

in a modern style

Follow-up to the famous tradition of arms production in Brno





22 THE DAN WESSON PISTOLS









### Dear READERS,

It is a great pleasure for me to welcome you, for the second time, to the pages of Česká zbrojovka a.s. Yearbook.

Our first publication of a similar nature was released in 2007 and, according to your positive response, it has lived up to our expectations one hundred percent. Presented to our readers in a very attractive form, the publication offered much interesting and useful information about past and present of our company and, at the same time, it became an opportunity for a fuller orientation towards the impressive choice of CZ brand quality products.

During the preparation of the new yearbook which you are just opening we have again relied upon the finest team of experts from the editorial staff of Střelecká revue (Shooters Review), the most widely read monthly concerning firearms and shooting. In contrast to the previous publication, which dedicated much space to the rich and interesting history of our company, this time the main focus is given to new developments. This is to say that since 2007 Česká zbrojovka a.s. has launched many new, structurally very advanced firearms. With no exaggeration some of these represent a real landmark and add considerable stature to our position amongst the top players in the world market.

The following pages offer a detailed presentation of all the newly released key products; in some cases making their world premiere. Of course, you will again find here some interviews with interesting people who are deeply involved with firearms made by CZ. There are also a lot of interesting details concerning the demanding tests to which our products are subjected, or a reminder of a brand new design of our corporate websites. You will also find information about the new family of service weapons offered by CZ, where, apart from the other details, you will discover a new weapon in the PDW category, i.e. the CZ Scorpion Evo 3 A1 and also the modular weapon system the CZ 805 BREN A1, which has just been chosen as the new assault rifle for the Army of the Czech Republic.

I would just like to wish you pleasant reading and to express my confidence that the Česká zbrojovka a.s. Yearbook will again give you a great deal of interesting and useful information and will help you in your decision when you are purchasing a firearm of the CZ brand.

Ing. Lubomír Kovařík General Manager of Česká zbrojovka a.s.

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## Česká zbrojovka a.s. behind the threshold of a new era

In 2007, the then new management of Česká zbrojovka Uherský Brod, headed by its General Manger Ing. Lubomír Kovařík, took on as their objective the general enhancement of the reputation of the CZ brand. After the previous successful period the company simply drew a fresh breath for further expansion. And how does the situation of the company, located in the town of Uherský Brod, look less than three years later?

imply and briefly: Česká zbrojovka a.s. still remains the largest firearms company in the Czech Republic and, at the same time, it is one of the important global players in this field of business, while its position on the market continues to grow stronger. The company has not only succeeded in withstanding the present onslaught of global economic crisis, but it has also launched the expansion and overall modernisation of its product line, exactly during this challenging period.

### **FIVE LINES OF PRODUCTS**

The backbone of the current offerings produced by Česká zbrojovka a.s. is still defined by their products with the Drand name (or now DZ with a gap – as the newly registered trademark of the company located in Uherský Brod now appears). This line of products now includes their highly-regarded pistols, designed for duty, for self-

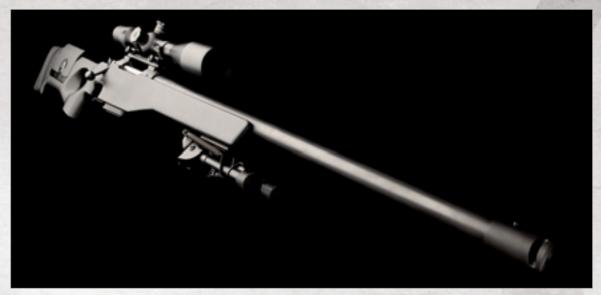
defence and for target shooting, centrefire rifles, rimfire rifles, and air rifles, also using the Slavia trademark.

On the other hand the product line of CZ-USA, including very successful shotguns which offer an attractive combination of lower price and high quality is a novelty. These shotguns are made for the American subsidiary of Česká zbrojovka by the Huglu company. Other products connected with CZ-USA are the excellent Safari Classics centrefire hunting rifles. Česká zbrojovka is not hiding its ambition to be the world's number one in the market for firearms for safaris. Opportunity certainly seems to be in its favour.

Through the CZ-USA the Česká zbrojovka a.s. range has been enhanced with a successful line manufactured by **Dan Wesson**, which includes, in particular, the top modern varieties of the M1911 A1 pistol. The same brand name is also carried by high-precision revolvers, however



CZ Scorpion Evo 3 A1



CZ 750

their production has been temporarily discontinued due to the special interest in the pistols. However Dan Wesson revolvers should be launched on the market soon.

The main factory, located in the historical countryside of Moravia, is not lagging behind either. The line of Česká zbrojovka a.s. products has been expanded by the shotguns, shotguns/rifles and rifles made by **BRNO RIFLES**, which, since the beginning of 2009, carry the legendary trademark of a "Z in a helix". At first the new firearms from the Brno factory had to fight against a certain scepticism engendered by the anguish over the now defunct Zbrojovka Brno; however the quality of the construction and finish of its products soon managed to win the popularity and the hearts of their customers while their sales have shown a rapid growth.

### A GENERATIONAL LEAP

Also another indicator of the strong position of Česká zbrojovka a.s. is the frequency of launching of new products on the market. This frequency has substantially increased during the past few years, while in the case of most of the new CZ firearms we can speak about a generational leap in terms of design and technology.

In the case of pistols, on one hand there is the revolutionary **Omega** trigger mechanism, which is now gradually being installed in almost all the handguns of the CZ 75 family, and on the other hand there is the completely revised "tender" model the CZ 75 P-07 **DUTY**, also equipped with the Omega mechanism. The launch of Omega and DUTY equals the onset of a new era, in which the CZ pistols will combine the best features from the timeless ideas of František Koucký with a maximum of manufacturing and user simplicity which will lead towards both modularity and variety.

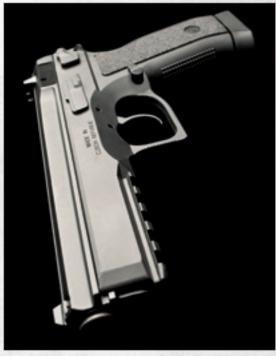
A similar approach also characterises some other outstanding new products. The repeating CZ 455 rimfire rifle is an example of the combination of the best features of the time-proven family of CZ 452 models of both completely new, manufacture and a user-friendly conception of transition to a different calibre. The new CZ 512 semi-automatic rimfire rifle is based on a similar modular concept, while it also uses the same magazines as the CZ 455 model.

While all these crucial novelties designed for the regular (or if you will civilian) market are dealt with in detail on the following pages, here and now we will

deal, at least in brief, with the new products for duty. We have observed that Česká zbrojovka a.s. has made exceptional progress in this field in recent years.

### THE NEW "SCORPION"

Česká zbrojovka a.s. currently offers a comprehensive range of new duty weapons which includes models that are already manufactured, in addition to weapons whose development is in their final stage or whose serial production is about to commence. The first category is represented by two plastic pistols: the CZ 75 SP-01 PHANTOM from the famous SP family and the already mentioned CZ 75 P-07 DUTY. Both these toplevel duty handguns represent, at the same time, products which are also available on the civilian market and this is the reason for describing them in greater detail in this yearbook. As far as long guns are concerned the outstanding sniper rifles, designated as the CZ 750, are already in the process of manufacture.



CZ 75 P-01 PHANTOM

A weapon in the PDW category which is currently designated as the CZ Scorpion Evo 3 A1 is now in the final stages of preparation for its mass production. This latest "scorpion", made primarily from polymers, is a light, compact automatic weapon with a blowback breech. The standard calibre is 9 mm Luger, however, there is an option for a simple conversion to the more powerful .40 S&W cartridge. This weapon shoots from the front position of the bolt while the bolt recoil is partially dampened by a hybrid buffer, which facilitates very effective control when shooting in bursts. The modular concept of the CZ Scorpion Evo 3 A1, which is provided with barrels of different length and with different types of fore-end enables the weapon to be easily adapted to specific requirements. This is also facilitated by numerous mounting rails, manufactured according to the MIL-STD 1913 standard and an extendable ergonomic stock, foldable to the right side of the weapon. In order to provide for the greater comfort of the shooter, the weapon is equipped with a horizontally adjustable pistol grip and with ambidextrous or reversible controls.

The CZ Scorpion Evo 3 A1 has already successfully passed all its demanding tests and its mass production is about to commence in 2010. The competition in the field of PDW is in fact particularly strong, but this new "scorpion" from Uherský Brod boasts of such advantageous properties that it definitely cannot be considered as without a chance.

### A MODULAR WEAPONS SYSTEM

Another significant novelty from the factory in Uherský Brod is the unified and modular weapons system designed for the service market, which at this time carries the name of CZ 805 BREN A1 (or CZ 805 BREN A2 in the case of the more compact – carbine version) and is chambered with a cal. 5.56x45 mm NATO and 7.62x39 mm (prospectively also chambered in cal. 6.8x43 SPC Rem). The uniform system of anchoring interchangeable barrels enables, with the use of an interchangeable breechblock and a gas cylinder, easy calibre inter-changeability. The interchangeable magazine housing secures the use of the standard NATO magazines, including high capacity

magazines for troop automatic weapons. The easily detachable trigger mechanism is equipped with an ambidextrous four-position safety-selector.

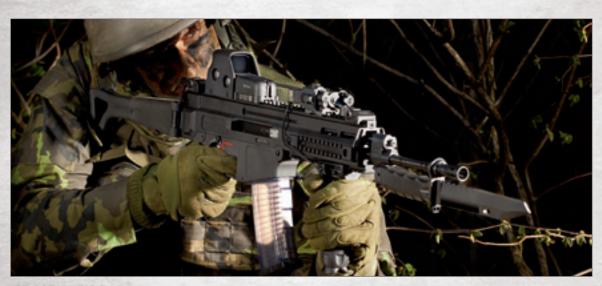
The weapon's receiver is equipped with numerous mounting rails in accordance with MIL-STD 1913. The folding shoulder stock is ergonomically shaped and adjustable in length. A modular weapons system enables the rebuilding of the basic version – the assault rifle – in a compact version, i.e. a light sniper rifle or, as the case may, be a light machine gun. An underslung grenade launcher with currently known as the CZ G 805 has been developed for this new weapon.

The company, located in Uherský Brod, developed the CZ 805 weapons family, in close cooperation with the Armed Forces of the Czech Republic, and at the turn of 2009/2010 Česká zbrojovka, with this weapon, successfully participated in a tender for the partial rearmament of the Czech Army with new assault rifles of 5.56x45 NATO cal. The first of these weapons are to be supplied to the Czech troops during the second half of 2010.

### PROFESSIONALS FOR PROFESSIONALS

The new mode of the development and production presentation in regard to personal weapons for security forces is also worth mentioning. During past years we could observe the trend of a would-be politically correct definition of arms factories' products as instruments for hunting, sport, or – from time to time – for self-defence in the country and we were hardly able to read any information about weapons for the police or for the army. But Česká zbrojovka a.s. is now beginning to openly and proudly broadcast its glorious tradition as a provider of top service weapons. Professionals for professionals – this has become the new creed of the company from Uherský Brod.

The good old truth still applies: Customers are always attracted to the weapons which meet the most exacting police and military standards, rather than to those weapons developed for the civilian market. Weapons for the military and for law enforcement are exactly those that Česká zbrojovka a.s. has been manufacturing since 1937.



**CZ 805 BREN A1** 

## CZ/5 P-07 DUTY

### The seventy-five for the 21st century

Česká zbrojovka Uherský Brod has been introducing several new releases to the market during recent years. The year 2009 became a crucial milestone for our largest arms manufacturer, as its very beginning brought the commencement of production of a service and defence pistol of an absolutely new generation – the CZ 75 P-07 DUTY model, a 9 mm calibre Luger. The new handgun was subjected to thorough testing in cooperation with one of the top shooters – Martin Kameníček.

he development of the CZ 75 P-07 DUTY pistol was completed in no more than three years. However, if we were to look for the exact origin of this new generation of CZ pistols, we would need to go back about ten years. That was the moment that sparked the

initial idea concerning a remake of the trigger mechanism, which was then labelled using the Greek letter  $\Omega$  (omega) in 2007. The mechanism of  $\Omega$  was first integrated into the CZ 75 B, which began its successful usage among shooter in the year 2008.



Those were the days already involved with the final stage of the development and preparation of the completely new pistol, the current CZ 75 P-07 DUTY, fitted with the trigger mechanism, described later on pages 14–15. However DUTY is not only just about Omega. This is a totally new pistol with a highly sophisticated design and technological solutions.

### **SMART DESIGN**

The CZ 75 P-07 DUTY is a self-loading pistol with its frame made from highly-resistant polymer. Two steel containers, manufactured using the MIM precision casting technology, are inserted into the frame; the top section features guide rails for the slide. The front container also carries the trigger with a single-sided trigger bar and houses the slide stop axis, forming the connecting pin of the body assembly and the slide with the barrel and the recoil spring. The rear container houses the firing mechanism. The steel slide is locked using an upgraded Browning-type system with the squared barrel section locked into the ejection port. The recoil spring is made from a flat wire and inserted on a long plastic guide. The slide movement is controlled by means of a backstop in the polymer frame, which also serves as an efficient slide recoil absorber. The barrel is made from cold forged material with a length of 95 mm and the bore comprises six R.H. grooves. During its operation cycle, the barrel performs a short recoil and tilt controlled by two hooks below the chamber (open link) with the slide stop pin. The cartridge's travel during loading is more simple and direct, as compared to the classic CZ 75. The latter, thanks to the barrel of the DUTY, is locked in a horizontal position and unlocked below the axis. Therefore the cartridge being loaded will be directed into the chamber better than in the case of CZ 75, where the barrel locking angle is equal to 1°. As mentioned previously, the DUTY has been provided with an SA/DA trigger mechanism of the Omega type, which, besides other functions, provides for easy resetting of the manual safety using the decocking lever. The trigger pull weight is set to the value of 16-24.5 N for the single action mode and the maximum of 55 N for the double action mode.

The control features include the smooth trigger, the left-sided slide stop and the ambidextrous finger surfaces of the manual safety, and the decocking lever respectively. The left lower section of the trigger guard is fitted with the magazine catch also convertible to the right side of the gun frame. The cock is provided with a round and knurled thumb piece. The slide control is further improved by means of a grooved surface below the rear sight. Safety features include the manual safety, or decocking lever, the hammer safety notch and the automatic firing pin block. The bottom part of the gun grip is fitted with a main spring plug with a round ring for lanyard attachment to prevent handgun loss. The sights, made of black polymer, are inserted into dovetail on the slide. The squared front sight is inserted from the front and is available in four height ranges, of a constant width, to enable optimum sight adjustment. The rear sight of the Novak type is locked in position using a screw. The front sight is highlighted using



Martin Kameníček test shooting the DUTY model and three spent cases in the air

a white line, the rear sight is provided with U-shaped lining. The sight radius is 149 mm long. The rail in front of the trigger quard complies with the MIL-STD 1913 to allow quick installation of a laser sight, a tactical flashlight etc. The magazine of the DUTY, holding 16 cartridges of 9 mm Luger calibre, comprises a steel body, plastic follower and a butt plate. The right side is provided with witness holes showing the quantity of ammunition within. The magazine's side walls are characteristic for their four narrow press-ins, which improve cartridge guiding, substantially reduce cartridge friction against the magazine walls and ensure the reliable feeding of rounds. The firm guidance of the magazine into the frame is further ensured by the bevelled walls of the bottom part of the magazine well. The surface of the pistol body and the plastic parts are black, the trigger and the cock are finished in matt brown, the slide and the barrel are nitride coated with black velvet surface.

### **ORIGINAL DESIGN**

The design of the CZ 75 P-07 DUTY shows no common features pertaining to the CZ 75 series. This is just another aspect, whereby the DUTY represents a new generation of pistols from Uherský Brod. This design has been developed by its author, Ing. Ivan Filko, the engineer from Uherský Brod, who managed to create a pistol of compact size, the dimensions and shape of which simply meet all the requirements imposed on current service and defence firearms. The DUTY does not resemble any of its contemporary rivals. Its shape is elegant, modern, smart and highly purposeful. For its compact size, on the other hand, the gun corresponds with the global trend towards size-reduction among standard service and defence pistols, which are smaller compared to their predecessors. These handguns are lighter, easier to carry, and possess all the positive characteristics - accuracy, stability and magazine capacity - attributes of the former large service pistols. Modern requirements are also met by the adapted shape of the trigger guard, which provides enough space and enables confident trigger operation even when wearing gloves. Excellent ergonomics can be found on the grip. Both the front and back straps are column striated, the side walls are ragged with coarse sand tread surfaces with the index finger rest and for the thumb of firing hand on the opposite side. The rear part is obviously provided with the curved grip tang in the form of the well-proven beavertail.

### **PRACTICAL TEST**

The practical testing of the CZ 75 P-07 DUTY pistol was conducted with a brand new item from series production. The overall workmanship has been completed with extraordinary care. The trigger travel was smooth and very pleasant. In double action mode, the trigger moved with a longer and well-manageable pull. The single action release with the hammer cocked was characteristic with a short slack and very short pull, followed by the hammer release. We performed the practical test in cooperation with Martin Kameníček, the winner of several IPSC championships. Martin



Complete disassembly of the CZ 75 P-07 DUTY. The red window in the top left corner shows parts necessary for replacement of the safety with the decocking lever.

completed his gunsmith course and works at Česká zbrojovka Uherský Brod, where he participates in the development and testing of new guns, as well as in marketing. He has also chosen the DUTY pistol as his self-defence pistol. We tested the accuracy of the DUTY at a range of 25, 20 and 15 metres. Any aimed shooting would make no sense at shorter ranges, as the first bullets penetrated the target to form a small opening with further bullets passing through it. Grouping within a diameter of approx. 50 mm at a range of 25 m, when holding the gun with both hands and standing, was not a difficult task for the DUTY. The grouping diameter even improved when shooting at twenty metres to form literally a single opening with an average grouping diameter of 25 mm. We were supplied with four different kinds of ammunition made by S&B and Fiocchi, including the subsonic version. Generally speaking, shooting with any kind of ammunition was very pleasant and we never experienced any excessive recoil force or jerk of the muzzle. The gun stability was satisfying even using a single-hand grip.

### IN ACTION

We made further tests of the characteristics of the DUTY by rapid shooting when standing and when moving, using both a single- or both hand grip at a single target, followed by multiple targets, which were arranged in a wide variety of different patterns, resembling familiar real time situations known from IPSC or LOS competitions. We tried the gun in various initial conditions, including the option of a fast grip onto the gun laid down on a table, insertion of the magazine lying aside, pulling the slide and shooting at several targets. We also used the new holster, which is available from Česká zbrojovka, among different accessories. We often used double shots, with some series of several fast shots, including rapid spending of the entire magazine capacity. The aiming conducted involved either sights or instinctive aims with no involvement of sights at a range of 1-20 metres. We were overwhelmed with the behaviour, accuracy and the grouping of hits achieved by the new pistol in any situation. If the shooter has managed the method of fast trigger pull and gun control, s/he can easily hit the target with two rapid shots producing hits very close together. Shooting a fast series can also result in a very good grouping. We spent a total of 1,250 rounds during roughly a three hour period! The CZ 75 P-07 DUTY worked absolutely perfectly and in our testing we did not encounter any defect.

### THE PISTOL, WHICH FOLLOWS THE TARGET

The classification can be summarised in the following sentences. The DUTY is very accurate and stable in any mode of shooting, whatever the ammunition used. Its grip features excellent ergonomics, the ragged surface prevents any slippage when in wet hands and enables fast aiming, aided by the perfectly legible sights. The control features are within convenient reach of the fingers. The slide is easy to pull, without any great force required. The

grip ergonomics were tested during shooting, whereby the shooter started with his/her eyes closed with the gun held in standby position. Following the signal, the gun was raised to the shooter's eye level, the eyes were opened and the gun fired. Once a shooter becomes accustomed to the DUTY model, s/he will be able to raise it to eye level at stealth speed, align the sights with the target, aim and shoot. The sights check is very fast with sight correction only required in exceptional cases. The DUTY is simply well balanced and follows the target by itself. To remain objective assessors, we should also mention the criticisms. The DUTY has not been provided with all control features on both sides. Unlike the CZ 75 SP-01 PHANTOM, this model does not have an exchangeable grip. The features mentioned above are appearing more frequently now on modern pistols; however, their absence never represents a substantial handicap and this does not impair the excellent characteristics of the CZ 75 P-07 DUTY, even with regard to the fact that its excellent ergonomics makes this gun comfortable virtually for everyone.

### **BUILDING MODULAR HOLSTERS**

Česká zbrojovka has prepared brand new, very varied holsters for the DUTY model, made from durable plastic. The basic system comprises a holster in three different lengths, which covers major part of the gun, or a smaller holster forming a die, with the front part of the gun protruding. The pistol can be secured using self-locking pressure retention, an automatic retention controlled by the thumb of shooter's hand pulling the trigger and automatic retention controlled by the index finger of the shooting hand. Any of these three retentions will block the pistol by means of the trigger guard. Every holster version can be fitted with one retention system at a time, or with a combination of the above mentioned systems. Any exchanges and adjustments can be customised by the users themselves. The set also includes a magazine pouch with a flexible flap secured with a stud or also without such a flap. Any fallout or any undesired movement of the magazine is prevented by the flat steel spring. The magazine pouch can be worn separately or paired with the gun holster. The basis of the pistol and magazine pouch bearing unit comprises the wellproven belt loop and the paddle. Either system is provided with openings for pins, which can be adjusted depending on the width of belt used. There are circles of cogged offsets on both the left and right sides of the pistol. The same offsets can be found behind holster clips on the pistol and magazine holsters. These offsets and cogs form an interlocked body and enable adjustment of various holster tilts. This building set concept allows for formation of up to 108 combinations of fixtures and safety mechanisms. Both the pistol holsters and magazine pouches can be installed onto the bearing system by virtually any method, which places the system among the most versatile ones in the world. At the same time, the configuration settings can be done by the user himself using the Allen key and the pack of alternative spare parts included in the package.



### **GUN FOR TENDERS AND DEFENCE**

The CZ 75 P-07 DUTY serves for the service and defence purposes perfectly. Its mature design and concept as well as its overall characteristics, including accuracy and behaviour during shooting ranks the gun among top models within the category. This gun has an amazing chance to render success in tenders for service handguns – which has actually happened at some places in the world already. Its concept will definitely attract civil users and competition shooters too. Česká zbrojovka Uherský Brod can be also praised for the simultaneous preparation of quality accessories mainly holsters at this stage. The flagship position within Česká zbrojovka Uherský Brod is still held by the famous and popular pistols in CZ 75 series, however, their newborn distant relative can never be considered a regular convoy vessel in this case. Especially when the near future will see other versions of the DUTY model in different calibres as well as different sizes to be released to the market afterwards.



The mechanism of the CZ 75 P-07 DUTY with release lever of the decocking lever (top) and the manual safety. Besides the shape of finger pieces, the only difference visible is the spring included on the decocking lever pin (see arrow).

## Testing THE DUTY



The new CZ 75 P-07 DUTY service pistol was first introduced to the public at the IWA Show in Nuremberg in mid-March 2009. However, this ceremonial act was just the last step in the long process of gun designing, the technical preparations for production, the testing series production and the actual testing of the new gun. And the most interesting aspects of this testing are disclosed below...

he most significant utility characteristic of a service pistol would certainly have to be its reliability. The gun must be reliable under regular as well as extreme conditions, such as accompanying police officers or military force on duty. Testing the gun's behaviour under extreme conditions is actually the final stage of development and this is the moment to demonstrate its real quality and sophisticated conception. The simple reports and results of particular tough tests will provide the clear proof of its success or failure.

A great environment for testing, with the option to simulate weather conditions in special chambers, was arranged at the VOP-026 Šternberk, in the VTÚVM Slavičín Division, a long term cooperative partner of Česká zbrojovka a.s. in the field of firearms testing. This was the location to which two of our CZ 75 P-07 DUTY pistols were taken at the beginning of November 2008, one of them brand new, the other one just following life-cycle testing, to enable monitoring of the wear and tear on the gun's functioning; these firearms were to undergo several series of operational testing under extreme conditions. Let us look at a sample from the most demanding tests.

Testing of the gun wiped dry in a dusty environment. This test simulates the use of a pistol without any protective lubricant and provides a clear idea of the gun's ability to withstand the penetration of dust into the pistol's mechanism. Several hundreds of rounds are fired in the modes of "dusting in holster" and "dusting without holster". The final classification of the results emerged as "complied without any defects or failures".

**Shooting during and after simulated rain.** Both pistols were literally showered with streams of water representing artificial rainfall with an intensity of 5 mm

per minute and the impact velocity of the drops equal to 6–7 ms-1. The pistols were regularly lubricated and placed inside the rain chamber, with the ejection port right in the centre of the rainfall area. The shooting commenced after 30 minutes of this heavy downpour. Result: both pistols complied without any defect or failures.

Shooting under high temperature. Both pistols were heated to +50 °C for one hour; the ammunition was actually heated to +70 °C. Every final round in the magazine was provided with a blinded primer – that round serves to test the self-ignition of ammunition, the risk of which is imminent in this case. There is a possibility of distortion of the plastic frame. The shooting was carried out with monitoring of the temperature of the grip surfaces of the pistol. Test result: The temperature of the gun's surface never exceeded a level of +50 °C during shooting; the values in fact ranged between 44 and 48 °C.





No case of self ignition was experienced. The pistol with an expired life cycle recorded one failure and that was to lock open when the last cartridge has been shot. None of the plastic parts showed any distortions or changes in colour; both guns retained their brand new appearance. Conclusion: double "complied without any defects or failures" classification.

The above were followed by low temperature and sudden temperature change testing. Both guns, lightly lubricated, were placed inside the freezing chamber and cooled to -30 °C for a period of 90 minutes. The magazines were left in the frost slightly longer. Once the shooting commenced, the air humidity condensed immediately to produce water droplets on the surface of the gun. However, both DUTY pistols were placed back into the frost. Further shooting took place half an hour later. Then back to frost. Numerous repetitions, over and over again. This test is really tough. It was obvious that the humidity would thoroughly soak into the guns and that the frost would completely ice-up both pistols. Due to the temperature dilatation, handgun parts would change their dimensions. However, the test results managed to remove all concerns. The pistols passed this test.

Test of sand penetration into handgun's mechanism. Each of the guns was dragged through sand in a 5 metre long channel 5x on their left side and 5x on their right side followed by a shooting test. This test permits a so-called remedial action, a simple correction during shooting, with regard to the higher failure rate possibility. However this option was not needed. The new pistol twice failed to attain the lock open position on the last cartridge, the older one had some sand grains inside the trigger mechanism parts but without any interruption of shooting. The result for both pistols was "complied without any defects or failures".

Functional testing in muddy environment. This test involves immersing the guns into a container of diluted

mud and their subsequent shaking it off in the same container; the muddy solution comprises 1 kg of clay per 10 litres of water. This fine clay comes from a 12 metre deep excavation and does not contain any sand particles. Both DUTY pistols were immersed into the mud solution for 30 seconds, with a light stirring movement back and forth. It was obvious that the mud would penetrate the gun through every single opening. More than one remedial measure is permitted in this test; this procedure is also very intensive. However the result would once again exceed all expectations: both guns failing to attain the lock open position on the last cartridge at the same time, with the very last round chambered for this test. Not a single failure! There was another classification stating "complied without any defects or failures".

The last stage within the entire testing marathon is the endurance and safety in falling test – the **drop safety test**. This was not exactly a point at which to expect any problems. The pistol is rugged and comprises well-proven mechanisms. There can be some damage to the plastics, but no serious problem is expected. The older pistol was allowed to fall from 1,5 metre first: onto each side, onto the muzzle, the hammer and the sights and that was performed with the gun hammer cocked and the safety on, the gun hammer cocked and safety off and the hammer resting on the firing pin. This procedure was repeated with a drop height of 3 metres. The pistol passed this safety test with the final classification of "complied without any defects or failures".

### HERE COMES THE NEW LEGEND

The extraordinary tough testing of DUTY in Slavičín produced satisfactory results which had been expected. The results are fully comparable to the legendary CZ 75 D COMPACT, which had to pass the same tests prior to its implementation as part of the equipment of the Police Force of the Czech Republic (see the Yearbook of Česká zbrojovka from the year 2007). The achievement of this new CZ 75 P-07 DUTY pistol model was even slightly better. It seems as if a new legend has been born...



## The Revolutionary ON/EGA



he keynote of the path-breaking trigger mechanism invented by František Koucký is the use of a trigger in the function of a single-arm lever. Whereas with the conventional SA/DA trigger mechanisms the trigger operates as a two-armed lever, i.e. when the trigger has been squeezed the top arm pushes the trigger bar forwards, Koucký achieved a very advantageous "unidirectional" movement of the whole mechanism by placing the trigger axis above the axis of trigger connection with its trigger bar. The second key element is a symmetric trigger bar whose two arms enclose the magazine housing. Thereby Koucký managed to attain a consistent trigger travel and uniform transfer of forces without any danger of individual parts "crossing".

### **AND WHAT OMEGA GIVES**

What is new or different in the Omega trigger mechanism in comparison with the above mentioned old solution? The fundamental change consists in the return to the single-arm trigger bar only which is led along one side of the magazine housing while the interconnection with the other parts of the mechanism were worked out without any negative effects on the force transfer. However, the basic principle set out by Koucký has not changed – the Omega trigger still functions as a single-arm lever, i.e. its coupling point with the trigger bar is below the trigger axis.

It is obvious that the employment of the single-arm lever brought about a number of significant benefits by no means of technological nature only. The new system can be further characterized by the typical employment of a roll which in the final stage of the DA mode of the hammer cocking provides for the trigger bar release with so called hammer lever. For manual cocking, or as case may be cocking with the use of slide, the mechanism is equipped with a sear, which is actuated by the trigger bar when the pistol is discharged in the SA mode of fire – the trigger bar also controls lever disengaging automatic firing pin block – which is a nice example of single part ingenious and multiple use.

Another novelty is the design of the ejector which acquired a form of a simple stamped part that has also more functions; a complicated manufacture of the ejector bridge is now a thing of the past. The smart element, besides it provides a solution to the main problem, is represented a newly designed trigger pin with the use of trigger spring, so that assembly process does not require any fixture for pin staking.

### STATE-OF-THE-ART TECHNOLOGY

From the manufacturing point of view, all components of the new trigger mechanism were dramatically simplified: presently there are only parts made with the use of spindle or stamping technology, while more complicated parts are manufactured using MIM technology. The parts now pivot around easily removable pins in the frame which interlock each other by ingenious system of slots and recesses. Thanks to this a manufacturing assembly or user disassembly is a trivial task which can be easily performed virtually by anybody. This understandably makes maintenance of handgun more comfortable.

The used materials, shaping and forming of parts and their operational interconnection jointly increased endurance, service life and reliability of the new trigger mechanism above qualifiable value – in short, there is nothing to go haywire.

The simple conversion from the manual safety version to the safe release of cocked hammer through decocking lever is absolutely unique. The point is in the use of the pivot pin with a control element (a part produced with the MIM technology) which actuates the sear and enables to use an ambidextrous control lever with a finger piece oriented forwards. The user himself can easily and comfortably carry out the exchange of the manual safety version and the decocking— and vice versa— in just a few seconds!

### **IMPROVEMENT OF USER PROPERTIES**

The first pistol from Uherský Brod with the Omega trigger mechanism started to be produced in series in the first half of 2008 – it is the basic model designated as CZ 75 B  $\Omega$  (Omega from the Greek alphabet). The new trigger mechanism solution brought not only the change to the inside frame appearance but also a different behaviour of the trigger, or more precisely a different course of the trigger pull weight and a smooth travel in the single-action mode of fire – which is exactly what every shooter needs to attain the most accurate hit. The graphic recording of the SA mode of fire notices a more or less two-stage character of the trigger travel, the indication of which slightly shows also in DA mode of fire. Both curves were smooth and without any jogs, which characterizes a user friendly trigger.

For the CZ 75 B Omega pistol the manufacturer declares max. trigger pull weight in the range of 14,7–24,5 N in SA mode of fire and max. 55 N in DA mode of fire. The values measured in a sample directly from the manufacturing facility which was tested by the Czech magazine "Střelecká revue" (Shooters Review) in 2008 were around 18 N, or 48 N. In the course of tests of a freshly manufactured pistol (a serial product which was only assembled and run-in in the most necessary scope at the break-in machine, not by fire, safety

proofed and sighted-in at the manufacturer) hit its first shots at a distance of 15 metres (16,4 yds) into a circle of 77 millimetres (3.03 inches) diameter. In the fifth five-shot grouping the spread already reached mere 61 millimetres (2.40 inches), which is far from being within this handgun's limits. The tests were conducted in the standing position while the pistol was held with both hands and it was of course in the SA mode of fire.

The test of this weapon as well as other guns with the Omega trigger mechanism confirmed that one of the many virtues of this radical reconstruction is a demonstrable improvement to this handgun's user and shooting performance.

### A NEW GENERATION OF THE SEVENTY-FIVES

Only after the company introduced the new Omega trigger mechanism, Česká zbrojovka Uherský Brod announced that this trigger mechanism is going to be gradually implemented into most of the current line of the CZ 75 models family, while in new pistols the mechanism will be a part of standard structural design. This was already carried out in the brand new compact model with polymer frame which bears the designation CZ 75 P-07 DUTY and which was launched to the market in the Spring of 2009.

A complex transition of the seventy-fives to the Omega mechanism starts by the end of 2009. The CZ 75 SP-01 Phantom model is one of the exceptions to this rule as it will go through a different process than other pistols. The application of the Omega trigger mechanism in the pistols of the CZ 75 family requires a partially different design of the inner frame which for the polymer frame equals a very expensive new mould.

It should be added that after the successful transition of pistols made in Uherský Brod to the Omega mechanism the models of the CZ 75 line with the original mechanism of František Koucký will be available only on a special order and for a higher price. On the other hand, the existing price relations of the 75s Omega are supposed to be maintained even despite costs increased in connection with the new parts serial production run-up.



## Trigger MECHANISM wrapped with a pistol

Ing. Ivan Filko

Interviewing Ing. Ivan Filko on the evolution of the Omega trigger mechanism and the origination of the DUTY model

Both the Omega trigger mechanism and the CZ 75 P-07 DUTY pistol represent the production of a consistent team of three employees of Česká zbrojovka Uherský Brod: Rostislav Hruboš, Jaroslava Rezek and Ing. Ivan Filko. The latter team member was interviewed concerning interesting features related to the development of both of the new releases.

How did you participate in the development of the  $\Omega$  system?

I worked together with Rostislav and Jaroslav to finalise the new trigger system and worked out its production technology. However, that was preceded by one specific event. We showed the new trigger mechanism to Ing. Radek Hauerland and he presented it to our General Manager, Ing. Kovařík, who authorised us to finalise it and to prepare it for production.

Who provided the impulse towards the development of the DUTY and when?

The main driving force came from the General Manager of Česká zbrojovka Uherský Brod himself. He approached us in the winter of 2006 to inquire what we could come up with. He pointed out that the costs of production of the CZ 75 were high and that there was a need to build a new pistol for public tender purposes. Such a pistol should be cheaper, fully operational and able to compete with the pistols from our rival manufacturers. We told him about the new trigger mechanism and he gave us the goahead to start the development of a new pistol featuring that system. The additional steps were simple and speedy. We managed to prepare the first prototype of this pistol within a three month period.

### Don't you think that this is too simple?

We had a new trigger mechanism. We would then basically wrap it with a pistol and add some more features. The front container used to accommodate the new trigger mechanism comes from the CZ RAMI P, we had to fix a couple of circular openings inside to house the new trigger axis. The same container, with a new trigger axis, and the relevant locking system is installed into the new RAMI P. The rear container basically had to be developed from scratch. Both these containers are made employing the MIM technology, by precision casting of the material into the mould. The concept of the slide provides for locking the rear part of the barrel into the ejection port. The space below the chamber has been provided with two lugs to form an open control link.

Did you exploit any experience gained through the development of any previous pistols made by Česká zbrojovka Uherský Brod?

The design process was obviously conducted using the findings and experience obtained during the development and production of the pistols of the CZ 100 and CZ 75 series. The concept of locking the slide into the ejection port is not a new feature in our pistols, however it had to undergo several changes as well. The barrel of the DUTY model is locked in a horizontal position and released below its axis. That enables better feeding of rounds into the chamber, as these do not have to undertake such a complicated travel path as in the CZ 75 pistols, where the barrel is locked at an angle of 1°. The magazine represents a combination of both old and new features. The basic item for its development was the magazine from the CZ 75 TACTICAL SPORTS, which has been slightly adapted. The resultant magazine for the DUTY is wider and shorter, compared to the standard CZ 75 magazine, however it still manages to retain a capacity of 16 rounds of 9 mm Luger.

You are apparently the author of the original design of the CZ 75 P-07 DUTY. How much time did you spend on the design of the final appearance of the gun?

I had been working on the design of this new gun in my mind for a considerable time beforehand. Once the decision regarding the development and production of a new gun had been made, I drew my idea into a computer-aided draft and adapted this concept to fit the new mechanism. What helped the evolution of the prototype was matching all the basic features of the existing DUTY model. The final looks of this pistol would then undergo only cosmetic changes in certain details.

DUTY evolved fairly quickly. Has the pistol been subject to any more rigorous testing?

The end of the year 2008 saw the testing series of the DUTY made in a 9 mm Luger calibre. We took two of these pistols to the Proofing Institute in Slavičín to undergo an endurance test, compliant with the conditions imposed within the tender for pistols for the Police of the Czech Republic. One of these was a new pistol; the other item had undergone the service-life test. Our pistols went through sand, dust, water, frost and various other tests... Both pistols passed this endurance test without any problems. Such situations tend to be very rare, indeed.

## The polymer CE

"Naming this pistol the PHANTOM is very appropriate", states Milan Trkulja, the Manager of the CZ Shooting Team. "Despite its dimensions, the pistol is amazingly pleasant to carry; one wouldn't actually feel it when it is holstered. The gun can be also presented at an exceptional speed – it is fast to draw from the holster, with the sights already almost aligned; you just pull it out and it's aimed. The pistol appeared literally out of nowhere, ready to hit. Simply a phantom!"

owever, prior to the completion of the CZ 75 SP-01 pistol, there was one important factor emerging – its weight. The SP was designed mainly for the armed forces and they have started to launch their tenders with weight limits established for guns for their special forces. These limits relating to the weight of an empty gun, are equal to one kilogramme. CZ 75 SP-01 was unable to comply with such a requirement due to its 1.18 kg (suitable for SWAT forces, though not for everyday carry).

### RAPID DEVELOPMENT

The development of the gun continued with the objective of reducing its weight. The factor that was clear from the very beginning implied that the only way to comply with this requirement would depend on the replacement of the steel frame with either plastic or a light alloy material. Česká zbrojovka Uherský Brod was already familiar with both materials from the past. The year 1996 had seen the introduction of the CZ 100, the first handgun made in Uherský Brod to use polymer as the main frame design material. There had been some early attempts to use plastic materials for the CZ 75 series at the same time. The first seventy-five with a polymer frame in serial production was the CZ 2075 RAMI P subcompact pistol, launched on the market in 2005. This pistol was followed by the CZ 75 BD COMPACT P, two years later, however it was not launched in production due to the development of a brand new generation of seventy-fives (which obviously includes the new pistol CZ 75 P-07 DUTY, which is described in detail in another part of this yearbook). The company also had considerable experience with the aluminium alloy frame as well, especially through the development of the CZ 75 D COMPACT pistol for the Police of the Czech Republic.

The development of a plastic version of the SP-01 commenced as early as in 2004, followed by the aluminium version one year later. Both lines of development were completed practically simultaneously, in the year 2006. The version featuring a frame made from a highly-consistent quality aluminium alloy managed to reduce the weight of an unloaded pistol, including the magazine to 0.905 kg. This pistol represented an exact derivative of the steel SP-01, with the change in the frame material as basically the only substantial adaptation and, judging from external appearances, this version can be distinguished only by the shape of the trigger guard and the recess along the end of slide

axis. But "the aluminium pistol" never made it to serial production, as the polymer frame appeared to be a more progressive and prospective solution for the reason, amongst others,, that this design allows for the utilisation of interchangeable grip straps.

### PROVEN FEATURES

The "plastic" CZ 75 SP-01 PHANTOM pistol, officially introduced at the IWA Trade Fair in Nuremberg, in spring 2008, is the most recent model from the extremely successful SP-01 series (though some stickler might point out that actually the most recent offspring of the SP family is obviously the CZ 75 SP-01 TACTICAL in the .40 S&W calibre).

As we have already mentioned, the pistol has been designed and adapted mainly to suit the needs of the



The first 3D model of the PHANTOM pistolframe, with a small and a large grip-strap. Acceleration of the specific development stages of a new product is assisted by the 3D printer of the Stratatis system, obviously controlled by a computer.

armed forces, especially their Special Task units. Like all the other pistols within the CZ 75 SP-01 family, the PHANTOM also inherited its double action hammer and trigger mechanism (SA/DA) from the original concept of CZ 75 by Koucký, whereby the trigger bar moves towards the rear when the trigger has been pulled. The locking system also uses the forced descent of the rear of the barrel, controlled via the closed link and operated by means of two locking lugs engaging the corresponding recesses in the slide, which has remained virtually unchanged. Regarding the change to the plastic frame, this pistol has undergone a large re-design, even a reshaping. The plastic has been integrated with two metal block inserts (containers), which carry the firing and trigger mechanisms. The top parts of block inserts also serve as slide guides. The front insert carries the trigger and accommodates the connecting pin, which controls the release and the locking of the slide; and also constitutes the slide stop pin.

The rear insert mainly holds the hammer with the cocking lever and the sear. There have also been some slight design adaptations to the front part of the gun frame. The accessory attachment rail, the MIL-STD 1913,

which comprises three traverse grooves only on the SP-01 and the SHADOW models as a provision for the recoil forces, has five traverse grooves on the PHANTOM. The shape of the trigger guard has been also modified. On the metal SP-01, the bottom section of the trigger guard is slightly curved. The plastic PHANTOM has t its bottom section straight, approximately parallel to the barrel axis. The front section was slightly elongated, it is in a straightline and its front is striated to enable a firm grip.

### **NEW FEATURES**

The most evident changes made can be seen on the grip. Unlike the metal versions, the CZ 75 SP-01 PHANTOM has been provided with modern interchangeable grip straps, which allow its users to accommodate the trigger reach easily, depending on their hand size. The interchangeable grip straps - the use of which is currently taken for granted within the framework of numerous tenders around the globe - are installed onto the frame by means of dovetail grooves and the standard package includes two sizes; existing experience has proved this solution to be sufficient. The grip strap is fixed using a traverse pin, which, at the same time, also holds the main spring plug. One of its ends has been provided with a lanyard ring. The main spring housing is open inwards into the magazine-well by means of a long crevice. The front part of the grip is stippled in a chequered pattern, the same as the gripping area of the interchangeable grip strap. The PHANTOM grip has not been provided with any interchangeable grip panels. Its sides are perfectly straight, flat, treated with a coarse-sand design. These features make for a very flat grip, with a width of only 28.5 mm. Such a flat grip represents a really exceptional feature for handguns with double column magazines; similar values can be found more commonly on handguns with single column magazines, whereas the magazine capacity of PHANTOM is 18 rounds. We can also add that while the fully fitted frame of the CZ 75 SP-01, made of steel, excluding the magazine, weighs 623 grams, the plastic frame of the PHANTOM model weighs only 242 grams, which is not even 40% percent of the weight of the previous version.

The slide has been also made with a new shape. The majority of its length is characterised by substantially slimmer sides compared to the rear section. That provides the rear surface with a fairly

bold "step" to support the fingers or the palm of the operating hand.

Therefore the slide sides have also been deprived of the front cocking grooved surface. This shape of slide could first be found on the CZ 2075 RAMI P pistol, in the year 2005. The so called "broad" slide combines parameters of both utility and comfort: it provides a cover for the top surfaces of the steel containers – slide guides, with a simultaneous improvement of control of the gun. However, despite the radical change of the slide dimensions, the weights of the steel and plastic slides on the SP are identical. The top surface of the slide on the PHANTOM model has been fitted with standard type sights, the same as those used on the all-steel CZ 75 SP-01.

The magazine catch is located on the left side of the grip, right behind the bottom root of the trigger guard. The magazine is identical with the ones used in the metal SP's, which comprises a double column with a single column issue and the capacity to hold 18 rounds in the 9 mm Luger calibre. The magazine body is made from steel, its bottom is plastic and when inserted into the pistol, the magazine bottom completes the grip front line. According to the common practice for the current CZ pistol models, the follower is made from plastic.

The slide stop is located only on the left hand side. As in the all-steel SP-01, the CZ 75 SP-01 PHANTOM is available with both a manual safety as well as a decocking lever, however the versions currently available feature only the safe decocking lever, corresponding with the all-steel CZ 75 SP-01 TACTICAL. The plastic SP has an automatic firing pin safety block.

The open sights feature a fixed front sight and a rear sight based within a dovetail. The sight picture is further enhanced by means of three white dots, made from a slightly luminescent material. The standard accessories for this pistol, apart from the interchangeable grip strap, include the assembly pin design for protrusion of the pin securing the interchangeable strap part. Any other operations that form a part of pistol disassembly are simple and identical to those for any CZ 75 pistol.

### **EXTREME RELIABILITY**

The test conducted by the collaborator from the Shooter's Revue (Střelecká revue) magazine demonstrated the PHANTOM to be an extremely reliable pistol. The handgun proved its reliable operation even with steel cartridge cases, which frequently would be the cause of spent case ejection problems in other guns. As far as the accuracy issue is concerned, the PHANTOM fully confirms our experience gained with other pistols belonging to the CZ 75 SP-01 series and featuring the classic frame design. The worst grouping produced by a five-shot series fired from a "free hand", at a range of 25 metres, was approximately 15 cm; the best hits were well below 10 cm. However, this pistol has been designed for task forces and for IPSC competition shooting and those users mostly shoot very dynamically, including fast draws. This is the field in which the PHANTOM model demonstrates its excellent parameters. The grip ergonomics in particular are simply superb. The grip fits into the shooter's hand with the gun already aimed and the sight almost aligned onto the target. Everything the shooter needs to do is to make a minute adjustment and then simply pull the trigger.

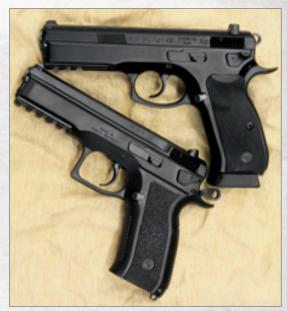
The sights are very legible. The "broad slide" was of great assistance as it would not slip out of the shooter's hand, not even when in contact with a sweaty hand or knitted gloves. The handgun shows even better balance on the barrel muzzle; unlike the classic SP, the centre of gravity lies in front of the connection pin axis. All of the above, combined with the superior shock absorbent characteristics of plastic as compared to metal, works in favour of the feasibility of the rapid repetition of shots. The controls are within easy reach of the hand holding this handgun and their positions are positive and stable.



The PHANTOM pistols enriches the CZ 75 series with a currently more and more common design feature in the form of interchangeable grip straps

### TWO CAPITAL P'S

The CZ 75 SP-01 PHANTOM is very comfortable to carry, even for people seated in a vehicle, who will not even sense its presence. The pistol offers overall comfort for shooters and users as such. Every shooter, whether recruited from amongst competitions shooters, members of armed forces or those who carry their handguns for personal defence, will remain calm, knowing that he or she can rely on the gun and that the threshold of his or her shooting performance lies in the first place within his or her own hands, undiminished by the gun's parameters. The PHANTOM complies perfectly with all such requirements. It is a very well made handgun, a pistol with a capital "P". Even twice.



CZ 75 SP-01 PHANTOM (below) with its older sister, the CZ 75 SP-01 TACTICAL, with a steel frame

## We are talking about A NEW GENERATION OF WEAPONS

with the Technical Director of Česká zbrojovka a.s., Ing. Radek Hauerland, about the past and present construction of weapons in Uherský Brod and about the new products for the armed forces

You started working as a Weapons Designer at Česká zbrojovka in 1993 and you participated, to a greater or lesser degree, in many key pistol projects in Uherský **Brod. The subcompact pistol RAMI** even carries a portion of your name in its designation. How do you, as a real veteran of Česká zbrojovka, who worked his way up to his present leading position virtually from scratch, feel about the changes in the research, development, construction and technical preparation of CZ weapons during the past 16 years?

The beginning was really difficult. We would be working on drawing boards at that time and all the

calculations were conducted manu-ally. We had only one computer, which was a bit better than a pocket calculator of today. Nowadays each designer has his/her own PC and the supporting Pro/Engineer software which enables him/her to make parametric 3D designs, which means that any change to the design is automatically projected throughout the entire documentation – in models, designs, configurations, etc. You can turn a piece of a part or of a configuration in any direction, you can verify the collisions, the tolerances and so on. We use the programme Marc Mental for stress analysis; for kinematics we have the Adams programme. This all, of course, has an effect on the results of our work. The weapons that are constructed today last two or three times longer than the weapons constructed 16 years ago.

Another difference is that 16 years ago we were "only" improving on the final products of the CZ 75 pistols, the CZ 527 centrefire rifles and the CZ 550 and the CZ 452 rimfire rifles. Today we are developing a completely new line for the army – an assault rifle, a submachine gun and a grenade launcher.

In the meantime, the demands and the complexity of the tasks have increased substantially and there is a huge pressure on the development of new products and of a steady improvement of their qualities – this is also not comparable with the situation 16 years ago.

In the past two years Česká zbrojovka Uherský Brod has introduced a series of crucial innovations. To what extent is it accurate to speak about a new generation



Ing. Radek Hauerland

of CZ weapons? And what can we expect in the immediate future? We often hear about an automatic centerfire rifle, for instance.

We can indeed speak about a new generation of weapons. Amongst pistols this would be the DUTY model, amongst rimfire rifles it is the CZ 455 repeating model and the semi-automatic CZ 512 model and among submachine guns it is the CZ Scorpion Evo 3 A1, in addition to the CZ 805 assault rifle and a grenade launcher. We plan to launch all these products on the market in the very near future. Then we are going to develop different models of these products – different calibres, different kinds of trigger mechanisms and

various sizes will be available. The automatic centerfire rifle had to make way for other projects.

We can observe a huge generational leap in the development of short weapons, that is to say a complete change-over to the Omega trigger mechanism. What does the present schedule look like?

The schedule for the transition to the Omega mechanism is as follows: the pistols of the CZ 75 Compact series are going to be changed during the year 2010, the big CZ 75 pistols in 2011 and the remaining models of the CZ 75 family are to be changed during the year 2012.

Are you able to define the plans with regard to the DUTY model in more detail? We have heard something about a Browning 9mm calibre model and also about a DUTY in a standard size which could become a substitute for the PHANTOM CZ 75 SP-01 model in the future ...

The parameters of the DUTY pistol will be broadened with models in the calibres 9x21 and .40 S&W already by the end of the year 2009. The 9 mm Browning (.38 Auto) version will be available in the first quarter of 2011. As far as a larger model of the DUTY pistol is concerned, we plan to launch it in 2011. We anticipate that the large DUTY will sideline the PHANTOM. However it all depends on the market, whether this will really happen.

Does the fact that you are developing the new series named CZ 805 BREN A 1 and weapons of the PDW

category called CZ Scorpion Evo 3 A1 indicate that the process of further development of the LADA defence set, or of the CZ 2000 respectively, in addition to the original Scorpion submachine guns, have been abandoned once and for all? And how

about other projects, such as, for example, the extremely short automatic HROM rifle?

The upcoming generation of a new assault rifle and of a submachine gun really means that all the projects related to the LADA system and the original Scorpion have been abandoned. Both projects were finalised some time ago, we even manufactured approximately 50 units of the LADA and Scorpion weapons in the 9x19 calibre. LADA has even passed its military testing. The weapons have not been launched, however, because these products have become out-dated. HROM is a bit different. We can state that it is a technical jewel - the weapon has a minimal, size while using a very powerful cartridge. However, we are not planning to continue its development at the moment.

The CZ Scorpion Evo 3 A1 weapon is now very close to being manufactured in series. Could you briefly describe its construction and its features?

This submachine gun, or as it is sometimes described, weapon of the PDW category, is made in a 9x19 calibre and its weight is 2,655 grams. It employs magazines holding a capacity of 20 or 30 cartridges, the mode of fire is 0-1-3-full. As a standard item it can be used with a wide range of the MIL-STD 1913 mounting rails, it is equipped with ambidextrous or reversible controls and a folding stock. The new Scorpion is perfectly ergonomic - the user can even adjust the grip, thanks to its movable handle. This weapon has undergone endurance testing and all sorts of tests in adverse environments and conditions heat, frost, sand, mud, dust, rain, elevations, depressions, drop tests etc. It passed all the tests. Its serial manufacture will commence in the last quarter of 2010.

Do you assume that it would be feasible to launch the new Scorpion on the civilian market, were it adjusted appropriately? There is no doubt that there are many potential users who would be interested in the semi-automatic version.

Yes, we are counting on the semi-automatic version. If everything goes well it could already be available during the year 2010.

zbrojovka for the programme called 21st Century Soldier. At the cusp of 2009/2010 the company won a tender for the partial rearmament of the Czech Armed Forces with the assault rifle and the carbine in a 5.56x45 mm NATO calibre.

CZ Scorpion

Evo 3A1

In this case we are talking about a modular automatic rifle in the 5.56x45 NATO and 7.62x39 calibres, and in the future also in the 6.8x43 calibre. The rifle is gas operated, with a rotationally locked breech block. The firing regime is 0-1-2-full. Other characteristic features include a folding telescopic stock, ambidextrous control of a MIL-STD 1913 rail, an option for the attachment of a grenade launcher or a bayonet and the possibility to use a bipod, various optical devices, a reflex sight, a noctovision device, etc. The interesting thing is that it is equipped with an interchangeable magazine-housing which enables the use of magazines of our own production or the magazines made for the M16, AR15, M4 rifles, etc. Its handle has an interchangeable back strap which enhances the perfect ergonomics of the weapon.

How do you personally see the future of the infantry and of hand weapons development? Do you think that there is still a possibility to improve classical constructions which are, de facto, simply largely-modernized single shot breech loaders or has this concept reached the limits of its potential? Can the Metal Storm system, for example, represent one of these new paths?

We are very far away from saying that everything has already been designed and constructed. I can still see the possibilities for improving the classical construction which have proved their value in hundreds of thousands of weapons and in all sorts of combats and climates. I think there is a lot of improvement



### The Dan WESSON pistols

### An unrivalled classic in a modern style

It is no secret that Česká zbrojovka Uherský Brod, through its American subsidiary, i.e. CZ-USA, owns the company Dan Wesson. This acquisition proved to be a good strategic step, as Česká zbrojovka on one side acquired another established brand with a resounding name, and on the other side enriched its portfolio by a type of handgun which is not produced in Uherský Brod, i.e. the Colt M1911 A1 pistols clones.



1996 purchased from defunct company everything having any worth (patents, trademarks, functional development designs and some tools), and he built a new business near Norwich, New York, under the name of Dan Wesson Firearms in 1998. In the era of Bob Serva this small but efficient company not only returned to the small batch production of SA/DA revolvers, but since 2000 it began to devote its activities to the development of clones of the handgun model which is still enormously popular in the U.S. – the Colt M1911 A1.

The revival of Dan Wesson brand is linked and credited to the name of Robert W. Serva, who in

business activities already in 1995.

economic difficulties, the revolvers bearing his name and using the original patents of Karl R. Lewis gained an excellent reputation thanks to its performance,

accuracy, reliability and handling. This by the way was

the reason why Dan's son, Seth Wesson, who after 1983

lost control over this firm, tried to take over the enterprise and carry on the famous family tradition in

the first half of 1990s. He obviously did not choose the

best time for his comeback as the company which was

transferred to Palmer, Massachusetts, shut down its

The pistol program offering the quality and amenities of sports specials for the price close to the serial products was very well received. Therefore after the company was purchased by Česká zbrojovka in 2005 the pistols became progressively dominant and currently they are even exclusive products of the Dan Wesson brand. The company, headed nowadays by Keith Lawton as Production Manager, not only provides for all activities related to complete production (with the help of renowned American parts subcontractors as Ed Brown, STI or Wolff), but also carries on further development.

### **FORTY- FIVES AND ALSO TENS**

Dan Wesson now offers as standard the following models RZ-45 Heritage, CCO Bobtail and the most popular Pointman (Marksman and Seven), all in .45 Auto. As one of the few – maybe in order to underline the exclusivity of the firearms of this brand – this company also offers pistols chambered for 10 mm Auto cartridge, specifically following models RZ-10, RZ-10 Sportsman a Commander Classic Bobtail.

All of them have single column magazines, forty-fives with capacity for seven or eight rounds, tens for 8 or 9 rounds. All these pistols are clones of the Colt M1911 A1 with the trigger mechanism operating in single-action mode of fire. These models differ in their size, surface finish, various versions of controls, grip panels, sights... Because Dan Wesson is a small firm which is not engaged in mass production it can easily adapt these individually manufactured handguns to the customers' taste. The particular requirements can allegedly be arranged even by phone.

### **NEW PISTOLS**

The overwhelming majority of Dan Wesson brand production is sold by CZ-USA in the United States. A minor proportion – and only some models – are then offered by Česká zbrojovka Uherský Brod through its distributors in the "rest of the world" including the Czech Republic. For the year 2010 this offer includes also new products available now for the shooters in the Czech Republic.

One of them is the **Pointman Nine**, that is actual flagship and Dan Wesson Firearms bestseller, but in more "European" calibre, 9 mm Luger. Recently we have seen in shops another model, the **DW Single Stack Custom (SSC)**, which is partly tied to Pointmans PM7 but it is chambered for .40 Smith & Wesson cartridges and features numerous adjusting elements for sport shooting purposes. This pistol has 127mm barrel, overall dimensions "in classic style" 218x135x36 mm, empty weight 1.088 kg and eight cartridges magazine capacity.

### THE VALOR MODEL

The latest novelty is the **Dan Wesson Valor**. This is a classic clone of the Colt M1911 A1 model with magazine for eight cartridges of .45 Auto caliber. The pistol is of all-steel design (having hammer forged frame), with Browning type locked breech, where tilting barrel is controlled by chain opening. Firing and trigger mechanism operates in SA mode of fire. Controls, i.e. slide stop, manual safety and magazine release are located only on the left side.

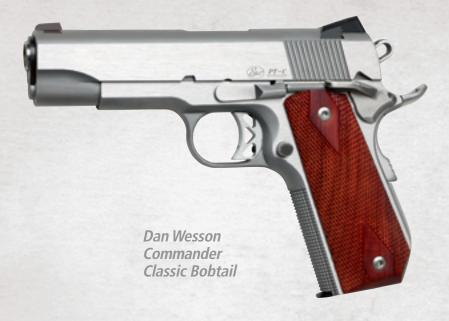


The Valor handgun is robust and intimidating, nevertheless it is a beautiful firearm

However, the resemblance with the famous predecessor ends with the traditionalistic basic construction and dimensional proportions. The DW Valor is simply the pistol for 21st century. The first feature worth mentioning is certainly the creative design. The Dan Wesson Corp. is always particular, not only as far as perfect performance is concerned, but it also stressed that its products are sweet to the eye. It is apparent that the current DW pistols production and



The Valor pistol disassembled for routine maintenance







especially its novelties are made by a gifted designer. That's the difference when compared with others, even with high end manufacturers of similar firearms.

At the same time the Valor model seemingly projects nothing striking, its appearance is very austere, without any purposeless ornaments, only on the left side of the slide there is a smaller aureate inscription "Valor". It does not look like a cheap firearm, however. The pistol is all black, only the visible parts of the barrel (in Match quality), hammer and the aluminium trigger with adjustable backlash were left in the colour of metal. However, the black colour of the frame and slide is not ordinary at all. The rare matt burnished or rather clean matt surface without any stain is achieved by surface treatment called Duty. This state-of-the-art technology is based on ceramics (surface saturation with silicon) which significantly enhances abrasion resistance. The undercut trigger guard is also worth mentioning

The flawless processing of metal surfaces is a matter of course. The hammer is skeletonized, the grip safety is complemented with a distinctive beaver tail. Flat grey-black grips are made from high quality G10 plastic, however, the impression it gives is the one of a noble wood. Three-dot tritium sights are made by Trijicon. The rear sight is adjustable for elevation, windage can be adjusted by a dovetail drift only.

DW Valor has the same dimensional parameters and eight cartridges magazine as the mentioned SSC model, only declared weight is slightly lower (1,077 kg).

We had the opportunity to test the Valor pistol for a short time (at the SSK Uherský Brod shooting range). The sights were, in a day light, without any problem, the trigger is, as is American practice, a little bit harder, but with smooth travel. The recoil seems to be more pronounced for a pistol of .45 cal. When shot the pistol "climbs", but it is not hard to manage and under proper hold the barrel axis returns to correct position by itself. The best five shot group at a 25 metres distance (with Sellier & Bellot FMJ 14.9 g cartridges) has a circle spread of 60 mm.

### **ACHIEVEMENTS IN SPORT**

The Dan Wesson pistols of course rank among firearms which are promoted by the Team CZ Shooting. The excellent shooter and silver medallist from the latest IPSC World Championship in Indonesia, Mr. Zdeněk Heneš, shoots in Modified Division with the pistol featuring Dan Wesson slide. However, the branded frame cannot be used now due to the limited capacity of its single column magazine. Anyway, even in this regard something is being done, so it is probable that this brand will also be produced with a high capacity double column magazine.

One of the successful propagators of the DW pistols is also one of the best IPSC shooters in the world and the captain of the CZ-USA team, Mr. Angus Hobdell, who otherwise shoots mostly with the CZ 75 SP-01 Shadow in the Production Division.

Other outstanding IPSC shooter, the American national Mathew Mink, was victorious with the Dan Wesson pistol at the USA Championship in "single column" Single Stack Division, which is of course not shot at the World Championship events.

## Adam TYC Five years at the top

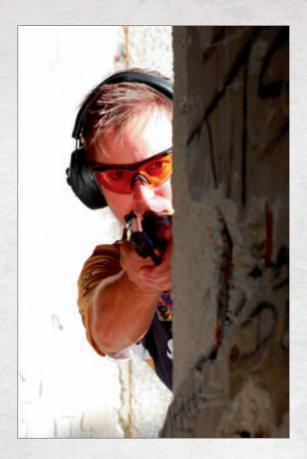
A phenomenal shooter, the IPSC Production Division World Champion and a representative of the company Česká zbrojovka, Adam Tyc has belonged amongst the world's top shooters throughout the past five years. He has not met anyone in the shooting competitions who has been able to deprive him off the winner's position. At the age of 23 he remains at the top. We asked him how he feels about his present successful shooting career, about what he is doing now and what he hopes to achieve in the future.



Your career started in 2004 when you won the European Championship in Opařany in South Bohemia. In 2007 you defended the title of European Champion in France. How do you feel about both championships at present?

The European Championship in 2004 was my first big competition which was supposed to open or close the door to the highest level competitions for me. If I hadn't won then I wouldn't have become the representative of Česká zbrojovka and I probably wouldn't have

participated in the World Championship in Ecuador in 2005. The European Championship in 2004 was very tough as far as my psyche and self-control were concerned. Moreover, I lacked the experience of big-time competitions then. When I went to France in 2007 I knew that I was expected to win but I also knew that my rivals were striving for the gold medal. By the time that I went to France I had already gained much success and I had acquired a lot of important and valuable experience. The Championship in France was different than the one in



our country. The targets were located at greater distances and the shooters were allowed to resolve the different problems on their own. However, some assistant referees in France didn't know the IPSC rules properly and many of them didn't even speak English, which complicated communications a lot. I had a conflict with one of the referees who falsely reported that I missed the target and put me at a disadvantage. I was deprived of the progress that I had laboriously achieved during the game. I lost too much because of this and I had only three or four stages to get ahead of the competition.

Every IPSC shooter dreams of succeeding in the World Championship or, if he's more confident, he dreams of winning the Championship. So far you've triumphed in the Championships of 2005 and 2008. Ignoring the location where they took place, did you perceive any difference between the two competitions?

The World Championship in Ecuador was a lot more difficult for me than the Championship in Bali three years later. I was younger when I competed in Ecuador and that time I still lacked experience of big competitions. It was pretty tough on our nerves and everything depended on who was more able to endure stress. I felt intense pressure. I faced off with the American shooter David Sevigny. Moreover, they were after me and my pistol in the competition all the time. They tried to discredit me and disqualify me from the competition. The Championship in Ecuador was pretty much on a knifeedge. The Championship in Bali was a lot more relaxing for me. I felt more aware of an inner kind of pressure since I was expected to defend my previous victory.

You are now a seasoned competitor, who has gained experience in competitions in the Czech Republic, as well as in almost all parts of world. Can you identify any differences between the competitions?

In the Czech Republic, the competition stages usually feel very cramped. What the shooter must do is very precisely defined; there is only little space to move around in and the competitors are restricted by the relatively narrow shooting zones. The shooter loses his free will. I don't like cramped stages. The stages in France and in other countries are different, they are more free. The competitors can choose what style they'll be shooting, how they'll resolve a given situation and they can also choose the spot from which they'll be shooting, regardless of being at a greater distance and taking the risk that they'll miss the target. I certainly like freedom of choice! I enjoyed the competition in Thailand in 2007 a lot. The stages were very well designed and they were characterised by large spaces in which you could run. The sets were painted, they were literally works of art. There were umbrellas at some stages while at others you jumped out of a taxi you won't find anything like this anywhere else. The target holders were kind of camouflaged. By and large, the organisers of the competition made a great effort. The competition was technically very demanding while it remained free and charming.

You are 23 and your life's still ahead of you. Do you feel that you have changed in any way?

I feel I am growing older. First of all, my physiology has changed. I've become slower and I've put on weight. When I started to shoot IPSC at the age of 14 I weighed 65 kilogrammes (143 lbs). Recently I weight 81 kilos (178.5 lbs) which is far too much for me. I could feel it during fast starts, running and sudden stopping. Now I've got back down to my optimal weight of 77 kilos (177 lbs). Earlier, I had never been worried about my physical condition or about what I was eating. I ate what I felt like. Now I can't get along without exercise and physical training, I feel every extra kilogramme and I watch what I eat.

You dedicated a lot of the time formerly to so-called "dry" training. Have you changed your habits?

Today I prefer live ammunition shooting to dry training. However, I don't want to say that dry training is not important.

Do you go in for other sports besides shooting?

I play squash which works as a good training for acceleration, fast movement, good perception and physical condition. I became fond of massages, especially the Thai ones. They relax your body which is very important before a competition. I enjoy riding karts; I like fast cars and the motor racing circuit. Driving karts is a great physical practice for shooting because the karts don't have a steering servo. I like driving. If I wasn't a shooter I'd have probably become an automobile racer.

Are you satisfied with the cooperation with Česká zbrojovka?

I've no objections to the cooperation. Česká zbrojovka always complies with our agreement. As a representative

I am very satisfied. They provide me with full-service, including air-tickets, accommodation in hotels and everything I need. There's always something to improve but the team system works. The Česká zbrojovka company is concerned about my results in the championships but my only concern is to focus on the competition. I am also glad that I can create my own training plan and that nobody tells me what I should do. I train when I like and how I want to, without any stress.

You've been shooting and competing with the CZ 75 SP-01 pistol for five years. Are you still satisfied with its qualities?

I've shot with several variants of the CZ 75 SP-01. I won the World Championship in Ecuador with a CZ 75 COMBAT II. Now I shoot with the CZ 75 SP-01 SHADOW. It's a perfect, accurate and absolutely reliable pistol. I don't know where I'd have been now and with what pistol I'd have been shooting if Milan Trkulja had not demonstrated the CZ 75 SP-01 for me and offered it to me in 2004 – a pistol whose qualities captivated me. It is rightfully a bestseller. And its success proves that this is not just my personal opinion.

How do you rate the reliability of the pistol that you shoot with?

If the SPs weren't reliable I'd be unlikely to win the competitions. The CZ 75 SP-01 can cope well with any cartridge. However, I've been using only serially produced cartridges from the very beginning. I don't reload the pistol because I don't know how to do it; in addition the branded cartridges are of high quality.

Is your pistol adjusted or altered in any way?

The Production Division rules basically don't allow any adjustments. The trigger mechanism is adjusted to my requirements and I use special aluminium grips named Custom-AT, that means Adam Tyc! I even participated in their development. At present they're being manufactured in series. I use a skateboard band or a checkering to roughen the grips' surface and thereby achieve a reliable grasp.

Are you familiar with the characteristics of the new products – the PHANTOM and the DUTY – from Uherský Brod?

I've tried both pistols. The PHANTOM is lighter and its balance is different with the magazine loaded than with the SHADOW. The DUTY is a very interesting pistol. It owes its excellent shooting behaviour to the integrated buffer which limits the recoil. Its construction is new, there are a smaller number of parts and it has a positive grip. The pistol is brilliant for self-defence and manifests superior durability.

You study at a college. How do you get on with the professors?

I started studying at the Anglo-American College in Mala Strana (Lesser Town) in Prague in 2006. I'm trying not to neglect the studies and I'm glad that the college enables me to participate in competitions. I have to study like any other student and the teaching staff gives me no leeway in exams.



What's your girlfriend's attitude towards shooting and what does she think about your success?

I live with my girlfriend in Pilsen. She met me as an ordinary guy Adam Tyc. She actually got to know that I was the World Champion and what I was doing a bit later. Even though she doesn't shoot she supports me, accompanies me to the competitions and keeps her fingers crossed for me.

Do you still enjoy shooting IPSC?

I still enjoy competitions and travelling abroad. I like those competitions where there is friendly atmosphere and there are good rivals. I also like working in the field of marketing, as a show-shooter, and getting to know new people. I don't run after medals like I did earlier.

We wish you good luck in your personal life, many good results in shooting and a lot of success at college as well as in your activities as an instructor in the shooting school.



## The TRIUMPH of the Czech practical SHOOTERS in Bali

Bali. This is not necessarily just a synonym for an attractive destination for an exotic holiday. At the cusp of October and November 2008, thousands of thunderous shots were heard at the heart of this romantic volcanic Indonesian island which is full of palm trees. It was in this beautiful East Asian spot that the prestigious meeting of the world's best practical shooters of IPSC took place. More than 1200 of the foremost shooters from 53 countries and 89 national teams gathered to participate in the XVth World Championship in practical shooting.

The Czech national colours were promoted by a team of almost 40 members. From the very outset there were a couple of hot favourites amongst the members of the Czech expedition. For example, the excellent shooter Adam Tyc was expected to defend the title of World Champion that he had won

ADAM TYC Team Production

SKUPINA ČEZ

SKUPINA ČEZ

Adam Tyc became the World Champion for the second time

when he beat the shooting aces during the World Championship in Ecuador in 2005 and gained the gold medal when he was only 18. That is why so much depended on Adam from the beginning and his task in Bali was definitely a tough one. It was obvious that everybody was waiting for him to make a mistake. However, Adam wasn't the only favourite in the team. The Czech shooters hoped to achieve at least the same success as the Czech team which participated in the Championship in the "land of iguanas" in 2005 where they garnered a total of a dozen valuable medals.

The struggle for the medals in Bali turned into an incredibly tough test of all the Czech shooters' nerves and endurance. In many cases the Czech shooters beat their rivals and they ended up with eight medals, including the most valuable ones – for the best overall ranking of individuals as well as for teams.

### A TOUGH FIGHT FOR MEDALS

The XVth World Championship in practical shooting was very demanding for the Czech team, due also to the fact that it took place in very aggravating conditions. The weather in Bali is extremely hot and humid which means that you become entirely sweaty from any movement. It was extremely difficult to make it through this terrible "laundry" on the scorched sand of the red-hot shooting range, even though the shooters had the chance to acclimatise themselves during several days before the competition started. The shift of competitors who were shooting in the morning had to get up at around five o'clock because they started shooting at seven. The second shift usually finished at six a.m. which meant that the last shooters passed the last stage at dusk, as darkness sets in quickly in southern tropical areas at that time of the year.

The competition as such wasn't standard either – the targets were located at greater distances than is usual, almost like targets for rifles. Furthermore, they were often movable, split or partly covered by penalised nontargets. The shooters were faced with even smaller metal targets, like gongs or poppers, at great distances which significantly changed the concept as well as the rhythm of the shooting and, in some cases, this even led

to the transformation of the usual dynamics of the IPSC into a regular aimed-shooting.

Our team handled this on its own and it must be said that the members managed to succeed perfectly. Every day it looked more optimistic. However, the successful process of the competition was interrupted by an unexpected accident. The brilliant Irene Liehne, a very promising member of the team representing Česká zbrojovka Uherský Brod, was a hot favourite from the very beginning. She was in very good shape and her performance was continually improving. Nevertheless, her chances completely vanished after a controversial measurement of the required output of her ammunition was carried out. This was really a terrible shock after the promising first days of the competition.

Other members continued in the competition literally like clock-work. Adam Tyc put on an outstanding show with his peerless CZ 75 SP-01 pistol. His shooting was breathtaking, while it remained admirably smooth. He had one "miss" that is lacking a hit, which shifted him immediately to a traumatising 62nd position which, however, he set right with miraculous ease. He stayed calm and in the following days he blew away the Earth's best rivals in the prestigious Production category. He didn't even give a break to such American stars as, for



The American silver medal shooter, Matthew Mink, also prefers the SP.

example, Matthew Mink, Angus Hobdell or Daniel Horner, who all incidentally also shoot with the SP-01 from Uherský Brod, nor to Robert Gordon Vogel.

So Tyc again became the legend of the World Championship. Despite his age he has managed to easily defeat much more experienced rivals thanks to his phenomenal performance. Furthermore, he has already gained the most valuable title twice. His awesome performance significantly helped one of the groups of the Czech expedition, the Czech national team in the Production Division, to obtain an excellent rank – together with Michael Strýc, Václav Vinduška and Jan Liehne he obtained the silver medal.

Another member of the CZ Shooting Team, Eva Turková, ranked 5th amongst the women in this division.

Other shooters from the Czech expedition also went for the top goals. Zdeněk Heneš, the present European Champion and Adam's colleague from the Česká zbrojovka Uherský Brod team who, however, shoots



Marián Vyšný, the CZ 75 SP-01 and three cartridge cases in the air

with the Dan Wesson pistol (also offered by Česká zbrojovka) took it in his stride when he was faced with the disrespectable attitude of his rivals and of some of the referees. After an exhausting competition and having sorted out problems with his ammunition he gained an excellent 2nd place in the Modified Division. Another superb member of the team was Kateřina Šustrová who ranked 3rd in the female Open Lady category. Martin Kameníček, the awesome guy from Zbrojovka, didn't let us down either and easily gained 2nd place in the same division as a senior.

The Czech shooters also dominated the senior revolver shooting category, despite the fact that Česká zbrojovka Uherský Brod doesn't manufacture revolvers. Zdeněk Němeček came first in this category and Lumír



The best Serbian shooter Ljubiša Momčilovič and his SP. Two cartridge cases are in the air the third cartridge has already left the bore of the barrel.



Adam Tyc on his way to his second title of the World Champion

Šafránek ranked 2nd while Ludmila Potůčková shone in the Revolver Lady category in which only two women participated.

Another promising competitor in the crowded Standard category was a prominent shooter of CZ Shooting Team, Petr Znamenáček, who shot with the new generation CZ 75 TS pistol in the .40 S&W calibre and after six extremely demanding days he ranked 4th and thereby considerably helped our team in the Standard Division (together with Zdeněk Liehne, Roman Podlešák and Jaroslav Václavík) to gain the bronze medal.

Not all of our champions had the chance to gain the winners' position. One of the best long-term shooters



The team competition in the Production Division – 1. USA, 2. The Czech Republic, 3. Slovakia

of the Česká zbrojovka Uherský Brod team, Martin Kameníček, who has gained many medals in championships, as well as in regional competitions, was perhaps disturbed by his new function. After Milan Trkulja who has been the CZ Team manager for many years fell ill right before the departure to the Philippines, Martin had to take over the challenging managerial duties. This perhaps prevented him from absolute concentration and influenced his usually excellent performance with which he might inconvenienced the "eternal" French winner of this "Formula 1" in IPSC, Eric Grauffel. However, Kameníček ended up in 11th place which is not bad at all and thereby confirmed that he rightfully belongs to the exclusive TOP 16 club. Actually he was the best Czech shooter in the Open Division...

### THE SP'S ON THE TOP

Our small country in the heart of Europe was not represented at the international event in Bali only by shooters. In many foreign shooters' belts you could see guns from Česká zbrojovka Uherský Brod which were talked about at the Championship in superlatives. For example, the excellent Slovak shooters Marián Vyšný and Andrej Hrnčiarik used the CZ pistols, as well as the experienced competitors from the victorious American team in the Production Division Angus Hobdell and Matthew Mink, and Daniel Horner, the excellent member of the US Army team, the junior winner of the division, Galo Moreira Icaza from Ecuador, the prominent Serbian shooter Ljubiša Momčilovič and the new World Champion Inez F. Jorge from the Philippines. After the huge success that the CZ 75 SP-01 experienced in Ecuador they were virtually around every corner at the World Championship in Bali. For example, the first four positions in the Production Division were dominated by shooters with these pistols and there were eight SP-01 users among the top 11 shooters of the competition.

This tough sport where any technical defect can mean that the competitor loses his/her hard won results is apparently experiencing a huge influx of the Czech pistols with their proverbial reliability, as well as ease of manageability and precision in shooting. The Czechs have again proved thanks to their sporting performance as well as to their famous products that they are not only a temporary or unimportant feature in this prestigious sports branch.

### THE WORLD ELITE

If we set out an unofficial evaluation of the nations which participated in the competition in Bali, according to the number of medals gained (without taking into account the different categories), then the USA come first with 6 gold medals, 3 silver medals and 4 bronzes. Second and third places belong to the Czech Republic and Italy, together with the same number of medals (1-2-1), then came France (1-0-1), Ecuador (1-0-0), the Philippines (0-3-1) and the ranks are concluded by Slovakia and Switzerland with identical results (0-0-1). Many countries with a long tradition and potential in shooting did not succeed this time!

## TUNING

### by the pros from Uherský Brod Customised CZ pistols

Česká zbrojovka a.s., Uherský Brod, follows the tradition focusing on the large-scale production of arms in series. There is no customised workshop as a specialised organisational unit to provide for the individual production of arms or of very small limited series. However, that does not mean that the company from Uherský Brod does not pay attention to those shooters who require more or less individual tuning of their guns. Furthermore, Česká zbrojovka launched two new schemes focused directly towards fans of customised pistols in the year 2009.

ndividual modifications to new handguns made by CZ prior to their actual delivery to customers, including binding orders for guns with engravings and other decorative features, which would be difficult to produce on a finished piece due to the heat processing of the product. To be more specific, the CZ pistols are currently offered with engravings and other decorations at four different levels: Classic, Elegance, Exclusive and Imagination, each of which is presented in several basic patterns, but with the optional implementation of a specific customer's requirements.

Other types of customised modifications, include features added to guns already purchased, i.e. owned by customers. In such cases, the owner submits a written request for modifications, exactly as specified (the specific gun-type with the relevant serial number must be quoted) and if the modifications requested are feasible from both a technical and legal point of view, the customer will receive a quotation. This activity is attended to by the in-house centre for customisation, within the department of commercial and technical services. Since autumn 2009, Česká zbrojovka Uherský Brod has begun offering additional services, which basically conform to the operation of "a custom shop". One of these is the so-called pistol configuration tool, the second one concerns the production of small series of sporting pistols.

### **BUILD YOUR OWN PISTOL**

Česká zbrojovka a.s. currently produces and supplies its customers with an extensive range of accessories, actual customisation items for large calibre self-loading pistols are available within its range of products. These items can either be purchased through the Internet, using the company's online shop (www.czub.cz), or at retail shops selling arms and ammunition or even at gunsmiths. Striving to care for customers' requirements, the company now offers the option of individual



Web configuration tool for the CZ 75 SP-01 SHADOW pistol

configuration of guns, including the fitting of customised items according to customers' wishes, prior to the actual delivery of the goods and that obviously includes the installation of such items.

The currently available website pistol configuration tool includes the CZ 75 SP-01 SHADOW pistols, with further models to be added progressively. Any customer opting for this gun can find the configuration tool on the company's website at www.czub.cz. The default screen will display the basic version of the pistol, which can be further "upgraded" with items selected from the wide range of accessories, matching his/her ideas and requirements related to the intended use of the handgun. Following the choice of a specific type of gun, the customer will be able to select the form of surface finishing, including the frame and slide colour, if available; the type of hammer, the trigger shape, the front sight (fixed block or light guiding fibre with a diameter of 1.0 mm or 1.5 mm), the rear sights (Target, Defender, fibre optics), the grip panels (finish, length,



Single action firing and trigger mechanism of the CZ 75 TS CZECHMATE

thickness and colour), the shape of the safety controls, the magazine guide ("funnel")...

This configuration tool will only offer technically feasible options. Therefore the customer will not be able to select the SHADOW model with a magazine guide and long grips panels; the configuration tool would not even permit such a selection. The customer will be advised concerning the total price for the relevant configuration by using a simple click and submitting a preliminary order to the custom shop centre. The staff of the centre will get in touch with the customer to discuss the delivery date for the selected pistol configuration including a choice of potential additional available options.

CZ Team Shooting – using pistols made in Uherský Brod, obviously. The very initial stage was dominated by the legendary CZ 75 (and the CZ 85) in the 9mm Luger calibre. However, as a standard service handgun, these pistols were not the optimal tools for the Open Division, which would always be dominated by specially customised guns. Zbrojovka was definitely eager to supply its shooters with more appropriate pistols and to offer these additionally to other shooters, especially the IPSC fans around the world.

These development and design efforts, resulting in the production of a wide range of sporting guns, led to significant success. The first success of truly international importance, which came as a sign of the swift arrival of the Czechs amongst the absolute top performers within the IPSC, was achieved by our shooters using the CZ 75 Modified model. They managed to gain the World Champion title and silver medals in team competition at the championship in the Philippines in the year 1999. However, better prospects were offered by the newly designed CZ 75 Standard single action pistols, produced in series, which later represented the primary objects of permanent popularity amongst local and foreign shooters and experienced several tremendous achievements. Since 2005, their trail has been followed by the bestseller - the large-capacity CZ 75 TACTICAL SPORTS (TS) pistol. For example Josef Rakušan gained the title of European Champion in the IPSC (the Standard Division) in France in 2007; however this pistol is also suitable for special-task forces.

The newer IPSC Production division is currently dominated by the service-type pistols from Uherský Brod; the globally famous CZ 75 SP-01 pistols, especially the SHADOW model. The CZ 75 SP-01 pistol, used by our phenomenal young shooter Adam Tyc, enabled him to gain the title of World Champion



Česká zbrojovka a.s., Uherský Brod – Yearbook 2010

Championships are held every three years). There is still the IPSC Open Division. The design series for this division was initiated by the CZ 75 CHAMPION in 1992, fitted with a compensator and a single action hammer and trigger mechanism, which was later produced in smaller series. The product range of Česká zbrojovka Uherský Brod excluded the CHAMPION model in the year 2006. These pistols were significant for their excellent reliability with various types of ammunition and their long life. Many shooters still use these pistols to their great satisfaction.

The main weak spot of the CHAMPION model was the reduced magazine capacity (max. 16 rounds in the 9 mm Luger calibre and 9x21 IMI or 12 rounds in the .40 S&W calibre). Therefore there was a parallel unit producing CZ pistols for the IPSC Open division. These guns have recently been based on the large-capacity frame of the CZ 75 TACTICAL SPORTS, so the products were named the CZ Tactical Sports Open. However, those guns were not available to the public, while being supplied only to shooters of the CZ Shooting Team.

As there were other shooters, including foreign ones expressing their interest in these handguns, Česká zbrojovka Uherský Brod started to manufacture them in small series in 2009, under the name CZ 75 TS CZECHMATE.

This is basically a large-capacity single-action pistol – the CZ 75 TACTICAL SPORTS – with the basic magazine capacity to hold 20 rounds in the 9 mm Luger calibre, with a total weight exceeding one and a guarter kilogrammes, when fully loaded. In this form - suitable for the IPSC Standard division and target shooting disciplines - the CZECHMATE pistol is supplied to the market, however the package includes the parts necessary for its conversion to comply with the Open Division shooting. The kit then contains a nut with an exchangeable sight for muzzle attachment (which is provided by an external thread) for the Standard Division as well as other features applicable for the Open Division: a hybrid muzzle compensator, a connection pin (instead of the slide stop that is not used by most shooters in this division), the mount for fitting a quality C-More red dot sight or any other red dot sight and a cocking lever, which is installed instead of the rear sight, in this case. The gun is fitted with a magazine guide, an ambidextrous safety lever and a recoil spring on a long guide rod, which is further complemented by the external spring guide of the gun muzzle. The pistol is finished by gunsmithing methods; the parts necessary for operation of the entire assembly are mutually matched by manual techniques. The Open Division can be handled using the extended magazine holding 27 rounds in the 9 mm Luger calibre. For the time being, the CZ 75 TS CZECHMATE kit is available with unified gear and a single type of surface finish. However, this kit is also expected to join other items within the online configuration tool, so that the pistol will be available, together with the tuning accessories, as selected by individual customer.

"The Open version of the CZ 75 TS CZECHMATE in the 9 mm calibre is the same as the pistol used by myself and the other members of the shooting team of Česká Zbrojovka Uherský Brod for years," says Martin Kameníček, the best Czech shooter in the IPSC Open



Martin Kameníček in action, using the CZ 75 TS CZECHMATE pistol. Martin was born in the year 1982 and for many years has ranked amongst the absolute top performers of the world in the IPSC practical shooting discipline. He has won the Czech Championships nine times in a row; he was also the Junior European Champion, now holding second place in the European standings, he has won numerous great championships. Just in the year 2009, which was not associated with any World or European Championships, he won the Championship in Slovakia, the Delta Cup in Belgrade, the Israel Open and the International African Championship; all these competitions belong amongst the most significant international championships. He works as a product manager for the commercial articles procurement department at Česká zbrojovka Uherský Brod.

Division. "The gun proves the successful application of all those positive findings and experiences that we have gained through shooting competitions. The gun boasts a long life, excellent accuracy and comfortable handling. The gun that I use to win competitions differs only in a slightly different shape of safeties to suit me and a slightly modified grip including a trigger guard for its optimum fit in my hand. However these are individual modifications. The pistol mechanism is absolutely identical. I have fired 150,000 rounds over the past five years with only one barrel replacement. I have one other pistol now, a newer one. Looking at our team, the same pistol is used by my father, Miroslav Kameníček, who brings home the highest medals from the most famous competitions and wins in the Open Senior Category, as well as another excellent shooter, Petr Pijáček, and the very gifted young shooter, Martin Šebo. Our rivals know about the quality of these guns; they are aware that our equipment helps us to win celebrated championships and that's the reason for the great demand for it by foreign shooters."

# A Superior RIFLE for the 21st century the CZ 550 rifle model, past and present

The CZ 550 hunting and sporting rifles manufactured by Česká zbrojovka Uherský Brod present a clear example of the fact that — with no offence intended — the smart heads and skilful hands of the Czech engineers can always find a path to improvement, even in the case of firearms that are generally considered to be perfect. The latter quality had been ascribed to the Mauser 98 bolt action weapon, which has been the best proven bet for certain victory, regardless of all the progress in technology and design, for all those in need of a hundred-percent reliable, durable and high-powered rifle for their everyday tasks.

he roots of the close relationship between Czech arms designers and the Czech arms manufacturing industry was in general focused on Mauser, reaching way back to the year 1920, when the offspring Czechoslovakian country paid a few millions for their "bargain deal" to purchase the machinery of the famous Mauser company, based in Oberndorf, Germany – and the purchase price included the indefinite right to manufacture the military rifles of this company. The manufacture of Mauser rifles in Czechoslovakia was then

exclusively an activity carried out by Zbrojovka Brno, which focused mainly on supplies for national and foreign armed forces. The portfolio of the company in Brno was marginally enriched with the Mauser hunting rifles as well, however their limited sales still pushed production costs and sales prices far too high.

There was a radical upturn in 1945, when Zbrojovka Brno, due to lack of orders from the military, started up bulk production of hunting and sporting firearms. This product range obviously comprised rifles with the Mauser

action, including the still greatly appreciated ZG-47 model designed by Otakar Galaš. The quantity of firearms produced was not overwhelming, however, rather than the product quality, this failure was mainly due to the weak business strategy adopted by the government trade organisations.

In the meantime, there was a new challenge in the form of heavy-duty ammunition with ever stronger voices demanding that the centrefire rifles included in production should be more than just re-mastered military guns. This trend was responded to by Josef and František Koucký, who worked at an R&D workshop located in Prague belonging to Jan Šverma Enterprises (the former name of Zbrojovka Brno) who employed their design efforts in the first half of the 1960's to developing the state-of-the-art and still highly praised ZKK 600 to 602 rifle series.



The initial plan assumed that the production of the ZKKs would be assigned to the enterprise in Brno, which would have followed tradition. However, the Czechoslovakian arms industry then underwent extensive organisational "changes", whereby Zbrojovka Brno handed over the vast majority of its arms manufacturing programmes, including those pending and planned, to the current Česká zbrojovka Uherský Brod. These programmes also related to the brand new series of ZKK rifles the production of which was launched at the factory in Uherský Brod in autumn 1966.

### THE ERA OF PRODUCTION IN UHERSKÝ BROD

The arrival of ZKKs in Uherský Brod launched a new, and still prevalent, era of Czech manufacturing and the design of Mauser type rifles. The ZKK series was represented by truly excellent rifles (try asking some older hunters and gamekeepers) and the staff at Uherský Brod were mastering their production, so that these were produced for three decades with only minor cosmetic bugs. There was a fairly long interval of time, associated with further progress in engineering, with certain significant change in the requirements imposed by the ever more demanding customers. That was the reason why Česká zbrojovka Uherský Brod ventured into the development of its own more sophisticated hunting rifles, implementing the Mauser action during the 1970's.

The CZ 530 was the initial model series, specifically the CZ 530 and 531 rifles. These guns demonstrated excellent engineering workmanship, however their fatal bad luck lay in the fact that the launch of their serial production, planned for the first half of the 1980's, interfered with the production of the new pistol models, the CZ 82/83 and the CZ 85. The result was that the serial production was never launched and the total quantity of rifles produced before 1988 was less than 800 units.

The CZ 537 hunting and sporting rifle encountered substantially more favourable circumstances; many of the contemporary hunters still remember this rifle. The modernised Mauser type firearm was manufactured until the late 1990's. The engineers from Uherský Brod were using it to test the new receiver concept, the application of various feeding mechanisms (fixed magazine or detachable magazine), the new shape for stocks in addition to preparation for the production process using CNC machinery, which saw its initial launch at Česká zbrojovka in the second half of the 1980's.

The company took further steps, the most recent one at the beginning of the 1990's, when the CZ 537 rifle became the engineering basis for the new model series – the CZ 550 – and that can be considered the top level of the multifarious development of firearms using the best proven concept of the Mauser action.

### **IMPROVING ON PERFECTION**

The Mauser 98 action represents a well-proven classic technology and it cannot easily be the subject of major enhancement, as such, although some people interested in the issue might imagine so. The bold-faced, eager to "upgrade" the old solution from Oberndorf for over hundred years, would stumble over unexpected downturns on their meandering route to new

achievements. Fortunately, that was not the case with the engineers in Uherský Brod, who were amongst the lucky crowd in managing to establish a link between the top features of the original design and the carefully preconceived modern modifications, in order to complete a perfectly functioning assembly. Apart from that, the mechanism from the CZ 550 was used in the excellent CZ 750 sniper rifle, with tremendous success.

The power manifested in the approach of Česká zbrojovka lies in the focus on the literal weak areas of the Mauser system and the preservation of the flawless aspects and features. The classic concept for the CZ 550 rifle was combined with a bolt and two locking lugs, a heavy firing pin and a long extractor. However the extractor on the fivehundred and fifty is located on the bottom part of the receiver, therefore, unlike on the Mauser 98, this part does not reduce the left locking lug, and the rifles from Uherský Brod can handle high performance ammunition (including the so called "tropical calibres") and are protected with dual locking lugs. The bolt sleeve was subjected to a total re-design (the classic Mauser system was equipped with a substantially more complex type, extremely difficult to manufacture). The safety catch was moved from the bolt onto the right side of the receiver in order to enable the installation of the riflescope. An interesting change was made to the firing pin, the rear part of which protrudes out of the bolt sleeve when the mechanism is cocked, and thereby works as a cocking indicator. Minor or less substantial modifications would definitely comprise a more comprehensive list; however, the user's point of view must be respected, in that we still talk about the classic Mauser 98, even though its design and technology have been matched by the stateof-the-art developments of the 21st century.

### RICH ASSORTMENT

The contemporary range of CZ 550 rifles comprises seventeen basic versions, which are further complemented with models featuring tropical calibres for the successful CZ-USA Safari Classics series, which is only available in the case of a few selected products in the Czech Republic, in addition to the CZ 555 model with a different design. The company's website at www.czub.cz can serve as an excellent orientation tool. One can always focus on the general summarised characteristics.

The CZ 550 rifle, which can be selected on the basis of a series of mutually related criteria, is distinguished in terms of the classes defined as Medium and Magnum





(plus the Safari Classics series for hunting in Africa; the independent class formed of the Lite series, comprising the related "small Mausers", actually the CZ 527 model), whereas the criteria most important for users can be listed in the order defined below:

- calibre: in inches within a broad range from .22 to .505, including the classic and new hunting ammunition with some of the heavy-duty exotic rounds such as .500 Jeffery or .505 Gibbs;
- barrel length: apart from the classic standard of 600 mm, there are light 520 mm long barrels for all-stock and drive models, and the heavy 650 mm long barrels on rifles designed for precision shooting at greater distances; in any event, these are premium barrels made from cold forged materials, with great accuracy and a long service life;
- stock material and shape: standard or choice walnut, laminated woods, shapes from the simple American stock right up to the luxurious Monte Carlo...;
- sights arrangement: basically a combination of mechanical sights and dovetails for the installation of riflescopes or just dovetails for riflescope installation; while a rifle can easily be fitted with the largest optical "cannon", mechanical sights can be provided with a battue type of sight;
- trigger mechanism configuration: the basic version is equipped with a single set-trigger, which can easily be dismantled; the trigger is provided as standard with an adjustable trigger pull weight, travel and backlash control.

Most models are available with a fixed magazine (5 rounds) as well as a detachable magazine (4 rounds); however they can be fitted with a short magazine for 3 rounds or an individual round feeding mechanism on request.

The CZ 550 rifles come with a manual silent side safety catch made in two-position or three-position versions. In its rear position, the two-position safety catch disengages the trigger mechanism and locks the bolt; the front position will disengage the safety catch, putting the rifle into "Fire" mode; the middle position of the three-position safety catch permits

opening the bolt, even while the trigger mechanism is locked.

### **NEW RELEASES**

The current product range of Česká zbrojovka includes a huge representation of new models with the new stock shape, typical in its elevated, slightly cranked comb, with a new shape for the cheek-piece, a conspicuous pistol grip, a modified fore-stock and a new aesthetically attractive finish for the checkered grip surfaces. This modernisation has been applied to all the rifles made in Uherský Brod, i.e. including the rimfire rifles and the very popular light rifles of the CZ 527 series. The new stock really "fits" the CZ 550 rifles, both in terms of aesthetics as well as practical utilisation.

The finish of the grip surface, carried out using laser technology, represents

a well-established standard accepted by rifle users in a very positive manner. Incidentally, Česká zbrojovka has been using laser technologies more during recent years for engraving and decorating metal parts and for "stamping" the proofing marks, though this is not yet well known.

The CZ 550 Exclusive Ebony Edition model represents a really distinctive new release during the recent period; it is described in further detail in the next article.

### RIFLES FOR THE WHOLE WORLD

Even though the CZ 550 series rifles have been in everyday use for a long time now and sold in large quantities all over the world, the best proof of their quality is definitely the excellent reputation and popularity that they enjoy in Africa. That is actually the place where one would likely make only one mistake when hunting, therefore the local professional hunters protecting and providing security for the overseas safari lovers will pay maximum attention to the rifle that they choose to rely on for their own lives as well as those of their high-paying customers. The previous yearbook of Česká zbrojovka Uherský Brod approached this topic with quotations from the African Hunter Magazine, which implied that the CZ 550 series manages to combine quality, reliability and price in such an excellent combination that the fivehundred and fifties have become the most popular firearms amongst professional African hunters, who do not have to worry when encountering attacks by large and dangerous animals such as the big cats, rhinos or buffalo. It would take more skill than that of the most adept marketing manager to manufacture a better reference.

Notwithstanding any exaggeration, the CZ 550 series is praised by its users absolutely everywhere. This well deserved respect is earned due to its clever design solution, which has created a harmony between the best of the traditional and contemporary features to achieve exceptional durability at the border of indestructibility, the highest quality of workmanship, total reliability under any weather conditions and above average shooting performance with weapons of regular factory production.

## Ebony BEAUTIES

## The CZ 527 Exclusive and CZ 550 Exclusive Rifles

The term "luxurious hunting firearm" will definitely make most readers think of rifles or shotguns with elaborate decoration. Česká zbrojovka Uherský Brod is showing another facet of this imagination with their new luxury rifles



ngravings on metal or crafted wooden parts, optionally complemented with incrustations or inlaying and overlay, represent a traditional and very popular method for decorating hunting rifles, applied also in some countries on combat or defensive firearms. The results of the work of master engravers represent artistic items of a high aesthetic quality and monetary value. However there are also certain disadvantages to this – a general rule implying that luxurious firearms will no longer be treated as regular tools and deemed as unsuitable for normal use. When lumbering through the woods, one can never

In regard to the above mentioned scenario, Česká zbrojovka Uherský Brod decided to adopt a slightly different approach to the subject. Their aim was to provide wealthier customers with rifles of an exclusive appearance, which could be also used in regular hunting scenarios without the need for concern about damaged ornaments. That inspired the development of the new series of Exclusive rifles (with the Ebony Edition attribute), including the well-proven hunting models of the CZ 527 and CZ 550 series.

Both firearms have been based on the excellent variation of the Mauser bolt, which locks into the locking recesses on the front face of the receiver. The receiver is made from a solid steel billet and is





connected with the trigger mechanism, furnished with an adjustable single setting trigger. The bolt is operated using the bolt handle on the right hand side, with a round knob on the end. The manual safety catch is located behind the bolt handle, on the right side of rear portion of the receiver. The CZ 527 Light Rifle model with a calibre of .222 Rem. or .223 Rem. has a magazine for 3 rounds located in front of the trigger guard. The CZ 550 selected for the Exclusive series is equipped with a fixed magazine for five rounds of the .30-06 Sprg calibre. Both models come with a floating barrel made from cold hammer forged metal, installed in front of the receiver.

## What is ebony?

Ebony (i.e. Diospyros ebenum in Latin) or ebony wood is the general name applied to more than 200 kinds of wood originating from Africa, Asia, America and Australia. The most famous types comprise the Ceylon ebony, the African ebony and the so called "Makasar" ebony, found on the islands of South-Eastern Asia. Any type of ebony is remarkable for its very thin, grey-white sap and its very dark core, sometimes even pitch black. Ebony can achieve a weight-density of approximately 1000 kg/m<sup>3</sup>. Ebony wood is famous for its hardness, which requires laborious processing and carries the risk of chipping. However ebony is still very easy to polish so that, despite its high price and difficult processing, this wood has been in heavy demand for millennia and has been utilised for the manufacture of decorative items, musical instruments and luxury furniture as well as for intarsia (inlays in different types of other wood).

The word "ebony" itself originates from the Old Egyptian word "hbny", which developed into the Ancient Greek "ébenos".





## **EBONY AND SPIRAL**

One of the key decorative features on the CZ 527 Exclusive and CZ 550 Exclusive models consists of their new, modernly designed, walnut stocks with new elegant checkered grip surfaces complemented in fine style by the shape of the fore-end stock nose and the butt of the pistol grip, made from dark ebony wood – adding the Ebony to the firearms attribution.

The stock is provided with a butt-plate made from black rubber to reduce the experience of recoil. The bottom surfaces of the stock and the fore-end stock are fitted with a sling. Other distinguishing features of the Exclusive rifles range include a barrel with a helical surface created by a spiral facetting hammer forging technique. This technology ensures high accuracy and long life. The surface of the barrel and receiver is black and stylishly complemented by a bolt in a matching metal colour with the overall surface embellished by jewelling. The finish of the bolt handle, the trigger guard, the magazine and the other steel features are also blued. The trigger colour matches that of the metals parts.

Neither the CZ 527 Exclusive nor the CZ 550 Exclusive has open sights. Their intended use is designated for mounting a quality riflescope, corresponding with the extraordinary accuracy of the new rifle series from Uherský Brod. The magazine of the CZ 527 and the magazine housing base are flush to the fore-end stock contours and do not interfere with its clean lines.







## We want to become the world's top manufacturer of SAFARI GUNS

Alice Poluchová is a successful manager and the President of the CZ-USA company, a subsidiary company of Česká zbrojovka Uherský Brod. We talked with her about her experience as a hunter, about the development of the CZ Safari Classics Programme and about other news regarding the activities of CZ-USA and the success of the new CZ weapons in the United States.

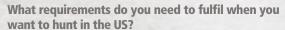
Alice, what's your relationship towards nature?

I come from the Czech town of Nový Jičín which is situated in the rolling and woody foothills of the Beskydy Mountains. When I was a little girl we used to go to our friends' forest and we spent every weekend making walking excursions in the woods. My positive relationship with nature is deeply rooted within me and I'm always glad when I can return to the countryside, where there aren't any giant buildings or unceasing noise.

### When did you start hunting?

I started hunting on my own in 2002, in the USA, and I was a complete greenhorn then. My husband and I were lucky enough to meet the right people, who maintained a special attitude towards

hunting and shared their experience with us. They also told us what's good to wear when hunting in America. Most American hunters prefer camouflage clothes because they don't care whether they tear them up in nature or not.



You have to pass a course targeted to the safe handling of guns and to ecological behaviour in nature. The Americans really care about safety. Each hunter is required to wear special safety accessories, orange in colour, in order to be clearly seen by other hunters. After you pass the course you receive a certificate which is valid for your entire lifetime. It is possible to take the course from the age of 8 and every participant also obtains a handbook entitled Hunters' Education Safety which contains advice about how to behave in nature. By the way, the publication of this handbook is promoted and sponso-red by our company, the CZ-USA.



Alice Poluchová with the CZ 550 centerfire rifle at the IWA Trade Fair (Germany).

What are the differences between hunting in the US and hunting in the Czech Republic?

The rules for hunting are established individually for each state in the US. Apart from different hunting periods and close seasons the difference also consist in whether you may use only a centerfire rifle or whether you're also allowed to use weapons loaded with a single bullet and gun powder, that is to say muzzle-loading rifles or, for example, bows, crossbows, pistols or revolvers. In each US state you are required to purchase a hunting licence, which you can obtain virtually anywhere, for example at a gas station.

There are only a few types of animals in the USA, while there are 12.5 million registered hunters. In conjunction with registered fishermen, this number increases to

34 million. Hunting and fishing directly support 1.6 million jobs. Hunters and fishermen spend more than one billion dollars a year on licenses, tickets and permissions. According to official records, hunters and fishermen generate some 25 billion dollars in federal, national and local taxes, while they spend 76 billion dollars a year on items associated with hunting and fishing. Despite the fact that it is often balloted upon whether you will be permitted to go hunting or not, you'll often hear a regular cannonade in the woods. Some hunters use spears and many people prefer hunting with a bow or a crossbow, because you can buy them easily, similarly to muzzle loading rifles. Vermin, which in the USA also includes rabbits and hares, can be hunted all the year round. There are only a few game-birds in the US, such as, for example, quail or pheasants, however there are more mallard ducks and grey-lag geese. Over the whole territory of the US there are a large number of predators, which are protected by federal law, which is to say throughout the whole of the US.

Which calibres are most preferred amongst the American hunters?

The most-purchased calibres include the .30-06 calibre, the .270 Winchester and the .300 Winchester Magnum. The rimfire rifles are usually used for hunting squirrels which are categorised as vermin in the US. The squirrels in the US are bigger than those in the Czech Republic and in some regions their meat is eaten.

You said in the interview for the Company Yearbook for 2007 that you had used exclusively weapons manufactured by Česká zbrojovka, Uherský Brod. What hunting experiences have you had with the guns?

The accuracy and reliability of our guns represents an undisputable advantage. It has never happened to me that our rifle wouldn't work after it fell into mud or sand or after a horse lay down on it. When Česká zbrojovka manufactures a new weapon I always check its capabilities for hunting. One of the most recent examples of the remarkable accuracy of our guns is the new CZ 550 Hunter rifle in the .300 Winchester Magnum calibre. I hunted down an antelope at a distance of 505 yards with this rifle.

## Which guns do you use?

While out hunting, I prefer repeating rifles and I try to shoot at sure targets. I also use handguns made by Česká zbrojovka. In my bedside table there is a CZ 75 SP-01 pistol with a laser pointer.

Does the success of the World Champion in IPSC Adam Tyc, his colleague Angus Hobdell and other shooters from the CZ Shooting Team in any way encourage the interest of American shooters in the weapons manufactured by Česká zbrojovka?

Of course it does. When we started the business ten years ago, the CZ weapons were only occasionally used here. Today, when you look at the results of any of the international or national championships, the weapons from Česká zbrojovka will certainly rank amongst the most successful. The most popular models are the CZ 75 SP-01 and the CZ 75 SP-01 SHADOW. During the past two years we've been successful in the Single Stack Division of the IPSC with the Dan Wesson pistols.

Česká zbrojovka has recently launched two new pistols – the CZ 75 SP-01 PHANTOM and the CZ 75 P-07 DUTY. Do you know how American shooters evaluate the qualities of these pistols?

In 2009, the DUTY pistol was the best selling product from the Česká zbrojovka's portfolio on the American market. Its attractive design, reasonable price, its suitability for concealed carry and its functional reliability guarantee good sales and satisfied customers. The PHANTOM pistol is suitable for people who prefer a higher capacity magazine. Overall, the SP-01 line in the 9 mm Luger calibre has proved exceptionally good.

**How does the Safari Classics programme continue?** 

We've prepared a separate catalogue of the luxury hunting guns line for the 2010 season, in cooperation with Česká zbrojovka. The catalogue can be downloaded from the www.czub.cz web pages and we're preparing a world-wide sales promotion for this

programme. We've extended our range of calibres, we've prepared engraved arms and we've developed new stock types. Our aim is to become a world-wide brand in hunting guns for safaris.

In 2008 Česká zbrojovka started to manufacture the CZ 75 SP-01 pistol in the .40 S&W calibre. How did the American shooters accept the gun? The CZ 97 in the .45 ACP calibre is now also manufactured with a decocking lever in the place of manual safety. Has the modi-fied CZ 97 BD, which has been aimed at the American market since the very beginning, succeeded?

The SP-01 models in the .40 S&W calibre and the CZ 97 BD in the .45 ACP calibre, with the decocking lever, were developed at the request of the armed forces. Even though we can't boast that we sell a lot of these guns, we're starting to see some activity in this field and we sell these weapons to individual members of the armed forces. These are the first swallows.

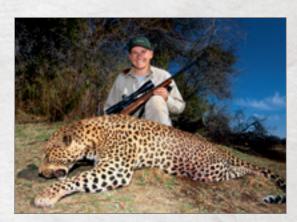
The Dan Wesson Company, which is owned by CZ-USA, has introduced two new pistols. Can you reveal the plans of this company for the year 2010?

Dan Wesson has been successfully continuing with the production of the type M1911 pistol. In 2009 we manufactured 3000 pistols and I'm very happy that all of them had already been sold in advance. After five years, these products have brought themselves to the attention of shooters as peak guns, thanks to their high quality. In 2010 we plan to manufacture 3500 pistols which, due to never-ending demand, will consist mainly of models of the .45 calibre ACP modified for the American market – the Valor II and the compact models designed for concealed carry.

Do you use your hunting experience and your experience with the guns from Česká zbrojovka in your business?

Our customers ask about the characteristics of our weapons so, naturally, my own experience is very beneficial to me.

Thanks for the interview and we wish you a lot of success!



Alice Poluchová hunted down a cheetah in the summer of 2009 "Nothing can escape the guns of Česká zbrojovka", she says.

## Not only for PRESIDENTS

When a leading authority figure in the Czech Republic decides to give a valuable gift to a leading authority figure of a friendly state the short list of suitable gifts often includes a high-quality,

## and KINGS CZ luxury arms

artistically decorated handgun made in the Czech Republic. This is a tradition of long standing, which has been linked for a long time with Česká zbrojovka a.s. in Uherský Brod, as different Czech governments, regardless of their composition, have confidentially appealed to the company for the purpose of purchasing luxury gift guns.

uring his visit to Washington in March 2008, the then Prime Minister of the Czech Republic, Mirek Topolánek, handed over to US President, George W. Bush, a CZ 550 rifle of the .308 Winchester calibre. In a press release Česká zbrojovka stated:

Based on the CZ 550 model, this rifle is a unique original, with a high proportion of craftwork. However, it was specially designed at the request of the client, which was the Czech Prime Minister. There are President George W. Bush's initials, outlined in pure gold and on



A breakthrough moment: the news about the ornamented CZ 550 rifle from Česká zbrojovka Uherský Brod being handed over to the then US President George W. Bush in March 2008 was reported in all the major Czech media.



the stock there is an inscription engraved which states that the rifle is a gift from the Czech Prime Minister. The rifle is richly inlaid with pure gold and ornamented with a hunting motif and a fine English engraving. Its ergonomic stock is made from Canadian walnut with a luxury briarwood finish.

While the Americans accepted the gun from Topolánek as a very nice but not exceptional gift, as it is an established tradition to give a gun to the US President, it was an important, even virtually a breakthrough moment for the Czech Republic and for Česká zbrojovka in particular.

The truth is that luxurious guns destined for important officials have been manufactured for decades in Uherský Brod, but the general public has scarcely ever heard about it. The news about the decorated rifle for President Bush, which was reported by all the national media, is perhaps the first globally distributed, detailed information concerning the fact that our largest national arms factory is able to prepare a gift gun of high quality which can excite even the leader of the most powerful country.

During the presidency of Topolánek, the company has experienced a mini-boom as far as orders of gift guns designed for leaders of friendly states are concerned. Apart from that given to the then President Bush, the CZ 550 was also given to the President of the United Arab Emirates, while the President of Kazakhstan received an engraved CZ 75 pistol and the Jordanian King was given a decorated SA 58 sub-machine gun during his visit to the Czech Republic. The Government of the Czech Republic ordered ornamental gift guns for several other important officials.

### THE SERIES FOR PRESIDENTS

Česká zbrojovka focuses on series manufacture, while ornamentation as well as adjustments represent a kind of extra service which the company provides with pleasure at the request of clients. The offer of engraved guns therefore includes both a basic and a medium level of ornamentation, the starting point being a serial product or a subsequently adjusted product, which is fully functional. This has certain advantages – like for example when the company decided to follow up on the

enthusiastic acceptance after the handover of the luxury rifle to the then US president. Even though the rifle for George W. Bush was a unique item, worth tens of thousands of dollars, it is based upon the standard CZ 550 model which enables Česká zbrojovka to continue to cooperate with the workshop of the engraver, René Ondra, and to take advantage of the admired presidential rifle in order to manufacture a similar limited series of rifles which are decorated with more or less identical pieces of art. One luxurious rifle from this series will become an exhibit in the "hall of tradition" of the Česká zbrojovka company, another item will be exhibited in the company's store in Prague and the third exemplar is designated for the Government of the Czech Republic.

## **GUNS FOR KINGS AND QUEENS**

The rifle for the then US President represents only the tip of the iceberg – even if we consider only engraved guns for heads of states. The products of Česká zbrojovka are also very popular in the countries of the Orient, where gun ornamentation is perceived a little differently than in the generally more conservative Euro-Atlantic civilisation. It is from this part of the world



The engraver René Ondra works on a luxurious order for a client from the Orient



that several very important, and in some cases even crowned, clients of Česká zbrojovka come from. These customers order luxurious guns, including weapons for duty use, in Uherský Brod.

Orders from the Orient represent a real challenge for the engravers who work for Česká zbrojovka because these clients have really special demands. Nevertheless, it is worthwhile. The satisfied buyers from the Middle East, who cannot complain about a lack of money even during a global economic crisis, usually return to a well-proven supplier and their orders amount to considerable sums. Apart from the previously mentioned Jordanian King the Heads-of-State of Bahrain and of Oman also took a fancy to the engraved guns from Uherský Brod. The Sultan of Oman, Kábús bin Saíd bin Tajmúr as-Saíd, regularly orders engraved pistols from Česká zbrojovka. Thanks to these exclusive clients the company obtained an order for 120 engraved pistols in 2009.

## THE VISIT OF KING ABDULLAH

Invited by the Czech President, Václav Klaus, the Jordanian King Abullah II came to the Czech Republic on an official visit and spent two days here, April 6th and 7th.



This sovereign belongs amongst the admirers of the weapons from Uherský Brod and he likes to give them to his friends. He ordered a meticulously ornamented CZ 550 rifle with a portrait of the Bahrainian sovereign Hámid ibn Ísa al-Chalífa and at the SOFEX 2008 Trade Fair in Amman he bought a pistol with an engraved portrait of his son. Guns from Uherský Brod were also presented during the King's visit to the Czech Republic in April 2009. At the end of his visit King Abdulláh met with representatives of Česká zbrojovka, who had prepared the most recent models of engraved guns, at the airport in Přerov-Bochoř.

"The Jordanian sovereign himself requested this meeting. He's a passionate collector of guns with artistic designs. He has grown up with the ornamental guns from Česká zbrojovka, chosen for their perfect workmanship and individualised graphic designs," stated Jiří Škrabal, the Sales Manager of Česká zbrojovka who organised the event.

The meeting was very successful: Abdullah II liked the new ornamental guns from Uherský Brod so much that immediately, on the spot, (like many times before) he ordered a whole collection of engraved pistols. In regard to the fact that the Czech Republic has just established military cooperation with Jordan we can assume that a meeting of this nature was by no means the last one. This is a good piece of news for Česká zbrojovka because the Jordanian king will probably take advantage of another opportunity to supplement his collection.

## HOW TO ORDER YOUR OWN ENGRAVED GUN

Embellished guns made by Česká zbrojovka are not the privilege only of Presidents and Sovereigns. The company from Uherský Brod offers a wide range of engraved guns which are quite affordable for the basic models, even for people with moderate incomes. In order to explore the possibilities it is very worthwhile to visit one of the company's outlets: one of these is located in Uherský Brod, close to the factory, while the Company's store in Prague has moved into very attractive premises on Opletalova Street, opposite the Main Railway Station. Both shops offer ornamental guns including some interesting exemplars from a limited series. In this way a potential buyer can work out what he can afford. And, who knows, perhaps he will take a fancy to one of the exhibited items.

Another path may lead you to our catalogue of finished engraved CZ guns – the easiest way to find your way is through our web site: www.czub.cz in the section "products", and the subsection "engraved guns" which is divided into the categories pistols (4 types of engravings), centerfire rifles, rimfire rifles, knives and gift cases.

If you order a specific engraved gun you can choose between the models from the catalogues. However those of you who are sufficiently confident artistically may design their own ornamentation. The prices correspond to the demands made by the design. The delivery-term is a minimum of three months in respect of common motifs; in the case of more complicated designs this takes longer. The gun is then formally handed over to the client, who receives a certificate of the engraving, signed by the engraver.

## Tovelve GROOVES The CZ 452-2E

ZKM Super Match rimfire rifle

The CZ 452 rimfire rifles, also known as the ZKM series, can be legitimately considered as the crown jewels of the Czech arms manufacturing industry. These firearms have been among the bestsellers at Česká zbrojovka Uherský Brod for a long time and the factory treat them with the care due. The initial 452 series has expanded to include more or less specifically derived models, including the CZ 453 special, fitted with a new trigger mechanism, and the very well marketed model Super Match.



CZ 452-2E ZKM Super Match in .22 LR calibre

he CZ 452-2E ZKM Super Match in .22 LR calibre was first launched on the market in 2008. This model evolved pursuant to demands from Asian customers, who purchase the majority of these products. Like the other rimfire rifles made by Česká zbrojovka Uherský Brod, the Super Match model features a premium quality cold-hammer forged barrel, provided with twelve right-handed grooves (the standard bore of CZ rimfires would have only six grooves). The twelve grooves work perfectly to stabilise the projectile, giving the Super Match the capability of extremely high accuracy. This model is supplied with a magazine for 10 rounds as standard.

The open mechanical sights comprising a front sight and the rear sight adjustable in a range between 25 and 200 mm allow for shooting over a fairly long distance. Other parts of the Super Match model are identical with the familiar rimfire rifles of the CZ 452-2E ZKM series.

Although the Super Match rimfire rifle might look like an exclusive sporting special, this is not the case. The standard model is supplied with a stock made from natural beech wood. The buttplate is made from black plastic. The bottom surfaces of the fore-end and stock are provided with swivels for a sling attachment. The CZ 452-2E ZKM Super Match in .22 LR calibre represents an attractive blend between a standard and a sporting rimfire gun. Therefore this firearm is very convenient not only for leisure and sport but also for

hunting small game. The total success of this rifle is demonstrated by the great demand for it – the Super Match model is currently placed fourth in the table of best selling rimfire rifles from the factory in Uherský Brod.



Rear sight of the Super Match model



Muzzle of the Super Match model

## MULTICALIBRES

The CZ 455 – a new generation

of repeating rimfire rifles from Uherský Brod

> CZ 455 Lux – muzzle close-up

The rimfire rifle CZ 452 and CZ 453 rimfire rifle models from Česká zbrojovka Uherský Brod rank among the world's most sought-after firearms of their kind. The company in Uherský Brod was not going to allow itself to fall asleep in this field and the year 2009 ushered in another generation of rimfire rifles, which reflect the most recent requirements and desires of hunters and sporting shooters. The new CZ 455 series had adopted the successful design properties of the CZ 452 model and augmented them with up-to-date features to improve the user's comfort and to expand the potential of these guns.

## **UNCHANGED FEATURES**

The well proven features of the rimfire rifles produced by Česká zbrojovka Uherský Brod include the familiar steel receiver and a very rugged bolt, locked by means of a single massive lug on a rotating ring, on the CZ 455 model, with the ring sliding onto the rear portion of the bolt body, whereby the lug is linked to the bolt handle. The recess to accommodate this lug is

located in the rear portion of the receiver. This locking system allows for the utilisation of any type of power load of ammunition of the calibres .22 LR, .22 WMR and .17 HMR. The bolt is of a moving cylinder type, which does not rotate during loading and only moves back and forth. In no way is this a Mauser system derivative; this is an original design born on the drawing board of the famous engineer, Josef Koucký.

The feeding of ammunition into the chamber and the ejection of spent cartridges are absolutely reliable. The top reliability characteristics of this gun are definitely supported by the design of the extractor with a holder fitted by means of a C-shaped flat spring, which embraces the front area of the bolt. The extractor and the holder are housed within ports in the body of the bolt without any pins. This structure is very solid, while the parts are still very easy to replace in the event of damage.

We should not forget about the smart design of the simple but absolutely reliable safety catch, which will block the firing pin directly, when it is in the locked position. The passive safety of this gun is further enhanced by means of the trigger mechanism design. The sear and the firing pin catch form a triangular assembly and are mutually reinforced in the case of the trigger being released. This arrangement prevents any accidental shot due to the parts being set in motion by the momentum generated in the event that the rifle were to fall on the ground. The trigger pull weight is adjustable and the trigger is protected by means of



CZ 455 Lux – sights close-up

a steel guard. The magazine housing is located in front of the trigger guard. The core part of the rimfire rifles made by Česká zbrojovka is the cold hammer forged barrel with excellent accuracy and durability parameters, proven over time.

## A WORD FROM THE DESIGN ENGINEER

We asked the most proficient authority, the design engineer Jaroslav Malina to describe the development of the substantial design assemblies for the new CZ 455 rimfire rifles:

"The work took about nine months. Our task was to supply our customers with a variable rimfire rifle, allowing for the easy replacement of the barrel with a different calibre, feasible for the users themselves. We derived some features from the proven design of the CZ 452, however these had to be modified in certain ways.

We created a receiver and a bolt, including the magazine housing, identical for all the models and different calibres. There is a significant change in the installation of the barrel. There is a recess with a straight right-angle fitting beneath the perpendicular barrel top; this recess fits tightly over the bolt face and the front surface of the steel insert reinforcing the magazine housing, which is firmly connected to the receiver.

We machined two prismatic grooves into the bottom part of the barrel below the chamber. The rear surface of these grooves is pushed by the front facets of two Allen screws passing through the threads on the bottom surface of the receiver face. These screws also push against the contact surfaces in the receiver. The design of the barrel installation is very simple, stable and strong. The barrel is attached at one point and is allowed to



vibrate freely. A replacement can be carried out using regular wrenches without any need for special tools.

The barrel or even the calibre replacement options are closely in synch with the magazine design and the shape of the magazine housing. The CZ 455 rimfire rifles are supplied with our standard plastic magazines, identical for the .22 LR and .22 WMRI.17 HMR ammunition types. The magazine housing corresponds with the size of the magazine for the .22 WMR or the .17 HMR calibre, and to make the magazine suitable for the .22 LR calibre, its rear part has an insert of a simple plastic segment, secured by means of a traverse steel pin. The magazine is held inside the rifle by a flexible catch located on the magazine housing face.

The trigger mechanism of the first CZ 455 Lux model is equipped with the adjustable trigger pull weight





Receiver and magazines for .22 LR and .22 WMR/.17 HMR calibre and the spacing segment with the locking pin

option. The trigger currently has no set-trigger, however we now have the set-trigger version ready.

The bolt top rear portion is fitted with a manual safety catch. Aiming is facilitated by the use of the LPA steel sights with the rear sight drift adjustable for elevation and windage with a squared notch. The front sight is a squared post protected by a tunnel made from sheet steel. The barrelled action is embedded into the well-tried stock made from quality walnut. The stock is protected with a high-quality lacquer; the steel parts of this gun are blued. The bolt retains its traditional metallic colour. The change of design and the utilisation of modern production technology helped us to achieve an overall simplification. That makes us more flexible by prompt compliance with the up-to-date demands of our customers."

## **MAIN ADVANTAGES OF THE CZ 455**

- simple design;
- unique receiver identical for any model of the CZ 455 regardless of its calibre; due to the new design, the

receiver cannot be used on the older models of the CZ 452 or the CZ 453;

- the same bolt for all models and calibres of the CZ 455;
- simple barrel replacement;
- easy conversion to any calibre;
- new LPA sights;
- easy disassembly and overall maintenance.

## GUN DISASSEMBLY AND BARREL REPLACEMENT

Remove the magazine and make sure that there is no cartridge in the chamber. Pull the trigger and remove the bolt from the receiver in a rearward direction. Loosen the screws securing the trigger guard, which also connect the receiver and the stock. (This is another example of simple design. Two strong screws holding together the trigger guard, a receiver with the trigger mechanism and the barrel inside the stock. Remove the trigger guard and the spacer beneath it.) Take out the receiver with the trigger mechanism and the barrel and magazine housing. Loosen the two screws in the breech face and remove the barrel from the breech face. In the case of rifles with a .22 LR calibre you can, though this is not necessary, push out the pin securing the segment within the magazine housing.

The procedure of re-assembly comprises the same steps in reverse order, without any difficulties. Insert the barrel into the receiver (there is only one way to do it), until the barrel stops on the contact surfaces, so that there is no other means of securing the barrel in place here; its locking screws must be tightened in such a manner that their removal does not require any excessive force; any damage is to be avoided. If we want to retain the .22 LR calibre, the magazine housing should be inserted with a plastic segment, which is locked using the pin. In case of conversion of a rifle to .22 WMR or.17 HMR calibre, there is no need to insert the segment, as these magazines are wider. The receiver with the barrel and the trigger mechanism should be placed into the stock, the corresponding recess in the stock should be fitted with



CZ 455 disassembled into its main components



Jaroslav Malina, the design engineer of new rimfire rifles CZ 455 and CZ 512 from Uherský Brod

the spacing insert, bearing the trigger guard, with two screws inserted into the openings inside; these screws tighten the stock and action assembly together. The gun assembly is finished upon insertion of the bolt and the magazine. For routine cleaning remove the magazine and bolt from the receiver.

## **PRACTICAL TEST**

We tested the performance of the CZ 455 Lux in the .22 WMR cal., with the interchangeable barrel kit and magazine for the .22 LR calibre, at the testing shooting range of Česká zbrojovka Uherský Brod. The new rimfire rifle has retained its excellent accuracy, easy handling and the reliability familiar from the previous models of the CZ 452 line. An excellent and easily adjustable trigger provides for comfortable shooting; the shooter can dedicate his/her full attention to aiming and enjoy the bliss, in terms of great hits. From the control point of view, this CZ 455 rifle works perfectly. We were shooting from the seated position with a gun support, however there was no one who could resist trying the standing position without any supports using rapid and razing fire. We were supplied with magazines for 5 and 10 rounds. While running multiple tests to check the optional calibre conversion, the simple and very purposeful design of this gun was appreciated even more. Our tests were conducted by firing more than 250 rounds of the .22 LR and .22 WMR calibre from various manufacturers and we never experienced any failure. The CZ 455 rimfire rifle in either calibre is associated with outstanding accuracy and quality ammunition produces exceptional groupings.

## **TOP COMBINATION**

The CZ 455 model series with modular design has assisted the well-proven rimfire rifles from Uherský Brod in passing a significant threshold between generations, which even enhances their attractiveness for potential users, and it has brought a substantial expansion of their performance. The revolutionary aspect of this solution is the optional fast and easy conversion of the gun to any calibre within the wide variety of .22 LR, .22 WMR and .17 HMR – while maintaining accuracy, reliability and long life which result in the worldwide popularity of the CZ 455 model for the shooter. Frankly speaking, this is the best method for modernising the traditional rimfire rifle assortment that Česká zbrojovka Uherský Brod could ever have chosen.

CZ 455		
calibre	.22 LR/.22 WMR/.17 HMR	
overall length	980 mm	
height	215 mm	
width	66 mm	
barrel length	525 mm	
magazine capacity	5 rounds	
weight of empty rifle	2800 g	

## CZ 512

## Semi-automatic rimfire rifle

CZ 512 © NOX N CETON KUNALZ style

Self-loading rimfire rifles
belong among the most popular
firearms worldwide, used for hunting, sport and leisure.
Česká zbrojovka Uherský Brod ranks amongst the traditional
manufacturers of semi-automatic rimfire rifles. Therefore, the disappearance
of the famous CZ 511 model from their portfolio several years ago was not to
indicate the company's retirement from the self-loading rimfire gun business.
The truth was quite different; following a careful assessment of the demand from
local and foreign customers, the company designed and started marketing the new

## **DESIGN**

The initial project focusing on the design of the new rimfire gun was assigned to an associated company in Slavičín, not far from Česká zbrojovka Uherský Brod. The final stage of development at the factory in Uherský Brod, including prototype testing and preparation of the production technology was undertaken by Jaroslav Malina, the design engineer of Česká zbrojovka a.s., who disclosed some of the crucial aspects of the design works:

CZ 512 model in the .22 LR and .22 WMR calibres.



"When working on the design of this gun, we took into account all the most recent findings and desires of our customers. With regard to the ammunition performance parameters, we had no other choice but to use the blowback steel action. The receiver is made of two parts. The bottom part, with the independently installed block containing the hammer trigger mechanism and the magazine housing, is made from a durable plastic, reinforced with fibreglass. The top portion, made from aluminium alloy, houses the steel bolt. Since the very beginning of our work, the CZ 512 rimfire rifle concept was developed as a modular version, allowing for the production of models in a calibre of .22 LR or .22 WMR. The modular structure is based on the easy interchangeability of the barrel, which is installed in a similar manner - not identically - as the barrel on the new repeating rimfire rifle, model CZ 455. The barrel anchorage shows some common characteristics, including the two locking screws in the bottom part of the receiver, which push into the wedge recess below the chamber. These screws act to ensure the simple and secure anchoring of the barrel within the frame and the receiver. The barrel is of a traditional cold hammer forged type,

with an excellent long service life and it is provided with a bore comprising six right-handed grooves. Other details taken from the repeating rimfire rifle model CZ 455 include the magazine housing shape and the magazines, which helped us to unify the production processes and to create a new family concept for our new rifmfire rifles."

We came across further design features during detailed inspection of the gun. The right wall of the receiver shows the ejection port and the removable cocking lever, which

## SELF-LOADING RIMFIRE RIFLES FROM UHERSKÝ BROD

The first self-loading rimfire rifle ever made by Česká zbrojovka Uherský Brod, initially designed by the legendary Koucký brothers for the Zbrojovka Brno company, the ZKM 851 in .22 LR cal., represented an original model of modular design. This small calibre semi-automatic rifle was produced in Uherský Brod in the period 1965–1979 in a total volume of less than 29,000 items, of which most were intended for export purposes. The ZKM 581 rimfire rifle was made in two versions: the Standard with a beech wood stock and a matte surface finish, without any dovetail on the pistol grip and fore-end and the Lux (or "luxurious") with a walnut stock and with high gloss polish and checkering on the grip surfaces.

In 1980, Česká zbrojovka Uherský Brod launched the production of self-loading rimfire rifle, the ČZ 511 model in .22 LR cal. (with a diacritic above the "C" while the factory in Uherský Brod was still using the trademark of its former parent company located in the town of Strakonice). That was basically the ZKM 581 model with certain innovations. The production line was discontinued from 1984 after the manufacture of almost 6,000 items, once again identified as Standard or Lux. The self-loading rimfire rifle returned to the portfolio in Uherský Brod in the year 1992 in relation to the increased production of civilian firearms following the inevitable termination of the supply for the national armed forces and law enforcement units. Česká zbrojovka a.s. then brought back the wellproven ČZ 511 model once again, which was then given the CZ 511 name after the expiration of the licence agreement granting the ČZ trademark rights. In addition to the traditional versions, such as the Standard (with a semi-matte beech stock in the previous stage of production) and the Lux (with a semi-matte walnut stock), there was also the Subsonic version with a thread for the installation of the Still or the Parker Hale sound suppressor on the muzzle, which was designed for less powerful ammunition with subsonic bullet velocity. The production of this self-loading rimfire rifle CZ 511 model ended in the year 2007 with a prospective replacement in the form of another modern model, with either the CZ 512 of .22 LR cal. or of .22 WMR.

Adding in an interesting piece of information, we might say that in the year 2004 we considered expanding our company portfolio with the self-loading rimfire rifle ZKM 611 model of .22 WMR cal. produced by Zbrojovka Brno to complement the products range of Česká zbrojovka a.s. The intended name for this gun in the product range from Uherský Brod was the CZ 411. However, this plan was not fulfilled due to the lower operational reliability of this model, which the company in Brno failed to remedy.

moves in conjunction with the bolt. The shape of the bolt is a square block with the spring loaded extractor on the right side. The ejector can be found on the left side of the receiver. Both braking the bolt movement during an operational cycle and its forward motion are ensured by the two recoil springs, which are laid over steel guides and are connected by means of an oval segment.

The top part of the receiver was machined with two rails for the attachment of a riflescope mount. The manual safety is located in the rear base of the trigger guard; it moves in a traverse direction and blocks the trigger from movement, when it is in a locked position. This safety system (cross-bolt) and its control belong amongst the basic systems worldwide and they are significant for their simple operation and high safety parameters. The magazine housing has been primarily designed to hold magazines of .22 WMR, whereas the use of magazines of .22 LR calibre, which are smaller, requires a spacing segment within the housing. The magazines available are designed to hold 5 or 10 rounds respectively and, together with the spacing segment and the catch on the front part of the magazine housing are identical to the magazines used in the repeating rimfire rifle model, the CZ 455. The shape of the receiver is very modern and this part has certainly been overdesigned. The barrel is embedded in the front of the receiver with the use of two screws. The receiver gradually melds with the fore-end. The stock, made from premium walnut, is linked to the receiver by means of a single long bolt passing through the pistol grip. The rear portion of the stock is protected with a checkered buttplate made from black plastic. The LPA sights are identical to those fitted on the CZ 455 model, comprising the post front sight,







adjustable for elevation, protected with a tunnel of sheet steel and the rear sight with a square notch and drift adjustable for elevation and winding.

## SIMPLE DISASSEMBLY

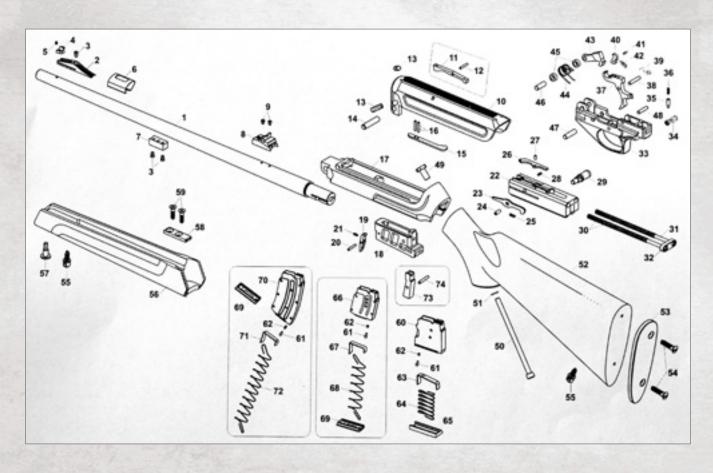
Remove the magazine and ensure there is no cartridge in the chamber. Loosen the screw in the foreend and remove it, take out the fore-end by pulling it in the direction of firing. Push the connection pin (e.g. using the screw from the fore-end or any other convenient object) and once it is protruding, remove it. Grip the barrel with your left hand and the stock with your other hand and pull it away from the body to slide the receiver all the way out from the gun frame, until it reaches the cocking lever. Take out the cocking lever and finish the complete removal of the receiver and barrel. When performing this operation, it is necessary to pay close attention to prevent loosening of the bolt

within the receiver; the bolt is under constant pressure from the recoil springs.

Hold the bolt firmly, push its top downwards and slightly against the pressure of the recoil springs. Additionally, tilt the bolt upwards in such a manner as to enable its complete removal. When removing the bolt, proceed with the utmost caution to avoid the ejection of the compressed recoil springs. For cleaning after shooting a large quantity of ammunition, it is recommended that the bolt itself should be disassembled.

## **EXCELLENT ERGONOMICS**AND ACCURACY

The practical testing of the parameters of the new self-loading rimfire rifle CZ 512 model was obviously undertaken correctly at Česká zbrojovka Uherský Brod. The outstanding ergonomics of the stock, together with the great shape of the gun and convenient reach of the controls, brought praise from the very outset. The trigger demonstrated a short and smooth movement and a slightly higher, easily-manageable pull weight (the manufacturer's data state a maximum trigger pull weight setting level of 29 N). The shooting test was then undertaken using models of both calibres - .22 LR and .22 WMR. From the very first shots, we were very pleased with the excellent accuracy and grouping. Shooting at a distance of 50 metres, we had the gun supported and used quality ammunition, combined with fixed sights, to achieve groupings within a radius of 55 mm diameter. We were shooting from various distances, from a seated position with support as well as a standing position without any supports, slow and aimed shots, followed by rapid firing at a single or multiple targets. When





standing and shooting at a distance of 18 metres, we achieved a grouping with a radius of 17 mm, with the gun warmed up after more than one hundred shots.

The performance, accuracy and reliability of the new self-loading rimfire rifle are excellent. The sights are very legible under normal lighting conditions and also when shooting at lit targets. The recoil is absolutely minimal



and negligible. I tested both rifles using magazines of 5 or 10 rounds respectively and I used more than 500 rounds of .22 LR and .22 WMR calibre from several manufacturers, with no failure encountered.

## **SUMMARY**

The new self-loading rimfire rifle CZ 512 .22 LR model will be introduced to the market in February 2010 in .22 WMR calibre and will be available to retail customers from June 2010. It is remarkable for its modern design, rugged structure, reliability and accuracy which make it competitive with a hand operated bolt. This model is suitable for sport or hobby and for hunting, made to satisfy every shooter with the desire for a quality gun of this type.

## **CZ 512**

## BRNO RIFLES

## Heirs of the famous traditions of arms manufacturing in Brno

significant and progressive suppliers of military firearms and machine guns.

BRNO RIFLES

Over/unders made in various configurations as shotgun-shotgun, shotgun-rifle and rifle-rifle of the BO 800 series and the single shot BRNO EFFECT break-action rifle are the most recent successors in the long and famous tradition of the manufacture of premium hunting and sporting firearms in the Moravian "capital" of Brno. This tradition has been associated with the Zbrojovka Brno company, which had become famous as one of the most



he origins of hunting and sporting arms production in Brno date back to the early 1920's, when Zbrojovka Brno made its first repeating hunting rifles. The real boom in this industry came in the period just after the end of World War II, when this manufacturer from Brno introduced double-barrel shotguns that were made partially in serial production and rimfire and centerfire rifles with a hundred percent interchangeable parts, completely in serial production. These premium quality firearms of simple design and perfect craftsmanship were developed by the top Czechoslovakian engineers of that time: the Koucký brothers, Emanuel Holek and Karel Pištecký. These civilian arms, labelled with a "Z" inside a helix, offering high quality, durability and reliability at affordable prices, reigned over a major part of the global market leading up to the end of the 1940's and established a firm foundation for the still prevalent popularity of rifles from Brno. The popularity of the shotguns, centerfire and rimfire rifles made by Zbrojovka Brno was not affected even by the partial decrease of civil production during

"the hot period" of the Cold War, nor even by the subsequent transfer of rifle production to Česká zbrojovka in Uherský Brod, who would produce these firearms under the same logo of Zbrojovka Brno.

## A NAME, A LEGEND

Every individual product from Zbrojovka Brno was in fact to become a worldwide legend within a short period: the "Z" and ZG 47 rifles, the small Hornet ZKW 465 hunting rifle, the exceptionally popular ZKM rimfire rifle – still produced by Česká zbrojovka Uherský Brod, the selfloading rimfire rifle ZKM 581 model, the excellent ZP model side-by-side shotguns, the original ZH combination guns and last

but not least the ZKR 551 revolver for target shooting. Never to be forgotten is the famous ZKK model hunting rifle, originally designed for production in Brno and carrying all the indications of the top quality firearms from this factory, however eventually manufactured in Uherský Brod, due to certain circumstances. The quality and popularity of these models is best demonstrated by the fact that many of them are still in use today, despite their venerable age.

## **DECLINE AND REVITALISATION**

Following the mandated transfer of rifle production to Česká zbrojovka Uherský Brod in the mid 1960's, the factory in Brno focused on the production of tractors and typewriters and calculating machines together with the development and production solely of shotguns and combination guns. This direction led to the production of the high-quality, classic Brno 500 over and under guns, together with the Brno Super and the Brno Super Express, the modernised versions of which were sold in parallel with the ZH combination guns, especially to Western

countries, up to the end of the
20th century. The glory of the rifles
bearing the "Z" in the helix was further
boosted by the products from Česká zbrojovka
Uherský Brod. Thanks to the efforts of the staff in
Uherský Brod, the "Brno" label was still regarded as
a symbol of top quality and reliability, with the guns
bearing this label becoming popular among several
generations of hunters and competition shooters.

The privatisation of Zbrojovka Brno in the 1990's brought improvement to its product range: in addition to the continuing production of the combination gun models, the ZH, the Brno 500 and the Brno Super, the Brno factory saw a partial revival of the production of repeating rifles production - these were fitted with the Mauser 98 action; the engineering department introduced the promising break-action single shot rifle ZBK 110 and ZK 99 models and the ZOM repeating rimfire rifle while the production department finally launched the attractive self-loading rimfire rifles designed by the Koucký brothers in the 1960's. The mid 1990's also saw the arrival of a brand new combination gun, the Brno 800 model. These rifles perpetuated the high tradition of arms production in Brno and Zbrojovka Brno had a sound opportunity to rejoin the world leaders.

## **ARRIVEL OF BRNO RIFLES**

Despite these promising steps in the right direction, Zbrojovka Brno suffered from a very complicated economic situation with the forced reduction and eventual cessation of its activities at the outset of the new millennium. Fortunately enough however, there was a new player about to emerge soon - BRNO RIFLES, s.r.o., a company initially founded as an affiliate to Česká zbrojovka Uherský Brod. This new company purchased some of the machinery and equipment from the factory in Brno, together with licences to manufacture the most promising models, employing experienced professionals (including the excellent engineer and designer of all the products currently being manufactured by BRNO RIFLES, Ing. Michal Koutný) and launched the production of the over and under guns designated as BO 800, in the second half of the year 2006, exactly in the former premises of Zbrojovka Brno, following up with the single shot break-action Brno Effect rifle model.

Another detail worth mentioning is that the year 2008 brought a change in the ownership of BRNO RIFLES, with respect to the fact that Česká zbrojovka a.s., which had completed the overall restructuring of its ownership relations, became the owner of 100% of the shares of the Brno factory as of 1st September 2008. That turned the former affiliated entity into a part of the parent company. At the same time, the executive head of BRNO RIFLES gained a new leader, the professionally experienced, Mr. Jaroslav Hruška.



The year 2009 brought a significant advantage in terms of the trade mark, famous worldwide, the "Z" in helix, which the BRNO RIFLES company re-introduced to its products to assist in further improvement of its position of being linked to the finest traditions of arms production at the Brno factory.

However, the company does not cling to the tradition at any price. This has been demonstrated by their relocation to new premises once the existing production and assembly halls of the former Zbrojovka Brno were found unsuitable for the company's activities due to the deterioration of the buildings, the high overheads and additionally the new corporate strategies. This relocation – of course within the Brno municipality as there is nobody to interfere with this tradition yet – was performed smoothly and fast in autumn 2009 and did not affect the accomplishment of production plan in any way.

## **GROWING DEMAND**

Unlike with the previous models manufactured by Zbrojovka Brno, the concept for the products made by BRNO RIFLES has been adapted to suit the CNC machinery lines, using regular communal tools and normal fixing equipment.

The original production solely of shotgun models is history; there is a growing demand for combination and centerfire models in addition to a greater interest in interchangeable barrel assemblies. The initial range of calibres has been gradually expanded with some additional specific models emerging. The year 2007 saw the introduction of a new combination gun model, Brno Stopper, in calibre a .458 Winchester Magnum with reinforced locking with a traverse pin. The increasingly popular products of BRNO RIFLES entered the year 2008 with a slight "face lift" especially in terms of a slimmer fore-stock and bascule modification. The most recent newcomers to the product range comprise the premium Competition sporting combination guns, which are described in more detail on subsequent pages.

## LONG GUNS from BRNO Back in the spotlight

## Brno Competition Shotguns

Long guns with receiver/action manufactured by the BRNO RIFLES are designed primarily for gamekeepers and hunters. However, every gun manufacturer with this production programme will always dream of having a quality sporting firearm, which would fit in the hands of the top shooters to demonstrate its quality and characteristics in the sporting field.



he BRNO RIFLES company has achieved just that with their excellent sporting over and under shotguns, **Brno Trap Competition** and **Brno Skeet Competition**, the technical parameters of which have been based on both the traditional and modern designs of shotguns, rifle-shotguns and rifle-rifle combination guns of the BO 800 series which are experiencing a rapid growth in popularity amongst customers during the recent years. The factory in Brno, following in the footsteps of the famous local arms manufacturing tradition, has reached another

benchmark necessary for achievement of sporting prowess – the Brno Trap Competition has been mastered by Miroslav Matějík, winning various championships as he has ranked amongst the greatest stars of the Team CZ Shooting since the beginning of 2009 (for an interview with Miroslav Matějík see the following spread).

## **DESIGN**

The designing and the changes in design of the new sporting long guns made in Brno, in comparison with the existing hunting models of the BO 800 series, were the main topics discussed with the BRNO RIFLES design engineer, Ing. Michal Koutný, who stated:

"The sporting shotgun combination guns have been developed thanks to their successful predecessors of the BO 800 series. These are made in the Trap version, with a barrel length of 760 mm, and the Skeet version, with a barrel length of 710 mm. The muzzle is threaded to allow for choke interchangeability. These guns are made with an adjusted sight rail with longitudinal ventilation ports, fitted with a front sight incorporating fibre optics and an optional auxiliary front sight attachment. The stock is made from selected wood, with an elevated

comb, a resilient buttplate, an extended pistol grip and an ergonomic fore-end. The factory-adjusted and finely tuned single-trigger mechanism facilitates a speedy first shot. The trigger is protected by the use of a steel trigger guard, with a gilt surface finish that enables settings for the optimum position against the finger within a range of 7.5 – 5 mm forwards and 2.5 mm rearwards.

The steel receiver of barrels has been tested for high stress effected by thousands of shots and features a plasma nitride-finished surface in a silver tint, decorated with a machined engraving showing flying targets and the Brno gilt sign. The barrel assembly bears an engraved label stating Brno Skeet Competition or Brno Trap Competition. When breaking down the barrels, it is necessary to push the classic top lever in front of the manual safety located in the traditional place on the top rear part of the receiver. Removal of spent shells is ensured by automatic ejectors.



Both the Brno Trap Competition and the Brno Skeet Competition shotgun models are made a the request of specific customers and adjusted in accordance with their special requirements directly in the production process."

## **DESIGNED FOR MAGNUM**

Successful utilisation of new models of shotguns has brought about a method of efficient promotion of the BRNO RIFLES company, as well as a truly profound test in respect of the technical and utility parameters of these firearms, making it a very useful source of practical discoveries of considerable value.



New guns from Brno are provided with adjustable triggers



Brno Trap Competition and Brno Skeet Competition (below)

"Even though the skeet and trap shooting competitions involve ammunition of the calibre 12x70, for which the chambers of the new Competitions series firearms have been intended, their structure has been designed to withstand the pressure generated by ammunition of the calibre 12x89 Magnum," explains Ing. Koutný. "Apart from our own comprehensive tests, the robust structures and endurance of our firearms are further tested by our competition shooters who are supplied with these tools. Their training sessions and competitions require more than 20.000 rounds per year and we have not been advised of any failure as yet."

## **SHOTGUNS WITH A BONUS**

The sporting over and under shotgun Brno Trap Competition or Brno Skeet Competition models are available with a set of interchangeable chokes of different types to fulfil the needs of right or left handed shooters. Both models present excellent craftsmanship. In addition to that, every customer will definitely appreciate the exceptional bonus provided with every model of the Competition series, in the form of an individual one hour training lesson at the shooting grounds of SK Kometa Brno in Soběšice, with Bronislav Bechyňský, who has won the European Championship three times and has represented our country at the Olympic games. At the end of the day, the new firearms from Brno are premium sporting guns moving BRNO RIFLES a significant step forward in the right direction and they will definitely be heard of in the future, as well as their originators and their satisfied users. They certainly deserve it.

## **Over and under shotguns**

c	Brno Trap Competition	Brno Skeet Competition
calibre 1	12x70, 12x76	12x70, 12x76
overall length (mm)	) 1200	1150
barrel length (mm)	760	710
weight (g)	3350	3250

## I started with BRNO and I returned to BRNO

The twenty-year old Miroslav Matějík who became the representative of the company BRNO RIFLES and an ace in shotgun shooting in the Olympic discipline trap has recently enlarged the successful CZ Shooting Team. Despite his age he has been extremely successful in shooting. With the shotgun Brno Trap Competition he fulfilled the demanding requirements of a Czech Republic's representative for the year 2010.

## Mirek, how long have you been shooting?

I have attended to shotgun shooting and trap shooting since I was 14. However, before that I had been shooting air guns, like many other boys. It was my dad who led me to shooting – he is a trap shooter and participates in competitions. I accompanied him on

competitions since I was a little child and when I tried to shoot at a competition once, a trainer noticed me and offered me to become the member of a local club. I soon started to be trained by Mr. Radomír Zaoral.

## What kind of rifles did you use before you started using the Brno Trap Competition shotgun?

I started shooting with the classic ZH Brno shotgun. My dad bought it to me. Then I used some older Brownings which were available in our club. After two years the club gave me a Beretta M 682 which I changed for the Brno Trap Competition only in 2008. Therefore I can say that I started with a Brno rifle and I returned to Brno. Before I shot my way through to Brno and to the Česká zbrojovka team I was shooting in the club SK Kometa Brno (Sport Club Comet Brno) as a junior from the beginning, later on I passed to the senior category. I've shot out many successes. I'm a quadruple junior champion of the Czech Republic in the trap discipline and a double champion of the CR in double trap. I still remain the member of SK Kometa Brno even as a representative of Česká zbrojovka a.s.

## What's your occupation?

I studied to be a gunsmith at the high school for technical studies in Uherský Brod and between 2004 and 2008 I was employed by the Ministry of the Interior in Brno as a professional shooter. As a representative shooter of the BRNO RIFLES company I started to work as a test shooter at Česká zbrojovka Uherský Brod.

## Can you compare the parameters of the Brno Trap Competition shotgun with other guns you have shot with?

The Brno Trap Competition model is totally comparable to and competitive with the Berettas and other shotguns which are used in international competitions. Ever since I have been shooting with the Brno Trap Competition shotgun I have improved significantly, I have gained several medals in competitions and I have fulfilled the Czech representation requirements for the year 2010. I have adjusted the stock of my shotgun and I usually adjust the barrel chokes to the actual conditions and needs. I am totally satisfied with the model Brno Trap



Competition. I'm really happy about its ergonomics as well as its balance. I'm also satisfied with the quick response of the trigger mechanism.

How many cartridges do you shoot? Approximately 15 000 a year.

## How do you maintain your physical condition?

We played squash and table tennis at the Kometa club a lot which is an excellent exercise for perception. I used to go to the gym and sauna. Today I'm busier but I still go to the gym and play table tennis.

## Are you satisfied with the requirements and the attitude of Česká zbrojovka?

The conditions for me as a representative are excellent. I can't complain in the slightest. I cooperate with Milan Trkulja, the CZ Shooting Team manager. From time to time I do shooting demonstrations at various events and to our customers using the Brno BO 800 shotguns .

Many shotgun sports shooters have a close affinity to hunting and nature. Are you a huntsman?

I was born into a family of hunters, both my dad and granddad were huntsmen. I come from Záhorovice which is ten kilometres from Uherský Brod and the woods are only 100 metres from our house. I can't imagine life without nature. I have been going to the woods since I was a little boy. I became a huntsman at the age of 18. We have a hunting dog with my dad – a longwoolled dachshund –my father got him on his 50th birthday.

Do you use only shotguns while hunting or do you use other guns as well? Have you ever hunted down anything special?

I have only ever used the Czech guns manufactured by Česká zbrojovka Uherský Brod for hunting. I have an over-under rifle and an over-under shotgun-rifle, the CZ 452-2E ZKM rimfire rifle and the CZ 550 rifle in calibre 7x64. So far I have hunted down a medal gold mouflon, a medal deer, about 45 wild boars, roe-deers, bucks and a couple of foxes. I really like being in forests.

## Last question: Do you have any sporting goals?

I would like to be a better shooter and to take part in the European and World Championships as well as in the Olympic Games...



## Back and forth ACROSS THE ATLANTIC Shotguns of the CZ-USA

When Česká zbrojovka Uherský Brod quit producing the shotguns at the end of the 20th century, the next couple of years gave no hint that this product line would be revived. However, gamekeepers and hunters did not forget about the popular Moravian firearms and kept asking the staff in Uherský Brod about possible the resurrection of this product range. Some sparks of better days caught fire with the establishment of the associated company (the current subsidiary) called BRNO RIFLES, which once again completed the portfolio of Česká zbrojovka a.s. with break-action shotguns, combination guns and rifles. Additional shotguns are included within the product range of Česká zbrojovka a.s. from the production of its subsidiary, the CZ-USA.



he history of the new shotguns carrying the label of Česká zbrojovka Uherský Brod, supplemented with the world-famous label of CZ-USA Kansas City began just a couple of years ago. The President of CZ-USA, Alice Poluchová, recognising the demand from customers desiring classic hunting shotguns which were not included within their product range, began to seek for a solution to meet the requirements of American hunters. The factory in Uherský Brod was not producing any shotguns at that time and BRNO RIFLES was just a distant horizon, so Alice would venture out to explore the world producers. Finally, she approached Huglu, the famous arms manufacturer from Turkey, whose product range could satisfy the demand from American hunters.

Alice did not hesitate to visit Turkey to learn about the range of the shotguns produced as well as about the manufacturing premises and she contracted the supply of some selected models. However, she did not limit herself to one visit since the initial samples of firearms selected could not even be compared to the current production. Alice adopted a positively obstinate stance to make the manufacturers improve the quality of the Turkish shotguns manufactured and supplied to the CZ-USA.

The success achieved by the Turkish shotguns was noticed by the staff of the sales department of Česká zbrojovka a.s., so it did not take long till samples of these firearms appeared in Uherský Brod. These items were obviously subjected to detailed research and profound testing and passed the proofing tests of the Czech Institute for Arms and Ammunition Testing. Based on their approval, the sales managers of Česká zbrojovka brought these guns to promotional venues to enable gamekeepers and hunters to test their features in practice. Success came almost instantly. Gamekeepers expressed their preference for these new shotguns, so they have enriched the wide choice of hunting, sporting, service and defence firearms available from Česká zbrojovka a.s. since 2009. Our readers might be confronted with the question as to why Turkish shotguns carrying the label of Česká zbrojovka emerged at a time of full production of the famous Brno shotguns. The answer is very simple. The Brno guns represent the medium category, while the new Turkish firearms are intended for those customers who demand guns with good utilitarian characteristics at a lower price. And such a complement to the product portfolio is definitely reasonable and truly appreciated by the customers. The items imported to the Czech Republic represent only some models selected from a wide variety. Any further step will depend on the response from the customers. The full product range comprises hunting and sporting over and under shotguns, side-by-side hammerless and Lancaster shotguns and last but not least are the self-loading shotguns (the so called "automatic shotguns").

## LOTS OF WORK FOR LITTLE PAY

The core items of the range of shotguns at CZ-USA include the over and under and side-by-side shotguns described in the attached catalogue spread, with sufficient basic information including basic technical data. These guns will not surprise anyone in terms of design. Some people might be impressed with their high quality workmanship. The Turkish arms manufacturing industry has come a long way during the last two decades and Turkish firearms have been amongst the best products worldwide for some time now, in regard to their appropriate cost level, naturally.

These manufacturers use nothing less than quality steel; the surface finish of all parts is very good. Any model found will have a bascule decorated by machinery. Looking at barrels of the over and under shotguns and the CZ 712 semi-automatic shotguns, one will notice the ventilated rail on the top; this also forms a link between the barrels on some models. Models with a single-trigger mechanism are provided with a safety and a barrel selector. Breaking is ensured by means of traditional top lever. The bead front sight is a matter of course. The stock and fore-end are made from high quality wood provided with a machine made checkering and the buttplate made from black rubber. Any CZ-USA shotgun available will be provided with a set of five interchangeable chokes and permit the usage of steel shot.

## **AUTOMATIC TURKISH GUN**

The CZ 712 model of calibre 12x76 definitely deserves a little more attention. This gun is the second automatic shotgun with a CZ label arriving after a considerable period. The action is locked into the matching recess in the elongated part of the barrel behind the chamber by the use of a wedge and the automatic mechanism is operated with the drain of combustion gases out of the barrel. These gases are drawn through two ports and the pressure is transferred to the bolt through the piston and the rods. The bolt is operated by the well-proven checkered finger piece on the left side. The tubular ammunition container for four rounds is located beneath the 711.2 mm long barrel. However, to comply with the Gamekeeping Act valid in the Czech Republic, this gun is fitted with a reducer allowing the loading of only two rounds. The third round can be held in the chamber. Shells slid into the container must pass into the swinging flap, through the opening in the bottom part of the gun's receiver in front of the trigger guard.

The CZ 712 model is equipped with a push button safety in the rear area of the trigger guard root and an automatic bolt stop operated by a separate button (spending the last shell will lock the bolt in the open



Redhead DeLuxe and Malard over and under shotguns (below)

rearward position). The stock, the grip and the foreend feature familiar and traditional shapes and pleasant ergonomics.

## **LIKE A SWISS WATCH**

We had the opportunity to test shoot all the CZ-USA shotguns currently included within the product range of Česká zbrojovka a.s. with a few shooters. All of us praised the pleasant ergonomics of the stocks, the trigger settings and the mildness of the recoil. Several stands around us were soon to be flooded with spent shells and it took us a fairly short time to expend six hundred rounds of different parameters. All the shotguns, including the CZ 712 self-loading model, operated as precisely as a Swiss watch and we never encountered any failures. Therefore the new range of shotguns from CZ-USA represents a very welcome revitalisation and complements the assortment of hunting and sporting firearms from Česká zbrojovka Uherský Brod and our hunters have got something new to think about, once again. We dare to suggest that it will not take the Turkish shotguns from CZ-USA long to accompany guns from Brno at many hunts and at every shooting range.



The Woodcock over and under shotgun with a marble bascule and the top lever on the left; the CZ 712 automatic shotgun on the right



Česká zbrojovka Uherský Brod is proud of the many years of its air gun manufacturing tradition. Since 2000, the company followed the current trends of including

PCP air guns in the product range; these are gas-operated rifles with detachable compressed-air container. It is no secret that the basic model of the PCP rifle, the CZ 200 was developed in close cooperation with the renowned English manufacturer of air guns and PCP rifles, the NSP/Air Arms company, which also sells some of these products under its own brand.

he CZ 200 model series comprises 2 basic versions: the CZ 200 S is made in the calibres 4.5 mm and 5.5 mm. The muzzle energy of the projectile can be set up to 16 J, so this model can be used for the Field Target discipline or even for hunting small game and vermin, where permitted by law (not in the Czech Republic). With the 4.5 mm cal. the maximum projectile energy corresponds with a bullet velocity of 250 ms-1. The manufacturer does not recommend individual operating pressure reduction by the user (altering the rifle's performance). The target version of the CZ 200 T rifle is made in only in the 4.5 mm cal. model and the muzzle energy has been set up using the Venturi's reducer, to a maximum of 7.5 J. The corresponding projectile velocity of approx. 160-170 ms<sup>-1</sup> suits the design of this gun for ten-metre disciplines, in accordance with ISSF rules. The gun design obviously complies with ISSF regulations and its accuracy features match the basic level of shooting

skills. Twenty guns from the testing series achieved a grouping of 1 to 6 mm out of 10 shots at 10 metres, measured from the centre of individual hits. However, some types of ammunition would only achieve a grouping of 6–7 millimetres in diameter. The CZ 200 T is therefore suitable for training and competition shooting for both beginners and advanced shooters however it has not been featured on the top (international) level as yet.

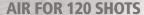
Both models shown feature a two-piece stock made from quality beech wood in either a fixed or adjustable version.

## **NEW RELEASES**

In 2008, the assortment of air guns from Uherský Brod was further enriched with the CZ 200 S FS model. As the name implies, this gun is based on the standard model "S", distinguished only by its stock. With respect to tradition, the letters FS refer to "full stock" version,

even though in this case they describe a uniform one-piece stock. The compact characteristics of this gun are further improved due to the absence of a wider external part of the barrel at the muzzle. Included amongst the latest additions to the 200 line of PCP air guns, is the "red" model of the title-page labelled as the CZ 200 S Colour. This is basically the FS model with a new design with a coloured

one-piece stock made from reddish-black (reddish-grey) laminated wood. This version has been so far manufactured in 4.5 mm cal. and it is supplied with a 4x32 riflescope with the option of additional adjustment of range for gun zeroing purposes. Also a novelty for 2010 is the CZ 200 S HUNTER in 4.5 and 5.5 calibres with a onepiece stock, in the style of a hunting rifle with the pressure cylinder capacity increased by 30%. There is one more new release. The basic version of the CZ 200 is just a single-shot and each pellet must be loaded individually. Faster loading can be obtained by means of the traverse shifting loading magazine with the capacity for 5 rounds - or the discshaped magazine for 10 rounds, available since 2009.



The basic design of the CZ 200 comprises a bolt block made from hard aluminium. This has been adapted for right or left-hand operation respectively and includes an adjustable firing pin system, the cocking and loading mechanism and an adjustable trigger mechanism. The latter is completed by a barrel and accessories, the stock and a separate pressure cylinder with a valve, which works with the firing mechanism. The gun can be easily disassembled into its main components.

The CZ 200 has a pressure cylinder with a simple firing valve in the rear; the valve can be further tuned using another pneumatic circuit. The pressure cylinder, holding 122 cm3 of air, can be filled using a pressure bottle or a compressor capable of 190 bar (19 MPa) for the CZ 200 S and 170 bar for the CZ 200 T respectively. The gauge-less cylinder can be filled even while mounted, using the valve in the front face. In the event that a pressure gauge is mounted there, the cylinder should be removed and filled from the other side. The cylinder has been tested for a pressure of 300 bar and its structure is designed to withstand a pressure of up to 450 bar, however the manufacturer recommends a maximum pressure of 200 bar. A pressure of 250 bar results in a "safety" distortion of the pressure cylinder. The contents would permit shooting approximately 120 rounds in 4.5 mm cal. with a muzzle velocity of around 200 ms-1.



New disc-shaped magazine for 10 rounds

produced in Uherský Brod. It is manufactured by a cold hammer forging technique with subsequent bore polishing. The swaging process is also used to create the narrowed part at the muzzle, which represents a bore diameter reduction of 0.034 mm for every 25 mm of length. The muzzle is provided with a thread to enable the installation of various muzzle devices,

e.g. silencers. The standard version comes with a muzzle "attachment". The trigger pull weight is set to 3 N at the first stage and to 5 N at the second stage, whereby the first stage value and the take-up depth should not be further reduced. The second stage can be adjusted, as well as the trigger position and overtravel path. The entire trigger mechanism is easy to replace. The gun has no manual safety. When cocked, the striker can be safely released while at the same time holding the cocking arm.

The sights are not an integral part of this gun. The CZ 200 can be mounted with various types of sights from open mechanical ones, through optical sights up to a riflescope, a collimator or a laser aiming device, through a simple installation on the "3/8" dovetail" on the receiver.

## **SKILLS AND CAPABILITIES**

The air guns from Uherský Brod are sometimes referred to as the ones which will make anybody into a William Tell - and this may not seem such an exaggeration. Operating the "loading bolt" handle is very comfortable and if the user takes advantage of the new 10-round magazine, the whole loading process will become totally blissful and the shooting itself will become literally addictive entertainment that one can hardly abandon. The perfect ergonomics and balance of the gun, the excellent functioning of the trigger mechanism and the almost complete lack of recoil enable the shooter to dedicate his/her maximum focus on shooting, with corresponding results. When using a good riflescope, no air gun target at a distance of 10 metres would count as a significant enemy. Masters with a tuned CZ 200 will basically be able to shoot through "a single hole" up to a range of 30 metres there is hardly anything more to be said.

The CZ 200 series PCP air guns from Uherský Brod clearly represent a masterful result of this unusual Czech-English cooperation to be truly proud of. The same applies to anyone purchasing this gun regardless of its higher cost. The user can be sure of the reward in

> form of numerous years of shooting joy and excellent results.



# We've been successful INTHE FIGHT against the crisis

An interview with Ing. Ladislav Britaňák, the Commercial Director of Česká zbrojovka a.s., about the fight against the world economic crisis, the positive reception of the CZ novelties and the plans for the nearest future.



Ing. Ladislav Britaňák

How has Česká zbrojovka faced the consequences of the present global economic crisis so far? If I'm right, the company managed its first impact at the end of 2008 with honour, if we bear in mind the fact that you had to solve the problems caused by the fall of dollar.

The present economic crisis is certainly a very unpleasant situation for all manufacturers. Understandably, the crisis doesn't affect all of them directly but we can see at least hints of the change in purchase activities virtually all over the world. This affects the willingness to buy in particular

which consequently influences the sales rate. However, we've been really successful in the fight against the crisis in 2008 and 2009, which is naturally our challenge.

What's the actual volume of military production in terms of the overall production share of your company, the proportion of different types of weapons and the export rate? Have you experienced any significant shifts in the individual products sales in the last two years?

The production volume hasn't changed in comparison with previous years; we manufacture approximately 150 000 weapons a year while there is a tendency to raise the production share of pistols and rimfire rifles while the centerfire production has declined. This is one of the consequences of the above mentioned crisis.

What's the share of the non-military production, the subdeliveries to the automobile industry in particular, in the overall economy of your company?

The automobile and aviation or the non-military production in total is an important part of our production and it represents about 30% of the turnover. As you know, it was the automobile production which

was most notably affected by the crisis. The good thing is that thanks to modern investments and our people's efforts we've lately managed to reverse the tendency and we can expect that the company will return to the excellent outcome of the previous years.

The business strategy of Česká zbrojovka has recently changed which is by the way related to the importance of supplies of the CZ weapons to the armed and security forces.

The change you've mentioned refers to our customers' portfolio. Besides weapons for huntsmen, sportsmen and hobby we offer also complex solutions to armed forces such as the army and police. For this purpose we've developed some of the modern military weapons which we'd like to offer to our customers in the following period. The tradition of Czech weapons, the quality of our manufacturing, long service life, accuracy, reliability and last but no least, the reasonable price and service we provide to our national armed forces in particular, are undoubtedly our advantages.

The company BRNO RIFLES has recently changed from a sister company to a subsidiary of Česká zbrojovka. There are different opinions as far the success of the attempt to follow the tradition of the Brno arms factory is concerned, some of them even being critical. How do you perceive the present activities of the company and what are the perspectives of the company BRNO RIFLES?

We took over the rest of the production of Zbrojovka Brno in 2006. We had to stabilize the company and its products. Therefore I perceive the past period as a birth which is always painful. However, what's important for the customer? We have launched on the market several interesting models: I can mention for example the sports shotgun Brno Trap Competition which offers a quality comparable to Italian manufacturers for a very reasonable price, while adjustments to the shooter's needs are a matter of course. Bearing in mind the quick and cheap national service we provide we've named all arguments to

support the purchase of Brno. In 2010 we plan to launch a novelty among break-action rifle: the model Brno Effect will be offered in the Lux version, but still for a very reasonable price. I think the future of BRNO RIFLES is in small-series and piece production of exceptional weapons with a high portion of gunsmith's work.

How about the other "daughter", the CZ-USA company, are you still happy about it?

We certainly are. I think that this company represents us really perfectly in the world's most demanding market – the US market. American customers have a broad overview of the offer while their open market offers the lowest prices. It's not easy to succeed here. And there's no doubt that CZ-USA is a successful company. If you randomly ask Americans what they think of CZ you'll hear answers that warm the heart of every Czech citizen up and that reflects not only the good work of our company but the excellent output of our people in the company CZ-USA.

A curiosity: Do you plan to broaden the CZ-USA activity from gunsmith finishing of centerfire rifles to the level of partial or total production of some models as is the common practice of many other big armament factories?

This is actually happening. The Dan Wesson company falls within the CZ-USA, Inc. and works as a kind of its production division. I suppose that the production of other models is now just a question of time.

Speaking about the Dan Wesson company – it apparently managed to make a hit on the market with its high-quality clones of the Colt M1911 A1 – does that mean that the revolver production of this brand has definitely ended?

The Dan Wesson revolver production has been only suspended. We would like to introduce a new model which would be based on the traditional Dan Wesson revolver in 2011.

Which of the new products of Česká zbrojovka do you think is the most important for the company in terms of further development as well as in terms of business?

From the established novelties it's certainly the pistol P-07 DUTY which became the company's bestseller from one day to to the next. If I consider the upcoming issues I put my hopes in the new automatic weapons designed for armed forces and in the semi-automatic weapons for hunting.

You mentioned the CZ 75 P-07 DUTY. With this pistol, Česká zbrojovka tried to deviate from the established concept of the seventy-five family. How do you feel about the reception of this gun so far and what are your plans with the pistols in terms of business? Have you already managed to sell this pistol to any of the armed forces?

I'm exceedingly satisfied with how the pistol was received. Our plans correspond to the character of the product: our goal is to make the pistol an ally of all armed forces members and we're convinced that our chances

are good. For this purpose we're already preparing the standard version of this model. Today, after less than a year since it was introduced, you can find DUTY in many armed forces all over the world. We're glad that the policemen in Thailand or Philippines can now use it.

In the case of long arms, the outstanding novelty is the new generation of CZ 455 rimfire rifles and the semiautomatic rimfire rifle the CZ 512. How are you satisfied with these models and what are your expectations?

As far as the CZ 512 model is concerned – we're going to enter a completely new market that we haven't covered yet, so I expect that sales will rise and our customers will be satisfied because they've been calling for this kind of rifle for quite a long time. The CZ 455 is a slightly different matter: it's a modification and facelift of one of our successful models. Therefore we'd be happy if this attractive model raised the present interest in our rimfire rifles.

The Director General of Česká zbrojovka recently said to journalists that several foreign customers are seriously interested in the new PDW weapon called the Scorpion and he even mentioned that you got an order for 40 000 pieces in total. Can you confirm this interesting news?

Yes, I can. Our director was talking about a particular business case which is being negotiated in Asia. However, the interest in CZ Scorpion EVO 3 A1 comes from other parts of the world. I'm really glad that the Czech and Slovak armed forces are also extremely interested in the project.

Now briefly to the traditional problem of armament manufacturers and exporters which consists in the legislation. I assume that you're now really concerned about the situation in the USA and you're also certainly following the situation in Germany as well. What do you think about the trend?

Unfortunately, the state governments establish more and more strict legislation in terms of gun possession. We've come across this tendency in almost all the continents and it always means a break up for us and our partners. I personally think that the governments are trying to detract people's attention from the need to solve the causes of the problems to the solution of their consequences. Do you think that an individual failure is caused by a weapon or rather by for example the society or education?



CZ 75 P-07 DUTY

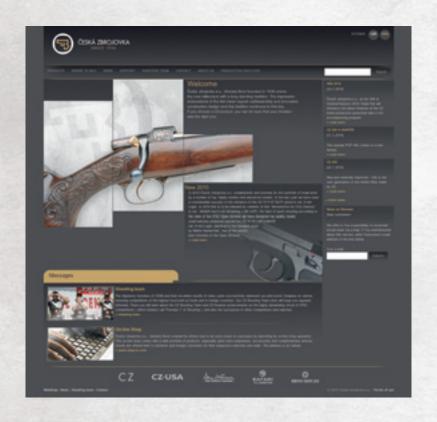
## www.czub.cz

The website of České zbrojovka a.s. belongs amongst the traditionally best and most frequented company presentations in the Czech Republic. Since June 2009, the website of this company has featured a radically re-mastered design and content providing top quality information and a customer interface of a global standard.

he home page of the new website of Česká zbrojovka Uherský Brod serves as a wellorganised signpost which can show each visitor the item sought for, including links to the websites of associated companies and for independent product lines. The basic structure of the primary bookmarks is not much different from the previous design; however, there are a lot of new items within the individual sections. This is very evident on the most important PRODUCTS page, which now offers a substantially more tabular, as well as faster, search. Individual product groups are presented in a list pattern with thumbnail photographs to simplify

searching for a specific model. The "Card" for every product is then assigned with a bookmark to facilitate swift searching for accessories and related electronic documents, such as instruction manuals, engineering drawings etc. From the user's point of view, the most significant new release is represented by the interactive linkage of the company's website (www.czub.cz) with the online shop (shop.czub.cz). This provides the visitor with the opportunity to move from the description of a particular item amongst the accessories directly to the online shop by means of a simple click, where s/he can order the accessories selected instantly. Additionally, the range of products

offered through the online shop has been significantly augmented with new items and Česká zbrojovka a.s. will be adding further products available to retail customers. The current hot releases also include the revolutionary holster designed for the newest hit the DUTY model; magazines; the much sought after riflescope mounts to fit the BRNO RIFLES firearms. The good news is that Česká zbrojovka compiles its website with both an attractive exterior in addition to texts related to the products treated with the utmost attention (the same applies to the products of its associated companies) those of the company itself and other relevant items. Excellent sections include the SHOOTING TEAM section bringing detailed updates on the successes achieved by its competition shooters using CZ guns, with reviews of their most successful achievements. The success of Česká zbrojovka website can be best judged by its visitor count, which averages two hundred and fifty thousand page views per month



## www.czub.cz

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