

VEXCRON

YOUR DEFENCE SOLUTIONS



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1. SMALL ARMS – PISTOLS AND SUBMACHINE GUNS

1.1 K100 Semi-Automatic Pistol cal. 9x19mm Luger

Main Characteristics: The K100 with an SA/DA trigger mechanism is a result of incorporating the strictest requirements imposed on universal guns with its ergonomics suitable for shooters of practical disciplines as well as for special units of military forces. K100 is perfect solution for close individual protection and mainly suited for Law Enforcement, Special service and Military utilization. The front part of the frame is fitted with universal tactical Picatinny rail MIL STD 1913. The K100 Mk12 is the upgrade of the well-known Mk6 and Mk7 models; it comes with 4 removable hand-grips. Easy-to-remove hand-grips make the gun an ideal choice for multi-user shooting practice. The enhanced ergonomic design increases hand-grip while shooting, keeping both the hand and the mind of the shooter focused firmly on their target. Due to its simple modern construction and solid design this pistol is intended for hard operational conditions and can withstand harsh manipulation as well. Shooting with this pistol is very easy and accurate to standard practical range up to 60 m with maximum effective range of approx. 150 m. Pistol is made from high-quality modern materials and very reliable during shooting.



K100 Semi-Automatic Pistol Basic Tactical-Technical Characteristics	
Caliber/Cartridge	Standard 9x19mm Luger
Trigger Mechanism	SA / DA
Trigger pull weight	20-25 N / 35-40 N
Overall length	202.5 mm
Height without magazine	133.5 mm
Width	36 mm
Barrel length	108 mm
Weight without magazine	740 g
Weight with empty magazine	820 g
Standard magazine capacity	15
Pistol producer	European Arms Plant - Slovakia (European Union)

Standard Weapon Equipment & Accessories:

- Semi-automatic pistol K100 with polymer frame
- 2 pcs of Shorter plastic box magazines for 15 rounds
- 1 pc of Pistol hand-grips set (various 4 pcs)
- 1 pc of Water-proof protective carrying plastic case
- 1 pc of Standard cleaning kit incl. cleaning rod, small brush



1.2 K105 Fully-Automatic Pistol cal. 9x19mm Luger

Main Characteristics: The K105 fully-automatic double-action pistol chambered for cartridge 9x19mm "Luger" is designed especially as the powerful personal defense weapon for close combat and protection and mainly suited for Law Enforcement, Special forces and Military usage with robust and reliable design with using sturdy materials as a product of Slovak Arms Plant (EU). The breech mechanism of this automatic pistol is locked pistol type based on high reliable and already proven K100 design so also as its predecessor the pistol has up-to-date design and simple construction, is high reliable, easy and fast to disassembly, cleaning and assembly back and is intended for hard operational conditions and can withstand harsh manipulation as well. Shooting with this pistol is very easy and accurate to standard practical range up to 60 m with maximum effective range of approx. 150 m. In fully-automatic mode real accuracy range of the weapon is max. 40 m. Pistol is made from high-quality modern materials and very reliable during shooting. Its empty weight is only 0.84 kg with 15-round empty detachable box magazine (0.98 kg with fully loaded magazine), length only 204 mm with barrel length 108 mm what gives to pistol muzzle velocity 330 m/s. Sights of pistol are mechanical, blade front and notch rear (side adjustable).



K105 Semi-Automatic Pistol Basic Tactical-Technical Characteristics	
Caliber/Cartridge	Standard 9x19mm Luger
Trigger Mechanism	SA / DA
Trigger pull weight	20-25 N / 35-40 N
Magazine capacity	15 and 20 rounds
Overall length	202.5 mm
Height without magazine	133.5 mm
Width	36 mm
Barrel length	108 mm
Weight without magazine	740 g
Weight with empty magazine	820 g
Safety lock	Ambidextrous manual safety, Drop safety
Pistol producer	European Arms Plant - Slovakia (European Union)

Standard Weapon Equipment & Accessories:

- Fully-automatic pistol K105 with polymer frame
- 2 pcs of Shorter plastic box magazines for 15 rounds
- 1 pc of Pistol hand-grips set (various 4 pcs)
- 1 pc of Water-proof protective carrying plastic case
- 1 pc of Standard cleaning kit incl. cleaning rod, small brush



1.3 P1 + P11 Semi-Automatic Pistols cal. 9x19mm Luger

P1 is compact version of the K100, offering the same reliability, ergonomics and benefits of rotational barrel design in shorter package, more suitable for every day carry. P1 also maintains the same Mk12 grip and 15+1 magazine capacity as the K100 and offers similar shooting experience and accuracy. Despite its shorter size, the P1 can compete with much larger pistols with ease.



P11, our sub-compact 9mm pistols, maintains fully ambidextrous operation, rotational barrel design and robust, reliable construction, materials and craftsmanship than its bigger brothers, while concealability is increased by shortening of the barrel and slide, as well as accommodating shorter and narrower grip.



P1 & P11 Semi-Automatic Pistols Basic Tactical-Technical Characteristics		
	P1	P11
Caliber / Cartridge	Standard 9x19mm Luger	Standard 9x19mm Luger
Trigger Mechanism	SA / DA	SA / DA
Trigger pull weight	20-25 N / 35-40 N	20-25 N / 35-40 N
Overall length	187.5 mm	179 mm
Height without magazine	133.5 mm	118 mm
Width	36 mm	36 mm
Barrel length	93 mm	85 mm
Weight without magazine	690 g	640 g
Weight with empty magazine	770 g	737 g
Standard magazine capacity	15	12
Pistol producer	European Arms Plant - Slovakia	European Arms Plant - Slovakia

Standard Weapon Equipment & Accessories:

- Semi-automatic pistol P1/P11 with polymer frame
- 2 pcs of Shorter plastic box magazines for 15 rounds
- 1 pc of Pistol hand-grips set (various 4 pcs)
- 1 pc of Water-proof protective carrying plastic case
- 1 pc of Standard cleaning kit incl. cleaning rod, small brush



1.4 Q100 Semi-Automatic Pistol cal. 9x19mm Luger

Main Characteristics: The Q100 semi-automatic double-action pistol chambered for cartridge 9x19mm “Luger” is designed especially as the perfect solution for close individual protection and mainly suited for Law Enforcement, Special service and Military utilization with robust and reliable design with using sturdy materials as a product of Slovak Arms Plant (EU). Handle Mk12 is made of polyamide GF 30 and comes with four different sized interchangeable hand grips. Frame is equipped with universal tactic Picatinny rail MIL STD 1913. The Q100 is standard size SA self-loading pistol with rotating barrel for extremely low recoil, ergonomically designed shape and all controls ambidextrous enabling full shooting comfort for right and left handers makes this gun unique. Only high quality materials, latest advanced technology of production process available on the market and strict quality control assures extreme resistance, accuracy and shooting comfort. Ten years of production with simultaneous research of latest advanced technology and high quality materials used to make improvements and material upgrades has made model K100 – ancestor of Q100 masterpiece standing out of its competitions. Q100 model was created as a combination of the unique locking principle proven by model K100 and the original trigger mechanism with striker fire.



Q100 Semi-Automatic Pistol Basic Tactical-Technical Characteristics	
Caliber/Cartridge	Standard 9x19mm Luger
Trigger Mechanism	N / A
Trigger pull weight	16 N
Overall length	202 mm
Height without magazine	133 mm
Width	34 mm
Barrel length	108 mm
Weight without magazine	760 g
Standard magazine capacity	15
Pistol producer	European Arms Plant - Slovakia (European Union)

Standard Weapon Equipment & Accessories:

- Semi-automatic pistol Q100 with polymer frame
- 2 pcs of Shorter plastic box magazines for 15 rounds
- 1 pc of Pistol hand-grips set (various 4 pcs)
- 1 pc of Water-proof protective carrying plastic case
- 1 pc of Standard cleaning kit incl. cleaning rod, small brush



1.5 Q1 + Q1S Semi-Automatic Pistols cal. 9x19mm Luger

The **Q1**, compact version of the Q100, shares many of benefits of its bigger brother in shorter, easy to conceal and carry form. Fully ambidextrous controls, four interchangeable backstraps as well as 15+1 magazine capacity are maintained, while difference in accuracy and overall performance of the pistols is virtually negligible.



For everyday carry and better concealability, the **Q1S** combines shorter, smaller frame you may find on our P11 with slide and barrel of the Q1, offering great concealability yet still offering excellent 12+1 magazine capacity, as well as maintaining benefits of rotational barrel and flat profile trigger of the Q1.



Q1 & Q1S Semi-Automatic Pistols Basic Tactical-Technical Characteristics		
	Q1	Q1S
Caliber / Cartridge	Standard 9x19mm Luger	Standard 9x19mm Luger
Trigger Mechanism	N / A	N / A
Trigger pull weight	16 N	16 N
Overall length	187 mm	183 mm
Height without magazine	133 mm	119 mm
Width	34 mm	34 mm
Barrel length	96 mm	93 mm
Weight without magazine	680 g	650 g
Standard magazine capacity	15	12
Pistol producer	European Arms Plant - Slovakia	European Arms Plant - Slovakia

Standard Weapon Equipment & Accessories:

- Semi-automatic pistol Q1/Q1S with polymer frame
- 2 pcs of Shorter plastic box magazines for 15 rounds
- 1 pc of Pistol hand-grips set (various 4 pcs)
- 1 pc of Water-proof protective carrying plastic case
- 1 pc of Standard cleaning kit incl. cleaning rod, small brush



1.6 T11 Semi-automatic pistol calibre 10x28T Rubber

Main Characteristics: The T11 semi-automatic double-action pistol chambered for special 10x28T rubber bullet cartridge of sub-compact type is designed as a non-lethal solution for close individual protection and mainly suited for Law Enforcement, Police service and Anti-riot units with robust and reliable design with using sturdy materials as a product of Slovak company Grand Power. This sub-compact sized pistol due to its dimensions uses Browning-type locked breech which is very simple, high reliable and dirt-resistance whereby its up-to-date design and construction makes it easy and fast to disassembly, cleaning and assembly back. Due to its simple modern construction and solid design this pistol is intended for hard operational conditions and can withstand harsh manipulation as well. Rubber bullet impact is meant to cause pain but not serious injury and can produce contusions, abrasions and hematomas. However, they may cause bone fractures, injuries to internal organs or death in some cases. The barrel of the gun is smoothbore and therefore cannot be used standard lethal ammunition. Shooting with this pistol is very easy and accurate to standard practical range up to 50 m with maximum effective range of approx. 100 m. Sights of pistol are mechanical, blade front and notch rear (side adjustable).



T11 Semi-Automatic Pistol Basic Tactical-Technical Characteristics	
S-A Pistol type	Semi-automatic sub-compact (double-action pistol)
Pistol producer	European Arms Plant - Slovakia (European Union)
Caliber/Cartridge	Special 10x28T Rubber
Weight of weapon	0.74 kg (without cartridges)
Weapon length	179 mm
Barrel length	85 mm
Magazine capacity	15 rounds detachable box magazine
Rate of fire	30 - 50 rounds/min (practical)
Muzzle velocity	300 m/s
Max. effective range	100 m

Standard Weapon Equipment & Accessories:

- Semi-automatic pistol T11 with polymer frame
- 2 pcs of Standard plastic box magazines for 15 rounds
- 1 pc of Pistol hand-grips set (various 4 pcs)
- 1 pc of Water-proof protective carrying plastic case
- 1 pc of Standard cleaning kit incl. cleaning rod, brush, oilcan and rag



1.7 T12 Semi-automatic pistol calibre 10x28T Rubber

Main Characteristics: The T12 semi-automatic double-action pistol chambered for special 10x28T rubber bullet cartridge is designed as a non-lethal solution for close individual protection and mainly suited for Law Enforcement, Police service and Anti-riot units with robust and reliable design with using sturdy materials as a product of Slovak company Grand Power. This S-A pistol uses Browning-type breech locking mechanism distinguished with simplicity, reliability and dirt-resistance whereby its up-to-date design and construction makes it easy and fast to disassembly, cleaning and assembly back. Due to its simple modern construction and solid design this pistol is intended for hard operational conditions and can withstand harsh manipulation as well. Rubber bullet impact is meant to cause pain but not serious injury. They are expected to produce contusions, abrasions and hematomas. However, they may cause bone fractures, injuries to internal organs or death in some cases. The barrel of the gun is smoothbore and therefore cannot be used standard lethal ammunition. Shooting with this pistol is very easy and accurate to standard practical range up to 60 m with maximum effective range of approx. 120 m. Sights of pistol are mechanical, blade front and notch rear (side adjustable).



T12 Semi-Automatic Pistol Basic Tactical-Technical Characteristics	
S-A Pistol type	Semi-automatic (double-action pistol)
Pistol producer	European Arms Plant - Slovakia (European Union)
Caliber/Cartridge	Special 10x28T Rubber
Weight of weapon	0.81 kg (without cartridges)
Weapon length	188 mm
Barrel length	104 mm
Magazine capacity	15 rounds detachable box magazine
Rate of fire	40 - 60 rounds/min (practical)
Muzzle velocity	310 m/s
Max. effective range	120 m

Standard Weapon Equipment & Accessories:

- Semi-automatic pistol T12 with polymer frame
- 2 pcs of Standard plastic box magazines for 15 rounds
- 1 pc of Pistol hand-grips set (various 4 pcs)
- 1 pc of Water-proof protective carrying plastic case
- 1 pc of Standard cleaning kit incl. cleaning rod, brush, oilcan and rag



1.8 STRIBOG S9A2 Submachine gun cal. 9x19mm Luger

Main Characteristics: The STRIBOG S9A2 submachine gun is mainly designed as the ultimate solution for close protection, available in semi-automatic and fully-automatic version for Law Enforcement and Military usage with robust and reliable design with using sturdy materials as a product of Slovak Arms Plant (EU). The core of STRIBOG S9A2 submachine gun consists of dynamic blowback dual mass bolt, which reduces recoil energy and is very easy to disassemble. The submachine gun is chambered for 9x19mm "Luger" cartridge, has empty weight only 2.65 kg with 20-round empty detachable box magazine (2.87 kg with fully loaded magazine), length only 485mm (747mm with unfolded stock) with barrel length 254 mm what gives to this SMG muzzle velocity 340 m/s. Due to used modern ammunition and high-quality materials including chromium molybdenum steel its maximum effective range in semi-automatic mode is approx. 300 m with maximum accuracy range against staying human figure 200 m. In fully-automatic mode real accuracy range of the weapon is approx. 150 m. Sights of SMG are mechanical, blade front and notch rear (side adjustable). Its construction is simple, reliable and easy and fast to disassembly, cleaning and assembly back. Due to its simple modern construction and solid design this SMG is intended to hard operational conditions as well.



STRIBOG S9A2 Submachine Gun Basic Tactical-Technical Characteristics	
Submachine gun type	Semi-automatic or full-automatic with plastic folding stock
SMG producer	European Arms Plant - Slovakia (European Union)
Caliber/Cartridge	Standard 9x19mm Luger
Weight of weapon	2.65 kg (without cartridges)
Weapon length	485 mm (stock folded) / 747 mm (stock extended)
Barrel length	254 mm (longer barrel) or 204 mm (shorter barrel)
Magazine capacity	10, 20 and 30 rounds detachable box magazines
Rate of fire	650 rounds/min (theoretical), 50 - 120 rounds/min (practical)
Muzzle velocity	340 m/s
Max. effective range	300 m

Standard Weapon Equipment & Accessories:

- Submachine gun STRIBOG S9A2 with folding stock
- 2 pcs of Longer plastic box magazines for 30 rounds
- 1 pc of Shorter plastic box magazine for 20 rounds
- 1 pc of Carrying weapon shoulder strap
- 1 pc of Water-proof protective carrying plastic case
- 1 pc of Standard cleaning kit - cleaning rod, brush, oilcan
- 1 pc of Operating and maintenance instruction manual



1.9 PHOENIX A1 Submachine Gun cal. 9x19mm Luger

Main Characteristics: The PHOENIX A1 submachine gun cal. 9x19mm Luger is a modern-style Personal defense weapon (PDW) of 21st century manufactured in Slovakia (EU) by using up-to-date production technology which has been specially designed as an ultimate solution for close combat protection (CAWS) available in both semi-automatic and full-automatic version for Law Enforcement or Military usage with robust and reliable design with using sturdy material and heavy field testing. The core of PHOENIX A1 SMG consists of dynamic blowback dual mass bolt, which reduces recoil energy and it is very easy to disassembly it and assembly back. This submachine gun is chambered for a standard 9x19mm Luger cartridge, has empty weight only 3.54 kg with 30-round empty detachable plastic box magazine (3.65 kg with fully loaded magazine), length only 560mm (770mm with unfolded stock) with barrel length 315 mm what gives to this SMG muzzle velocity 360 m/s. Due to used modern ammunition and high-quality materials including chromium molybdenum steel its maximum effective range in semi-automatic mode is approx. 300 m. The basic sights of SMG are mechanical, blade front and notch rear (side adjustable) with Picatinny rail in all length of upper part of the weapon body. Its construction is simple, reliable and easy and fast to disassembly, cleaning and assembly back. Due to its simple modern construction and solid design this SMG is intended to hard operational conditions as well.



PHOENIX A1 Submachine Gun Basic Tactical-Technical Characteristics	
Submachine gun type	Semi-automatic or full-automatic with steel folding stock
SMG producer	European Arms Plant - Slovakia (European Union)
Caliber/Cartridge	Standard 9x19mm Luger
Weight of weapon	3.54 kg (without cartridges) / 3,65 kg (with fully loaded magazine)
Weapon length	560 mm (stock folded) / 770 mm (stock extended)
Barrel length	315 mm (standard barrel)
Magazine capacity	30 rounds detachable box magazines
Rate of fire	650 rounds/min (theoretical), 60 - 120 rounds/min (practical)
Muzzle velocity	360 m/s
Max. effective range	300 m

Standard Weapon Equipment & Accessories:

- Submachine gun PHOENIX A1 with folding stock
- 3 pcs of Plastic box magazines for 30 rounds
- 1 pc of Carrying weapon shoulder strap
- 1 pc of Water-proof protective carrying plastic case
- 1 pc of Standard cleaning kit - cleaning rod, brush, oilcan
- 1 pc of Operating and maintenance instruction manual



2. RIFLES - CIVIL & MILITARY INDIVIDUAL WEAPONS

2.1 AKS-17 Automatic Rifle with Fixed / Folding Stock cal. 7.62x39mm

Main Characteristics: The AKS-17, it is an modern assault rifle nowadays under production in Slovakia (EU) as a modernized and improved version of original AKM/AKMS (Kalashnikov modernized automatic rifle with a fixes or folding stock) using the 7.62×39mm Mod.43 Soviet intermediate cartridge whereby the gun has been designed originally by Mikhail Kalashnikov. It is a redesigned and modernized variant of the AKM/AKMS rifle and the production is carried out is Slovakia Arms plant. The AKS-17 is an automatic individual weapon optionally equipped also with a Picatinny rails and other selected accessories (day or night optical sights, collimators, laser pointers, underbarrel grenade launcher etc.). It is gas operated with a rotating bolt mechanism. The AKS-17 is capable of selective fire, firing either single shots or automatic at a cyclic rate of 600 rounds/min. and comes supplied with a different accessory kit which usually contains modernized steel or plastic magazines with capacity 30-round of light sheet-metal or plastic body weighing only 0.33 kg empty, cleaning set, textile magazine carrying bag and shoulder strap. The AKS-17 assault rifle is standardly equipped with a fixed plastic butt (AKM-type) or side-folding metal butt (AKMS-type) or adjustable modern plastic shoulder stock in a place of the fixed wooden stock. To increase the weapon's accuracy during automatic fire, the AKS-17 is fitted with a slant cut muzzle brake (or special muzzle brake optional) that helps redirect expanding propellant gases upward and to the right during firing, which mitigates the rise of the muzzle during an automatic burst when held by a right-handed shooter.



AKS-17 Automatic Rifle Basic Tactical-Technical Characteristics	
Assault rifle type	Automatic rifle with fixed plastic or steel folding stock
Assault rifle producer	European Arms Plant - Slovakia (European Union)
Caliber/Cartridge	Standard 7.62x39mm Mod.43
Weight of weapon	3.30 kg (without magazine), 3.98 kg (with full magazine)
Weapon length	655 mm (stock folded) / 920 mm (stock extended)
Barrel length	415 mm
Magazine capacity	30 and 40 rounds detachable box magazines (75 rounds RPK drum)
Rate of fire	600 rounds/min (theoretical), 40 - 100 rounds/min (practical)
Muzzle velocity	715 m/s
Max. effective range	600 m

Standard Weapon Equipment & Accessories:

- Automatic rifle AKS-17 with steel/plastic folding/fixed butt
- 4 pcs of Standard box magazines for 30 rounds
- 1 pc of Magazines textile carrying bag
- 1 pc of Carrying weapon shoulder strap
- 1 pc of Standard cleaning kit incl. cleaning rod, brush, oilcan
- **Optional:** Forehand and body side-mount Picatinny rails
- **Optional:** Muzzle brake, adjustable stock, optical sights



2.2 AKSU-17 Automatic Carbine with Folding Stock cal. 5.45x39mm

Main Characteristics: The AKSU-17, it is a modern automatic carbine (assault rifle with shorter barrel, flash dispenser and folding stock) nowadays under production in Slovakian Arms plant (EU) as a modernized and improved version of original AKS-74U (Kalashnikov automatic carbine with a folding stock and shortened barrel) using the 5.45×39mm Soviet micro-calibre. The AKSU-17 is an automatic individual weapon (personal defence weapon) optionally equipped also with the Picatinny rails and other selected accessories (day or night optical sights, collimators, laser pointers, flash-lights, hand-grip etc.). It is gas operated with a standard Kalshnikov rotating bolt mechanism. The AKSU-17 is capable of selective fire, firing either single shots or automatic at a cyclic rate of 700 rounds/min. and comes supplied with a different accessory kit which usually contains modernized steel or plastic magazines with capacity 30-round of light sheet-metal or plastic body weighing only 0.33 kg empty, cleaning set, textile magazine carrying bag and shoulder strap. The AKSU-17 automatic carbine is equipped with a side folding metal or plastic (optional foldable) shoulder stock. To increase the weapon's accuracy and hide the flash from the burning propellant (due to shorter barrel compared to standard length) the AKSU-17 is fitted with a special shaped flash dispenser that helps to stabilize the gun and hide the flash especially during automatic fire.



AKSU-17 Automatic Carbine Basic Tactical-Technical Characteristics	
Automatic carbine type	Automatic carbine with steel/plastic folding stock
Auto carbine producer	European Arms Plant - Slovakia (European Union)
Caliber/Cartridge	Standard 5,45x39mm rounds
Weight of weapon	2.70 kg (without magazine), 3.38 kg (with full magazine)
Weapon length	490 mm (stock folded) / 730 mm (stock extended)
Barrel length	206 mm
Magazine capacity	30 and 45 rounds detachable box magazines (60 rounds RPK-74 drum)
Rate of fire	700 rounds/min (theoretical), 40 - 100 rounds/min (practical)
Muzzle velocity	735 m/s
Max. effective range	400 m

Standard Weapon Equipment & Accessories:

- Automatic carbine AKSU-17 with steel/plastic folding butt
- 3 pcs of Standard box magazines for 30 rounds
- 1 pc of Magazines textile carrying bag
- 1 pc of Carrying weapon shoulder strap
- 1 pc of Standard cleaning kit incl. cleaning rod, brush, oilcan
- **Optional:** Forehand and body side-mount Picatinny rails
- **Optional:** Adjustable stock, optical sights, front handgrip



2.3 SA Mod.58P Automatic Rifle with Fixed Stock cal. 7.62x39mm

Main Characteristics: The Mod. 58P (Model 58P - pechotný) is a automatic rifle chambered for standard Warsaw Pact 7.62×39mm Mod.43 small-arms ammunition designed and manufactured in Czechoslovakia and accepted into service in 1958. Nowadays once again produced in Slovakia (EU) as modernized and slightly modified version for military (full-auto) as well as for civilian market (S-A version). While externally the Mod. 58P resembles the Soviet AK-47 (AKM), it is a different design based on a short-stroke gas piston. It shares no parts with Kalashnikov rifles incl. the magazine. The Mod. 58P assault rifle is a selective fire gas-operated weapon with the two locking lugs system (different locking system as in AKM rifle). It is primarily designed for use by standard army units – as the fixed stock is basic version of such a army rifle and permits more accurate aiming and firing in comparison with the folding stock. The rifle uses a trigger mechanism with a lever-type fire mode selector, which is also a manual safety against accidental discharge and comes supplied with standard accessory kit that contains a Mod.58 infantry bayonet, cleaning set, textile sling etc. The weapon is fed from a detachable box magazine with a 30-round cartridge capacity and made from a lightweight alloy. The rifle's iron sights consist of a fully adjustable front post and a tangent rear sight with a sliding notch with range denominations from 100 to 800 m, graduated every 100 m. The front sight base also serves as a mounting platform for the Mod. 58 edged standard rifle bayonet.



Mod.58P Automatic Rifle Basic Tactical-Technical Characteristics	
Assault rifle type	Automatic rifle with fixed wooden stock
Assault rifle producer	European Weapons Factory - Slovakia (European Union)
Caliber/Cartridge	Standard 7.62x39mm Mod.43
Weight of weapon	2.90 kg (without magazine), 3.59 kg (with full magazine)
Weapon length	845 mm (fixed stock)
Barrel length	390 mm
Magazine capacity	30 rounds detachable box magazines
Rate of fire	800 rounds/min (theoretical), 60 - 120 rounds/min (practical)
Muzzle velocity	705 m/s
Max. effective range	600 m

Standard Weapon Equipment & Accessories:

- Automatic rifle Mod.58P with fixed wooden stock
- 3 pcs of Standard box magazines for 30 rounds
- 1 pc of Mod.58 standard rifle bayonet
- 1 pc of Magazines textile carrying bag
- 1 pc of Carrying weapon shoulder strap
- 1 pc of Cleaning-kit & tool-kit carrying textile case
- 1 pc of Standard cleaning kit incl. cleaning rod, brush & oilcan



2.4 SA Mod.58V Automatic Rifle with Folding Stock cal. 7.62x39mm

Main Characteristics: The Mod. 58V (Model 58 - výsadkový) is an automatic rifle chambered for standard Warsaw Pact 7.62x39mm Mod.43 small-arms ammunition designed and manufactured in Czechoslovakia and accepted into service in 1958. Nowadays once again produced in Slovakia (EU) as modernized and slightly modified version for military (full-auto) as well as for civilian market (S-A version). While externally the Mod. 58V resembles the Soviet AK-47 (AKMS), it is a different design based on a short-stroke gas piston. It shares no parts with Kalashnikov rifles, including the magazine. The Mod. 58V assault rifle is a selective fire gas-operated weapon that bleeds expanding combustion gases generated in the barrel from the ignited cartridge through a port drilled in the barrel with the locking system features a locking block hinged from the bolt and housed in the bolt carrier that contains two locking lugs which descend into and engage locking shoulders in the receiver's internal guide rails. The rifle uses a trigger mechanism with a lever-type fire mode selector, which is also a manual safety against accidental discharge. The weapon is fed from a detachable box magazine with a 30-round cartridge capacity and made from a lightweight alloy. The rifle's iron sights consist of a fully adjustable front post and a tangent rear sight with a sliding notch with range denominations from 100 to 800 m, graduated every 100 m. The front sight base also serves as a mounting platform for the Mod. 58 edged standard rifle bayonet.



Mod.58V Automatic Rifle Basic Tactical-Technical Characteristics	
Assault rifle type	Automatic rifle with steel folding stock
Assault rifle producer	European Weapons Factory - Slovakia (European Union)
Caliber/Cartridge	Standard 7.62x39mm Mod.43
Weight of weapon	2.90 kg (without magazine), 3.59 kg (with full magazine)
Weapon length	845 mm (stock extended), 635 mm (stock folded)
Barrel length	390 mm
Magazine capacity	30 rounds detachable box magazines
Rate of fire	800 rounds/min (theoretical), 60 - 120 rounds/min (practical)
Muzzle velocity	705 m/s
Max. effective range	600 m

Standard Weapon Equipment & Accessories:

- Automatic rifle Mod.58V with folding steel stock
- 3 pcs of Standard box magazines for 30 rounds
- 1 pc of Mod.58 standard rifle bayonet
- 1 pc of Magazines textile carrying bag
- 1 pc of Carrying weapon shoulder strap
- 1 pc of Cleaning-kit & tool-kit carrying textile case
- 1 pc of Standard cleaning kit incl. cleaning rod, brush & oilcan



2.5 AKMS/M05 Automatic Rifle with Folding Stock cal. 7.62x39mm

Main Characteristics: The AKMS/M05 is a Kalashnikov modernized automatic rifle with plastic folding stock and Picatinny rails - it is a modern assault rifle using the 7.62×39mm Mod.43 Soviet intermediate cartridge equipped with the Picatinny rails at forehead and gun receiver cover. The model M05 designed and produced by former Yugoslavia (nowadays Serbia) Arms factory is a modernized variant of the AKMS automatic rifle, it is gas operated with a rotating bolt. The M05 is capable of selective fire, firing either single shots or automatic at a cyclic rate of 620 rounds/min. and comes supplied with a standard accessory kit including modified steel or polymer magazines with capacity 30-round weighing only 0.3 kg empty. The M05 model is equipped with a right-side folding plastic shoulder stock in place of the fixed wooden stock. It is designed especially for use by paratroopers or crew of the armoured vehicles. To increase the weapon's accuracy during automatic fire, the M05 is fitted with a slant cut muzzle brake and full-length Picatinny rail on the receiver cover as well as 12 o'clock and 6 o'clock Picatinny rails at the forehead for fixation of any day or night optical sight, riflescope, collimator sight or other tactical weapon equipment (laser designator, flashlight, hand-grip etc.). The M05 is an highly reliable excellently balanced weapon with low recoil ensures easy fire control, precise aiming and shooting and high efficiency in the target. It is standardly equipped with the iron sights with tritium tubes for aiming also in low visibility as well as night conditions.



AKMS/M05 Automatic Rifle Basic Tactical-Technical Characteristics	
Assault rifle type	Automatic rifle with plastic folding stock
Assault rifle producer	European Weapons Factory (Former Yugoslavia)
Caliber/Cartridge	Standard 7.62x39mm Mod.43
Weight of weapon	3.85 kg (without magazine)
Weapon length	689 mm (stock folded) / 934 mm (stock extended)
Barrel length	415 mm
Magazine capacity	30 and 40 rounds detachable box magazines (75 rounds RPK drum)
Rate of fire	620 rounds/min (theoretical), 40 - 100 rounds/min (practical)
Muzzle velocity	715 m/s
Max. effective range	600 m

Standard Weapon Equipment & Accessories:

- Automatic rifle AKMS/M05 with folding plastic stock
- 4 pcs of Standard box magazines for 30 rounds
- 1 pc of Carrying weapon shoulder strap
- 1 pc of Cleaning-kit, tool-set & magazines carrying bag
- 1 pc of Standard cleaning kit incl. cleaning rod, brush and oilcan
- 1 pc of Operating and maintenance instruction manual



3. SNIPER RIFLES

4.1. SVD/M91 Military Sniper Rifle cal. 7.62x54R

Main Characteristics: The SVD/M91 is a military semi-automatic sniper/designated marksman rifle chambered in standard Warsaw pact 7.62×54R cartridge, developed and manufactured by former Yugoslavia (nowadays Serbia) Arms factory, whereby its almost direct copy of the original soviet SVD (Dragunov) sniper rifle. Semi-automatic sniper rifle SVD/M91 is designed on the basis of well-known reliable Kalashnikov system and is fed from detachable 10-rounds box magazine. Basic request of police and army forces - exceptional precision at large distances - is fulfilled and confirmed in extreme environments. Barrel is made of high quality materials and its interior is chrome-plated, which provides long service life and excellent precision. The ergonomics of the stock provides safe and comfortable position of the shooter during firing. Iron sights with tritium tubes enable aiming in conditions of low visibility. The side-rail fixed on the left side of the receiver enables the assembly of various types of telescopic sights and night optics. The standard daylight telescopic sight for the SVD/M91 is the ZRAK ON 6×24°. The rifle features adjustable backup iron sights with a sliding tangent rear sight which can be adjusted from 100 m up to 1000 m. The best results are obtained at ranges up to 800 m. The max. aiming distance offered by the optical telescopic sight is 1000 m as well. For maximum precision of firing should be used special sniper 7.62x54R ammunition.



SVD/M91 Sniper Rifle Basic Tactical-Technical Characteristics	
Sniper rifle type	Sniper rifle with fixed open stock
Sniper rifle producer	European Weapons Factory (Former Yugoslavia)
Caliber/Cartridge	Standard or sniper 7.62x54R
Weight of weapon	5.15 kg (without magazine with optical sight)
Weapon length	1195 mm
Barrel length	620 mm
Magazine capacity	10-rounds detachable box magazines
Rate of fire	50 - 60 rounds/min (theoretical), 6 - 10 rounds/min (practical)
Muzzle velocity	790 m/s
Max. effective range	1000 m (with using optical day telescopic sight 6x24° ZRAK ON)

Standard Weapon Equipment & Accessories:

- Sniper rifle SVD/M91 with open plastic stock
- 4 pcs of Standard box magazines for 10 rounds
- 1 pc of 6x Optical sight ZRAK ON riflescope
- 1 pc of Carrying weapon shoulder strap
- 1 pc of Cleaning-kit, tool-set & magazines carrying bag
- 1 pc of Standard cleaning kit incl. cleaning rod, brush and oilcan
- 1 pc of Operating and maintenance instruction manual



4. INFANTRY MACHINE GUNS & SQUAD SUPPORT WEAPONS

4.1 RPK/M72 Light Infantry Machine Gun cal. 7.62x39mm

Main Characteristics: The RPK/M72 is a light infantry machine gun developed and manufactured by the former Yugoslavia (nowadays Serbia) Arms factory. Generally, the RPK/M72 is almost a direct copy of the Soviet RPK light machine gun, the only visual differences being in barrel, wooden stock, no side rail mount and slightly in design of the wooden hand-guard. The RPK/M72 chambers and fires the 7.62x39mm Mod.43 rounds. It is a gas-operated, air-cooled, selective fire, shoulder-fired box magazines of drum-fed firearm with a fixed wooden stock and foldable bipod. This weapon is a near copy of the Soviet RPK light machine gun but with some mild modifications. It does not have a scope side rail mount, the butt is also different, having the shape of a regular AK-47 rifle. It has a reinforced receiver and the barrel also differs from other RPK machine guns because of the cooling fins to help with heat dissipation from the prolonged or sustained fire. The RPK/M72 only appears with a heavy profile barrel as opposed to Russian and Romanian RPK machine guns that can come in either light or heavy barrel configurations. It is a weapon, like the Soviet RPK but has its own unique design features.



RPK/M72 Light Machine Gun Basic Tactical-Technical Characteristics	
Machine gun type	Automatic light infantry machine gun
Machine gun producer	European Weapons Factory (former Yugoslavia)
Caliber/Cartridge	Standard 7.62x39mm Mod.43
Weight of weapon	5.5 kg (without magazine)
Weapon length	1025 mm
Barrel length	542 mm
Magazine capacity	30 and 40 rounds box magazines, 75 rounds drum magazine
Rate of fire	600 - 640 rounds/min (theoretical), 200 rounds/min (practical)
Muzzle velocity	745 m/s
Max. effective range	800 m

Standard Weapon Equipment & Accessories:

- Machine gun with wooden stock and folding bipod
- 4 pcs of Standard box magazines for 30 rounds
- 1 pc of Special drum magazine for 75 rounds
- 1 pc of Magazines textile carrying bag
- 1 pc of Carrying weapon shoulder strap
- 1 pc of Water-proof carrying canvas bag
- 1 pc of Standard cleaning kit incl. cleaning rod, brush and oilcan



4.2 UG Mod.59 General-Purpose Machine Gun cal. 7.62x54R

Main Characteristics: The Universal Machine Gun Model 1959 is a general-purpose machine gun developed in Czechoslovakia (today Czech Republic) in the late 1950s. The UG Mod. 59 is chambered for 7.62×54R standard Warsaw Pact infantry machine gun ammunition (although a Mod. 59N variant for 7.62×51mm NATO ammunition also exists), delivered via an easily hand-loaded ammunition belt usually packed in the ammunition boxes for 50 and 250 rounds which can be attached to the receiver of the machine gun. The weapon can serve as a light - infantry MG (light barrel and bipod designated as Mod. 59L model usually used with small ammo boxes) and/or as a medium - general-purpose machine gun (heavy barrel, tripod carriage and 4x8° riflescope designated as Mod. 59H version usually used with large ammo boxes) as well as can be also used as a co-axial mounted weapon (designated as Mod. 59T variant) with specific support mounting on selected armoured vehicles. UG Mod.59 is a gas operated, belt fed standard squad-support infantry MG. It uses underbarrel gas piston that operates the bolt carrier with tilting bolt that locks into the receiver. Pistol handle with trigger unit is also used to cock the gun.



UG Mod.59 General-Purpose Machine Gun Basic Tactical-Technical Characteristics	
Machine gun type	Automatic general-purpose machine gun
Machine gun producer	European Weapons Factory (Former Czechoslovakia)
Caliber/Cartridge	Standard 7.62x54R
Weight of weapon	9.28 kg (H-version), 8.67 kg (L-version) - without ammo-box
Weapon length	1215 mm (H-version), 1115 mm (L-version)
Barrel length	650 mm (H-version), 550 mm (L-version)
Magazine capacity	Belt-fed with 100 and 250 round belts (detachable box magazine)
Rate of fire	700 - 800 rounds/min (theoretical), 250 rounds/min (practical)
Muzzle velocity	830 m/s (H-version), 810 m/s (L-version)
Max. effective range	1000 m - 1500 m (with using optical day riflescope 4x8° ZD-4)

Standard Weapon Equipment & Accessories:

- Machine gun with wooden stock and folding bipod
- 2 pcs of Small ammo boxes with 50-rounds belts
- 3 pcs of Large ammo boxes with 250-rounds belts
- 1 pc of Carrying weapon shoulder strap
- 1 pc of Water-proof carrying canvas bag
- 1 pc of Cleaning-kit and tool-kit Carrying bag
- 1 pc of Standard cleaning kit incl. cleaning rod, brush & oilcan
- 1 pc of Replaceable spare light barrel with hand-grip (H-version)
- 1 pc of Movable adjustable weapon tripod/support (H-version)
- 1 pc of 4x Optical sight ZD-4 riflescope (H-version)



4.3 SGM(T) General-Purpose Machine Gun cal. 7.62x54R

Main Characteristics: The General-purpose machine gun SGM(T) is a portable infantry version highly modified and modernized in Slovakia (EU) based on the last tank version SGMT general-purpose machine gun developed originally in Soviet Union (today Russian Federation) in 1950s. The original SGMT machine gun has been developed from SG-43 G-P machine gun used during Second World War by Soviet army infantry. The SGM(T) infantry advanced modification is chambered for 7.62x54R standard Warsaw Pact machine gun ammunition standardly equipped with 250 or 500 rounds ammo belt. The weapon can serve as a light - infantry portable MG and/or as a medium - general-purpose machine gun mounted on a tripod support equipped with a selected day or night sight as the upper receiver of the gun is equipped with the Picatinny rail (MIL-STD 1913) for mounting various gun sights. The SGM(T) can be also used as a co-axial mounted weapon with specific support mounting on selected armoured vehicles. The SGM(T) is a gas operated, belt fed standard squad-support infantry MG. It uses underbarrel gas piston that operates the bolt carrier with tilting bolt that locks into the receiver. The gun is standardly equipped with a back-up iron adjustable sights (front and rear sight) for precise firing up to 1200 m graduated every 100 m. The SGM(T) machine gun enables firing only in automatic mode, its barrel is air-cooled and primarily it is intended as a squad support weapon for eliminating the soft-skinned uncovered or group targets.



SGM(T) General-Purpose Machine Gun Basic Tactical-Technical Characteristics	
Machine gun type	Automatic general-purpose machine gun
Machine gun producer	Russian Weapons Factory (Former Soviet Union)
Caliber/Cartridge	Standard 7.62x54R
Weight of weapon	10.24 kg (without ammo-belt)
Weapon length	1150 mm
Barrel length	720 mm
Magazine capacity	Belt-fed with 250 and 500 round belts (box magazine)
Rate of fire	600 - 700 rounds/min (theoretical), 250 rounds/min (practical)
Muzzle velocity	800 m/s
Max. effective range	1000 m - 1500 m (with using optical day riflescope)

Standard Weapon Equipment & Accessories:

- Machine gun with steel stock and folding bipod
- 3 pcs of Ammunition boxes with 250-rounds belts
- 1 pc of Carrying weapon shoulder strap
- 1 pc of Water-proof carrying canvas bag
- 1 pc of cleaning-kit and tool-kit Carrying bag
- 1 pc of Standard cleaning kit incl. cleaning rod, brush & oilcan
- **Optional:** Portable tripod-type gun mount (weapon support)



4.4 PKM/M84 General-Purpose Machine Gun cal. 7.62x54R

Main Characteristics: The PKM/M84 cal. 7.62x54R is a general-purpose machine gun developed and manufactured by former Yugoslavia (nowadays Serbia) Arms factory. Generally, the PKM/M84 is almost a direct copy of the Soviet PKM general-purpose machine gun, the sole difference being in stock, which is not hollowed like on the original and is made out of a different wood type as well as in different type of muzzle brake geometry. The PKM/M84 chambers and fires the standard 7.62x54R ammunition. It is a gas-operated, air-cooled, belt-fed with box magazine fully automatic shoulder fired weapon with a fixed stock. The PKM/M84 machine gun is also configured for tripod mounting (like the PKS) and comes with a scope mount (like the PKMSN). The barrel is made by cold forging, the interior is chrome plated, which guarantees its long service life and steady ballistic characteristics. In heavy duty, for cooling purposes, the barrel is easily disassembled and replaced with the spare one. Gas flow regulator provides reliable functioning in all environments and gun has rotating bolt locking system and folding bipod. Ammunition boxes for 100 and 250 rounds belts can be attached to the receiver of the machine gun for sustained fire.



PKM/M84 General-Purpose Machine Gun Basic Tactical-Technical Characteristics	
Machine gun type	Automatic general-purpose machine gun
Machine gun producer	European Weapons Factory (former Yugoslavia)
Caliber/Cartridge	Standard 7.62x54R
Weight of weapon	8.8 kg (without ammo-box)
Weapon length	1175 mm
Barrel length	658 mm
Magazine capacity	Belt-fed with 100 and 250 round belts (detachable box magazine)
Rate of fire	700 - 800 rounds/min (theoretical), 250 rounds/min (practical)
Muzzle velocity	825 m/s
Max. effective range	1000 m

Standard Weapon Equipment & Accessories:

- Machine gun with wooden stock and folding bipod
- 2 pcs of Small ammo boxes with 100-rounds belts
- 3 pcs of Large ammo boxes with 250-rounds belts
- 1 pc of Carrying weapon shoulder strap
- 1 pc of Water-proof carrying canvas bag
- 1 pc of Cleaning-kit and tool-kit Carrying bag
- 1 pc of Standard cleaning kit incl. cleaning rod, brush & oilcan
- Hand-operated belt loader (1 pc per 4 pcs of Machine gun)



4.5 PKT/M86 Vehicle-Mounted Machine Gun cal. 7.62x54R

Main Characteristics The PKT/M86 is a vehicle-mounted machine gun chambered for standard 7.62x54R MG ammunition designed in the Soviet Union and currently in production in Russia as well as in former Yugoslavia (nowadays Serbia) Arms factory. The original PK machine gun was introduced in 1961 and then the improved PKM as an infantry model and PKT as for armoured vehicles installation, in 1969. It remains in use as a front-line infantry and vehicle-mounted weapon with various countries armed forces. As a light-weight effective infantry and mounted automatic support weapon it is installed on various armoured vehicles such a BTR series of APC vehicles, the BRDM-2 armoured recon car, BMP-1 and BMP-2 IFVs, OT-64 APC and OT-90 IVF of Czechoslovak production, MTLB multi-purpose vehicles as well as on the MBTs of older generation (T-54/55, T-62/64, T-72/84 etc.). The PKT/M86 machine gun is an open bolt design, which improves heat management during automatic fire compared to closed bolt designs. The gas cylinder is mounted under the barrel and fitted with a gas regulator with three fixed positions. The barrel of the PKT/M86 machine gun can be quickly changed by the using of the carry handle oriented on the left side of the barrel. The barrel bore is chrome-plated for high accuracy during shooting and high operational life. The trigger assembly is suitable only for the automatic fire - it has no single shot mode. The PKT/M86 modification is a solenoid-fired coaxial version of PK MG. Modifications include the removal of the stock, a longer and heavier barrel, a gas regulator and an electric solenoid trigger. The PKT/M86 installed in the armoured vehicle's turret is usually fed from the detachable 250-round ammunition boxes.



PKT/M86 Vehicle-Mounted Machine Gun Basic Tactical-Technical Characteristics	
Machine gun type	Automatic vehicle-mounted machine gun
Machine gun producer	European Weapons Factory (Former Yugoslavia)
Caliber/Cartridge	Standard 7.62x54R
Weight of weapon	10.5 kg (without ammo box & support), 12.8 kg (with vehicle mount)
Weapon length	1098 mm
Barrel length	772 mm
Magazine capacity	Belt-fed with 250 round belts (detachable big ammunition box)
Rate of fire	700 - 800 rounds/min (theoretical), 250 rounds/min (practical)
Muzzle velocity	855 m/s
Max. effective range	1500 m

Standard Weapon Equipment & Accessories:

- Machine gun with mono-barrel breech assembly
- 1 pc of Electro-magnetic vehicle firing device
- 5 pcs of Large ammo boxes with 250-rounds belts
- 1 pc of Water-proof flash dispenser protective cap
- 1 pc of Replaceable spare barrel with hand-grip
- 1 pc of Cleaning-kit and tool-kit Carrying bag
- 1 pc of Standard cleaning kit incl. cleaning rod, brush & oilcan
- Hand-operated belt loader (1 pc per 4 pcs of Machine gun)



5. MOUNTED AND HEAVY INFANTRY SUPPORT WEAPONS

5.1 DShKM-type Heavy Machine Gun cal. 12.7x108mm / 12.7x99mm

Main Characteristics: The DShKM-type infantry heavy machine gun cal. 12.7mm is originally Russian production that replaced in army service older design heavy machine guns whereby now as a brand new modernized advanced version is under production in Slovak republic (EU) and offered as a portable or vehicle-mounted infantry support weapon in both 12.7mm calibers – 12.7x108mm and 12.7x99mm NATO (.50 BMG). The DShKM-type MG is a gas operated, belt fed, air-cooled machine gun that fires from an open bolt and in automatic mode only. The gas piston and chamber are located below the barrel, the gas piston is of the long stroke type and is attached to the bolt carrier. The gas chamber is fitted with a gas regulator, which requires a special wrench to make adjustments. The rear of the receiver houses two spring buffers, one for the bolt and one for the bolt carrier. The heavy barrel is finned for better cooling, and is fitted with a large muzzle brake. The barrel can be detached from the weapon and replaced quite fast and easily. The machine gun is chambered as option for both types of 12.7mm ammunition (eastern and western type) and primarily designated for defeating the lightly armoured targets, fire installations and living force of enemy at the distance up to 1500 - 2000 m as well as for the defeat of slow-speed low-altitude air targets (helicopters, aircrafts, UAVs) at distances of up to 1500 m. The gun is coming usually with foldable infantry tripod-type mount or as pick-up vehicle-mounted support weapon with special turnable mount and full accessories (ammo boxes with ammo belts, SPTA set, manual belt loader, fabric covers and wooden box).



DShKM-type Heavy Machine Gun Basic Tactical-Technical Characteristics	
Machine gun type	Automatic heavy machine gun
Machine gun producer	European Weapons Factory - Slovakia (European Union)
Caliber/Cartridge	Standard 12.7x108mm / 12.7x99mm NATO (.50 BMG)
Weight of weapon	34 kg (without support), 78 kg (with tripod support)
Weapon length	1625 mm
Barrel length	1070 mm
Magazine capacity	Belt-fed with 50 round belts (detachable box magazine)
Rate of fire	600 – 700 rounds/min (theoretical), 180 rounds/min (practical)
Muzzle velocity	850 m/s
Max. effective range	1800 - 2000 m

Standard Weapon Equipment & Accessories:

- Machine gun with breech assembly and muzzle brake
- 5 pcs of standard Ammo boxes with 50-rounds belts
- 1 pc of Movable adjustable weapon support
- 1 pc of Adjustable carriage folding tripod/pick-up mount
- 1 pc of water-proof protective Gun cover & Barrel cap
- 1 pc of Cleaning-kit and tool-kit Carrying bag
- 1 pc of Small spare parts and tools maintenance kit
- 1 pc of Standard cleaning kit incl. cleaning rod, brush and oilcan
- 1 pc of Hand-operated belt loader (1 pc for each Machine gun)



5.2 NSVS-type Heavy Machine Gun cal. 12.7x108mm / 12.7x99mm

Main Characteristics: The NSVS high-calibre machine gun cal. 12.7mm is a modified and redesigned version of original Russian design that entered service in 1971 whereby nowadays is under production in Slovakia (EU) - the original NSV machine gun has been modified and technically improved to advanced version which is now very similar to modern KORD heavy machine gun and offered as a portable or vehicle-mounted infantry support weapon in both 12.7mm calibers – 12.7x108mm and 12.7x99mm NATO (.50 BMG) The internal mechanism has been slightly modified and gun is offered with standard flash dispenser or special muzzle brake for firing from infantry portable tripod mount. These changes give the weapon reduced recoil compared with the standard NSV, allowing greater accuracy during sustained fire. Because a new barrel made of a high-tech alloy minimizes distortion and drop, accuracy has increased tremendously over previous Soviet machine guns. It can be fired also from a bipod as infantry version. Its relatively light-weight and lesser recoil allows stronger soldiers to move the gun around without assistance. The machine gun is chambered for 12.7x108mm as well as 12.7x99mm NATO (.50 BMG) ammunition and primarily designated for defeating the lightly armoured targets, fire installations and living force of enemy at the distance up to 1500 - 2000 m and for the defeat of air targets at slant distances of up to 1500 m as well. The gun is coming usually placed in a special cradle with a bipod, foldable butt and manual trigger and/or with portable infantry tripod-type mount or as pick-up vehicle-mounted support weapon with special turnable mount in standard NSVS(P) version. Also as option the gun can come with an electro-mechanical trigger device fixed at the gun's body as internal or RCWS tank-mounted machine gun in NSVS(T) version.



NSVS Heavy Machine Gun Basic Tactical-Technical Characteristics	
Machine gun type	Automatic heavy machine gun
Machine gun producer	European Weapons Factory - Slovakia (European Union)
Caliber/Cartridge	Standard 12.7x108mm / 12.7x99mm NATO (.50 BMG)
Weight of weapon	24 kg (gun itself), 32kg (with cradle and bipod), 60 kg (with tripod)
Weapon length	1960 mm
Barrel length	1120 mm
Magazine capacity	Belt-fed with 50 round belts (detachable box magazine)
Rate of fire	650 - 750 rounds/min (theoretical), 200 rounds/min (practical)
Muzzle velocity	850 m/s
Max. effective range	1800 - 2000 m

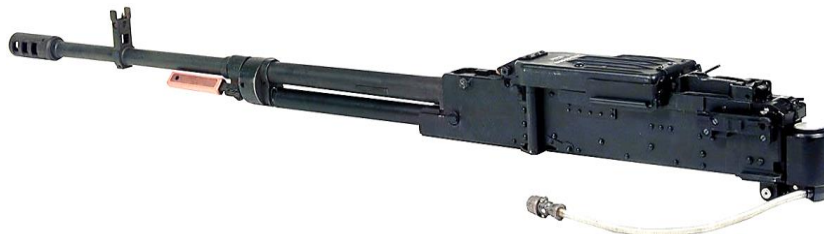
Standard Weapon Equipment & Accessories:

- Machine gun with breech assembly and muzzle brake
- 5 pcs of Standard Ammo boxes with 50-rounds belts
- 1 pc of Adjustable folding infantry bipod
- 1 pc of Weapon cradle with foldable butt-stock
- 1 pc of Adjustable carriage folding tripod/pick-up mount
- 1 pc of Water-proof protective gun cover & barrel cap
- 1 pc of Cleaning-kit and tool-kit Carrying bag
- 1 pc of Small spare parts and tools maintenance kit
- 1 pc of Standard cleaning kit incl. cleaning rod, brush and oilcan
- 1 pc of Hand-operated belt loader (1 pc for each Machine gun)



5.3 NSVS(T) Tank-Mounted Heavy Machine Gun cal. 12.7x108mm

Main Characteristics: The NSVS(T) heavy machine gun cal. 12.7mm is a modified and redesigned version of original Russian design that entered service in 1971 whereby nowadays is under production in Slovakia (EU) - the original NSVT machine gun has been modified and technically improved to advanced version which is now very similar to modern KORD heavy machine gun and offered as a portable NSVS(P) or vehicle-mounted NSVS(T) infantry support weapon/light anti-aircraft weapon in both 12.7mm calibers – 12.7x108mm and 12.7x99mm NATO (.50 BMG). The internal mechanism has been slightly modified and gun is offered with standard flash dispenser or special muzzle brake for firing from infantry portable tripod mount. These changes give the weapon reduced recoil compared with the standard NSV, allowing greater accuracy during sustained fire. Because a new barrel made of a high-tech alloy minimizes distortion and drop, accuracy has increased tremendously over previous Soviet machine guns. It can be fired also from a bipod as infantry version. Its relatively light-weight and lesser recoil allows stronger soldiers to move the gun around without assistance. The machine gun is chambered for 12.7x108mm as well as 12.7x99mm NATO (.50 BMG) ammunition and primarily designated for defeating the lightly armoured targets, fire installations and living force of enemy at the distance up to 1500 - 2000 m and for the defeat of air slow-flying low-altitude targets at slant distances of up to 1500 m as well. Originally the NSVT machine gun is installed on all T-series tanks from T-72 as well as eastern self-propelled howitzer, various technicals etc.



NSVS(T) Tank-Mounted Machine Gun Basic Tactical-Technical Characteristics	
Machine gun type	Automatic heavy tank-mounted machine gun
Machine gun producer	European Weapons Factory - Slovakia (European Union)
Caliber/Cartridge	Standard 12.7x108mm
Weight of weapon	26 kg (without vehicle mount)
Weapon length	1560 mm
Barrel length	1100 mm
Magazine capacity	Belt-fed with 50 round belts (detachable box magazine)
Rate of fire	650 - 750 rounds/min (theoretical), 200 rounds/min (practical)
Muzzle velocity	850 m/s
Max. effective range	1800 - 2000 m

Standard Weapon Equipment & Accessories:

- Machine gun with breech assembly and flash dispenser
- 1 pc of Electro-mechanical vehicle firing device
- 5 pcs of Standard Ammo boxes with 50-rounds belts
- 1 pc of Water-proof protective gun cover & barrel cap
- 1 pc of Cleaning-kit and tool-kit Carrying bag
- 1 pc of Small spare parts and tools maintenance kit
- 1 pc of Standard cleaning kit incl. cleaning rod, brush and oilcan
- 1 pc of Hand-operated belt loader (1 pc for each Machine gun)



5.4 KPVT High-Calibre Vehicle-Mounted Machine Gun cal. 14.5x114mm

Main Characteristics: The KPVT heavy machine gun cal. 14.5mm is a Soviet designed and produced, chambered for standard 14.5x114mm high-performance eastern-type ammunition, which first entered into service in 1960s as redesigned original KPV and installed on the armoured vehicles as well in anti-aircraft platforms because it showed excellent results as an A-A gun with a range of 3000 meters horizontally and 2000 meters vertically against low flying targets. Thus it is used in the ZPU series of anti-aircraft guns and its size and power also made it a useful as a light-weight anti-armour weapon on the BTR series of vehicles and the BRDM-2 armoured recon car incl. OT-64 APC and OT-90 IVF produced by the Czechoslovakia in late 1980s. This version - KPVT is used for an armoured vehicle installations, boats, movable and stationary mounts incl. various anti-aircraft mounts. It features a shorter receiver and a heavier barrel jacket compared to the original KPV machine gun. It is intended for fighting against light armoured targets, weapons systems and light shelters at the distances of up to 3000 m, as well as air targets at distances up to 2000 m. The KPVT is air-cooled and fitted with barrel with a hard chrome plated bore. It uses a short recoil operation system with gas assistance and a rotary bolt. It can be fed with the 50-round metallic belt from either the left or right side. The barrel can be removed by turning the prominent latch on the forward end of the receiver and pulling on the barrel's carrying handle. This version KPVT is equipped with an electro-mechanical trigger device mounted at the up end of the gun's body and allows to shoot from the gun from the internal vehicle/tank mount or RCWS turret system by pressing the firing or joystick button.



KPVT Vehicle-Mounted Machine Gun Basic Tactical-Technical Characteristics	
Machine gun type	Automatic high-calibre vehicle-mounted machine gun
Machine gun producer	Russian Weapons Factory (Former Soviet Union)
Caliber/Cartridge	Standard 14.5x114mm
Weight of weapon	53 kg (without support), 84 kg (with armoured vehicle mount)
Weapon length	1980 mm
Barrel length	1346 mm
Magazine capacity	Belt-fed with 50 round belts (detachable box magazine)
Rate of fire	550 - 650 rounds/min (theoretical), 150 rounds/min (practical)
Muzzle velocity	1005 m/s
Max. effective range	2200 - 2500 m

Standard Weapon Equipment & Accessories:

- Machine gun with mono-barrel breech assembly
- 1 pc of Electro-magnetic vehicle firing device
- 5 pcs of Standard Ammo boxes with 50-rounds belts
- 1 pc of Standard flash dispenser for vehicle firing
- 1 pc of Water-proof barrel protective cover
- 1 pc of Water-proof flash dispenser protective cap
- 1 pc of Replaceable barrel wooden carrying hand-grip
- 1 pc of Cleaning-kit and tool-kit Carrying bag
- 1 pc of Small spare parts and tools maintenance kit
- 1 pc of Standard cleaning kit incl. cleaning rod, brush and oilcan
- 1 pc of Hand-operated belt loader (1 pc for each Machine gun)



5.5 KPV(T) High-Calibre Heavy Machine Gun cal. 14.5x114mm

Main Characteristics: The KPV(T) cal. 14.5mm heavy machine gun is a Soviet designed and chambered for 14.5x114mm high-performance ammunition, which first entered service as an infantry weapon (designated as *PKP*) in 1949. In the 1960s the infantry version was taken out of production because it was too big and heavy. It was later redesigned for anti-aircraft use, because it showed excellent results as an A-A gun, with a range of 3000 meters horizontally and 2000 meters vertically against low flying targets. It is also used in the ZPU series of anti-aircraft guns and its size and power also made it a useful light anti-armour weapon on the BTR series of vehicles and the BRDM-2 armoured recon car. This newer version - KPV(T) is used for armoured vehicle installations, boats, movable and stationary mounts incl. various anti-aircraft mounts. In infantry configuration with removed electro-mechanical trigger device it is intent for shooting from a portable tripod mount by using manual trigger lever placed in the weapons cradle and special muzzle brake enables it to shoot from the infantry tripod (this mount is universal for KPV as well as newer KPV(T) versions). It features a shorter receiver and a heavier barrel jacket. It is intended for fighting against light armoured targets, weapons systems and light shelters at the distances of up to 3000 m, as well as air targets at distances up to 2000 m. The KPV(T) is air-cooled and fitted with barrel with a hard chrome plated bore. It uses a short recoil operation system with gas assistance and a rotary bolt. It can be fed with the 50-round metallic belt from either the left or right side. The barrel can be removed by turning the prominent latch on the forward end of the receiver and pulling on the barrel's carrying handle.



KPV(T) Heavy Machine Gun Basic Tactical-Technical Characteristics	
Machine gun type	Automatic High-Calibre Machine Gun
Machine gun producer	Russian weapons factory (Former Soviet Union)
Caliber/Cartridge	Standard 14.5x114mm
Weight of weapon	49 kg (without tripod), 88 kg (with tripod)
Weapon length	1980 mm
Barrel length	1346 mm
Magazine capacity	Belt-fed with 50 round belts (detachable box magazine)
Rate of fire	550 - 650 rounds/min (theoretical), 150 rounds/min (practical)
Muzzle velocity	1005 m/s
Max. effective range	2000 - 2200 m

Standard Weapon Equipment & Accessories:

- Machine gun with mono-barrel breech assembly
- 5 pcs of standard Ammo boxes with 50-rounds belts
- 1 pc of Movable adjustable weapon support
- 1 pc of Adjustable folding carriage tripod
- 1 pc of Infantry muzzle brake for tripod shooting
- 1 pc of Water-proof Barrel protective cap
- 1 pc of Spare barrel wooden carrying holder
- 1 pc of Cleaning-kit and tool-kit Carrying bag
- 1 pc of Small spare parts and tools maintenance kit
- 1 pc of Standard cleaning kit incl. cleaning rod, brush and oilcan
- 1 pc of Hand-operated belt loader (1 pc for each Machine gun)



5.6 AGS-17/M93 Automatic Grenade Launcher cal. 30x29mm

Main Characteristics: The AGS-17/M93 Plamya (Flame) cal. 30x29mm is a Soviet designed automatic grenade launcher (AGL) in service worldwide and today also produced as a slightly modified and strengthened version in Serbia (former Yugoslavia). The AGS-17/M93 is a heavy portable infantry support weapon designed to operate from a tripod or mounted on an installation or vehicle (classic mount or integrated in RCWS). The AGS-17/M93 fires 30 mm grenades in either direct or indirect fire to provide suppressive and lethal fire support against soft-skinned or lightly fortified targets (pick-ups, trucks, jeeps and sandbag-protected MG posts). The weapon uses a blowback mechanism and fire from the front position of the breech block to sustain operation. Rounds are fired through a removable (to reduce barrel stress) rifled barrel. The standard detachable metal ammunition box contains 30 linked rounds. The tripod is equipped with a fine levelling gear and ballistic table fixed on the upper part of the gun body for indirect fire trajectories. The AGS-17/M93 fires 30x29mm caliber (belted) cartridges with a steel cartridge case. The HE-FRAG type of ammunition is commonly fired from the AGS-17/M93. The VOG-17M is the slightly improved and modernized version of the original 30 mm grenade ammunition currently under production (with high-explosive fragmentation warhead).



AGS-17/M93 Automatic Grenade Launcher Basic Tactical-Technical Characteristics	
Grenade launcher type	Automatic grenade launcher
AGL producer	European weapons factory (former Yugoslavia)
Caliber/Cartridge	30x29mm (VOG-17M HE-FRAG)
Weight of weapon	18 kg (without tripod), 31 kg (with tripod), 46 kg (fully loaded)
Weapon length	840 mm
Barrel length	290 mm
Magazine capacity	Belt-fed with 30 round belts (detachable drum magazine)
Rate of fire	350 - 400 rounds/min (theoretical), 100 rounds/min (practical)
Muzzle velocity	185 m/s
Max. effective range	500 m (direct firing) - 2500 m (indirect firing with optics 2.7x13° NSBG-1)

Standard Weapon Equipment & Accessories:

- Grenade launcher with breech assembly
- 1 pc of 2.7x Optical sight NSBG-1 aiming device
- 3 pcs of Standard Ammo boxes with 30-rounds belts
- 1 pc of Adjustable folding weapon support/tripod
- 1 pc of Carrying frame & backpack with shoulder straps
- 1 pc of Small spare parts and tools maintenance kit
- 1 pc of Standard cleaning kit incl. cleaning rod, brush and oilcan
- Hand-operated belt loader (1 pc per 4 pcs of launchers)
- Barrel rectification optical sight (1 pc per 4 pcs of launchers)



6. ANTI-TANK REACTIVE WEAPONS & FIELD MORTARS

6.1 RPG-75 Hand-held Anti-tank Grenade Launcher cal. 68 mm

Main Characteristics: The RPG-75 is a portable, disposable, single-shot anti-tank weapon, developed in the 1970s in Czechoslovakia (nowadays Czech Republic). It fires a 68 mm special shaped anti-tank grenade with a HEAT warhead of weight 0.81 kg with effective range of 300 meters and maximum range of 1000 meters. It resembles the American M72 LAW rocket launcher. This RPG is recommended to be used against light tanks, armoured wheeled and tracked vehicles, armoured personnel carriers, fortified enemy positions as well as in urban warfare. The RPG-75 has cumulative breakthrough effect on 330 mm thick homogeneous armour (RHA) at 0° angle by a distance of shooting up to 300 m. The RPG-75 is a telescopic portable reactive recoilless infantry support weapon. The length of tube in transport position is only 630 mm (retracted) and length in firing position is 890 mm (extended). The RPG-75 grenade launcher consists of two parts telescopically spreads: pipes and the combustion chamber with the nozzle. Sights RPG-75 consist of sight and foresight. The sight is hinged on the tube of the trigger. Grid sight consists of one vertical and four horizontal wires, the position of which corresponds to distances shooting at 100, 200, 250 and 300 m on one of them there are two marks to correct for lateral movement of the target (at a speed of 25 km/h at a distance of approximately 225 m). The stabilization of the projectile is achieved by an appropriate weight distribution as well as the special aerodynamic shape of the projectile.



RPG-75 Hand-held A-T Grenade Launcher Basic Tactical-Technical Characteristics	
A-T launcher type	Single-round hand-held anti-tank grenade launcher/reactive weapon
A-T launcher producer	European Weapons Factory (Former Czechoslovakia)
Caliber/Cartridge	68 mm smoothbore (PG-7V 68mm grenade projectiles)
Weight of weapon	3.25 kg (with projectile), 0.81 kg (projectile weight)
Weapon length	890 m (extended tube - ready to fire position)
Barrel length	633 mm (retracted tube - transport position)
Weapon crew	1 - gunner (single-round weapon)
Armour penetration	330 mm RHA (at 0° angle)
Muzzle velocity	189 m/s
Max. effective range	200 m (against mobile target) – 300 m (against stationary target)

Standard Weapon Equipment & Accessories:

- Anti-tank grenade launcher extendable barrel tube
- 1 pc of Anti-tank HEAT projectile RPG Mod.75
- 1 pc of Iron mechanical sights (front and rear)
- 1 pc of Carrying weapon shoulder strap
- Carrier rucksack (1 pc per 3 pcs of grenade launchers)



6.2 RPG-7VM Hand-held Portable Reactive Weapon cal. 40/85/105mm

Main Characteristics: The RPG-7VM is a hand-held, man-portable, reusable, shoulder-launched, anti-tank rocket-propelled reactive weapon. Originally the RPG-7 (*Hand-held anti-tank grenade launcher*) weapon was designed by the Soviet Union whereby nowadays its modified and improved version is manufactured in Czech Republic (EU). The launcher is reloadable and based around a steel tube, 40 mm in diameter, 950 mm long, and weighing 6.3 kg. The middle of the tube is wood wrapped to protect the user from heat and the end is flared to assist in blast shielding and recoil reduction. Sighting is usually optical PGO-7M with a back-up iron sight whereby more modern optical system SGL-7MA as well as Collimator sight PG-K are also available. The launcher is able to fire standard PG-7V 40/85mm anti-armour (HEAT) projectile, anti-personnel OG-7V 40mm HE-FRAG rounds as well as TB-7V 40/105mm (or its equivalent) modern thermobaric rounds. The rounds are launched by a gunpowder booster charge, giving it an initial speed of 130 - 140 m/s and creating a cloud of light grey-blue smoke that can give away the position of the shooter. The rocket motor ignites after 10 m and sustains flight out to 500 m at a maximum velocity of 295 m/s. The grenade is stabilized by two sets of fins that deploy in-flight: one large set on the stabilizer pipe to maintain direction and a smaller front set to induce rotation. The RPG-7VM launcher is primarily intended against soft-skinned and lightly armoured targets as well as light stationary gun posts.



RPG-7VM Hand-held Reactive Weapon Basic Tactical-Technical Characteristics	
Reactive weapon type	Hand-held anti-tank grenade launcher/reactive weapon
A-T weapon producer	European Weapons Factory - Czech Republic (European Union)
Caliber/Cartridge	40 mm smoothbore (PG-7V, OG-7V and TB-7V 85/105mm projectiles)
Weight of weapon	6.3 kg (incl. optical sight without projectile), 8.6 kg (fully loaded)
Weapon length	1240 m (with loaded projectile)
Barrel length	950 mm (launcher tube length)
Weapon crew	2 (1 gunner and 1 loader) – manually loaded from muzzle side
Rate of fire	5 - 6 rounds/min (theoretical), 3 - 4 rounds/min (practical)
Muzzle velocity	120 - 140 m/s
Max. effective range	500 m (with using optical day aiming sight 3x13° PGO-7M)

Standard Weapon Equipment & Accessories:

- Hand-held reactive weapon with trigger mechanism
- 1 pc of 3x Optical sight PGO-7M aiming device
- 1 pc of Carrying weapon shoulder strap
- 1 pc of Carrier rucksack for 3 pcs of rocket grenades
- 1 pc of Small spare parts and tools maintenance kit
- 1 pc of Cleaning-kit and tool-kit Carrying bag
- 1 pc of Barrel protective caps set
- 1 pc of Standard cleaning kit incl. cleaning rod, brush and oilcan



6.3 RPG-7MX2 Hand-held Portable Reactive Weapon cal. 40/85/105mm

Main Characteristics: The RPG-7MX2 hand-held, man-portable, reusable, shoulder-launched, anti-tank rocket-propelled reactive weapon is re-designed, modernized and improved version of a classic RPG-7V (*Hand-held anti-tank grenade launcher*) originally designed by the Soviet Union whereby nowadays is produced in Bosnia (former Yugoslavia). The launcher is reloadable and based around a steel tube, 40 mm in diameter, 950 mm long, and weighing 6.8 kg. The middle of the tube is special heat-resistant composite wrapped to protect the user from heat and the end is flared to assist in blast shielding and recoil reduction. Sighting is usually day optical sight ON-M80 with a back-up foldable iron sight whereby also classic PGO-7V or more modern optical system SGL-7MA as well as Collimator sight PG-K are also available. The launcher is able to fire standard PG-7V 40/85mm anti-armour (HEAT) projectile, anti-personnel OG-7V 40mm HE-FRAG rounds as well as TB-7V 40/105mm (or its equivalent) modern thermobaric rounds. The rounds are launched by a gunpowder booster charge, giving it an initial speed of 120 - 140 m/s and creating a cloud of light grey-blue smoke that can give away the position of the shooter. The rocket motor ignites after 10 m and sustains flight out to 500 m at a maximum velocity of 295 m/s. The RPG-7MX2 launcher is primarily intended against soft-skinned and lightly armoured targets as well as light stationary MG posts and light shelters in urban area.



RPG-7MX2 Hand-held Reactive Weapon Basic Tactical-Technical Characteristics	
Reactive weapon type	Hand-held anti-tank grenade launcher/reactive weapon
A-T weapon producer	European Weapons Factory (former Yugoslavia)
Caliber/Cartridge	40 mm smoothbore (PG-7V, OG-7V and TB-7V 85/105mm projectiles)
Weight of weapon	6.8 kg (incl. optical sight without projectile), 8.9 kg (fully loaded)
Weapon length	1240 m (with loaded projectile)
Barrel length	950 mm (launcher tube length)
Weapon crew	2 (1 gunner and 1 loader) – manually loaded from muzzle side
Rate of fire	5 - 6 rounds/min (theoretical), 3 - 4 rounds/min (practical)
Muzzle velocity	120 - 140 m/s
Max. effective range	500 m (with using optical day aiming sight 3x13° ON-M80)

Standard Weapon Equipment & Accessories:

- Hand-held reactive weapon with trigger mechanism
- 1 pc of 3x Optical sight ON-M80 aiming device
- 1 pc of Carrying weapon shoulder strap
- 1 pc of Carrier rucksack for 3 pcs of rocket grenades
- 1 pc of Small spare parts and tools maintenance kit
- 1 pc of Cleaning-kit and tool-kit Carrying bag
- 1 pc of Barrel protective caps set
- 1 pc of Standard cleaning kit incl. cleaning rod & brush



6.4 SPG-9M Portable Tripod-Mounted Recoilless Gun cal. 73 mm

Main Characteristics: The 73 mm SPG-9M is a lightweight man-portable anti-tank and anti-armoured recoilless cannon, normally carried by two soldiers, crewed by four and mounted on a tripod for effective aiming and firing. It was developed by Soviet Union, nowadays as modified and improved version under production in Czech Republic (EU), fires fin-stabilised, rocket-assisted projectiles with either HEAT or HE-FRAG warhead similar to those fired by the 73 mm 2A28 Grom low pressure gun of the BMP-1 tracked armoured vehicle. The propellant charge is wrapped around a boom which extends behind the folded fins and terminates in a perforated disc of bore diameter. It can be towed using a small two-wheel carriage and may be mounted on the vehicles like pick-ups, technicals and other 4x4 vehicles. The optical sight SGL-9MA is provided for a direct as well as indirect fire. The projectile is launched from the gun by a small charge, which gives it an initial velocity of between 300 and 400 metres per second. The rocket-assisted projectiles PG-9V (HEAT) or OG-9V (HE-FRAG) consists of the warhead and a tubular rocket motor which is ignited by a delay element shortly after ejection from the muzzle of the gun.



SPG-9M Portable Recoilless Cannon Basic Tactical-Technical Characteristics	
Field gun type	Man-portable tripod-mounted recoilless gun
Recoilles gun producer	European Weapons Factory - Czech Republic (European Union)
Caliber/Cartridge	73 mm smoothbore (PG-9V and OG-9V rocket assisted projectiles)
Weight of weapon	47.5 kg (without tripod), 59.5 kg (with tripod)
Weapon/barrel length	2110 mm
Weapon height	0.8 m (0.99 m width allowing full weapon traverse)
Weapon crew	4 (gunner, loader, ammo bearer & commander) - manually breech loaded
Rate of fire	5 - 6 rounds/min (theoretical), 3 - 4 rounds/min (practical)
Muzzle velocity	320 - 435 m/s
Max. effective range	1300 m (direct firing) – 4500 m (indirect firing with optics SGL-9MA)

Standard Weapon Equipment & Accessories:

- Recoilless cannon with openable breech assembly
- 1 pc of Optical sight SGL-9MA combined aiming device
- 1 pc of Adjustable folding weapon support/tripod
- 1 pc of Barrel protective caps set (2 caps)
- 1 pc of Carrier rucksack for 3 pcs of rocket shells
- 1 pc of Cleaning-kit and tool-kit Carrying bag
- 1 pc of Small spare parts and tools maintenance kit
- 1 pc of Standard cleaning kit incl. cleaning rod, long brush and oilcan



6.5 M70 Portable Light Commando Mortar cal. 60mm

Main Characteristics: The M70 man-portable light commando-type mortar cal. 60 mm is fired directly from the operator's hand without any static bipod and it has been originally designed and produced in former Yugoslavia (nowadays Bosnia). This infantry light-weight short-range hand-held mortar is in service of lot of countries worldwide. This 60mm commando mortar is a very convenient, simple to use, easy to maintain and very effective infantry piece. Light for transportation, with efficient shell effect on the target. Intended for neutralizing and annihilation of close enemy, uncovered or lightly sheltered live force and firing points, particularly on rear slopes, in ditches, shell funnels, in buildings up to 1600 m. Used also for demolition of light wiring obstacles, pick-ups, jeeps, trucks, sand-bag protected MG posts etc. The mortar itself weights only 7.6 kg The mortar is easy to operate and highly reliable weapon and is ideal for effective autonomous close infantry fire support, particularly for airborne troops, special operations, urban warfare and rapid deployment forces. From the M70 field mortar can be fired variety of 60mm mortar shells - standard HE shells as well as Smoke, visible and IR illuminating shells incl. Target practice rounds. Thanks to convenient compact dimensions it is highly suitable for landing and anti-landing operations, for airborne and naval forces as well as for reconnaissance units operates in enemy territory and for street fights.



M70 Portable Commando Mortar Basic Tactical-Technical Characteristics	
Light mortar type	Man-portable commando-type light mortar
Mortar producer	European Weapons Factory (former Yugoslavia)
Caliber/Cartridge	Standard 60 mm (eastern types - HE, SMK, ILL, IR, TP)
Weight of weapon	7.6 kg (combat position), 8.9 kg (with tools & accessories)
Weapon/barrel length	650 mm (780 mm with breeching)
Weapon height	0.6 m ($\pm 360^\circ$ traverse, $5^\circ - 85^\circ$ elevation)
Weapon crew	2 (gunner/loader & commander) – manually muzzle loaded
Rate of fire	20 - 25 rounds/min (theoretical), 10 - 15 rounds/min (practical)
Muzzle velocity	105 - 210 m/s (depends on quantity of used charges)
Max. effective range	1630 m (with HE projectiles)

Standard Weapon Equipment & Accessories:

- Commando mortar with heat fabric protective part
- 1 pc of Mechanical artillery quadrant KO-1
- 1 pc of Carrying frame with shoulder straps
- 1 pc of Water-proof Barrel protective cap
- 1 pc of Cleaning-kit and tool-kit Carrying bag
- 1 pc of Small spare parts and Tools maintenance kit
- 1 pc of Standard cleaning kit incl. cleaning rod & brush



6.6 M57 Portable Light Field Mortar cal. 60mm

Main Characteristics: The M57 man-portable light field mortar cal. 60 mm is a former Yugoslavia (nowadays Bosnia) designed infantry light-weight short-range mortar system in service in lot of countries worldwide. The M57 mortar has high rate of fire, long range for its category (up to 2540 m with using HE shell M73), high-portability, good hit dispersion and accuracy as well as high ammunition terminal efficiency. The system weights only 19.7 kg and in general consists of smooth-bore barrel cal. 60 mm, the adjustable bipod, the mortar baseplate, day optical aiming sight NSB-3 and other supporting equipment and accessories. The mortar is easy to operate and highly reliable weapon and is ideal for effective autonomous infantry fire support, particularly for airborne troops, special operations, urban warfare and rapid deployment forces. The mortar is of conventional drop-fired system with a fixed firing pin. The bipod has a cross-leveling gear operated by a threaded sleeve between one leg and the elevating gear. From the M57 field mortar can be fired variety of 60 mm mortar shells - standard HE shells as well as Smoke, visible and IR illuminating shells incl. Target practice rounds. The M57 mortar is able to effectively destroy various modern small battlefield targets (light shelters, trenches, pick-ups, jeeps, trucks, wiring obstacles, sand-bag protected MG posts etc.) at all ranges up to 2540 m and can be fired from all kind of terrain as well as from the vehicle.



M57 Portable Field Mortar Basic Tactical-Technical Characteristics	
Field mortar type	Man-portable light field mortar
Mortar producer	European Weapons Factory (former Yugoslavia)
Caliber/Cartridge	Standard 60 mm (eastern types – HE, SMK, ILL, IR, TP)
Weight of weapon	11.5 kg (without baseplate), 19.7 kg (with baseplate)
Weapon/barrel length	725 mm (580 mm)
Weapon height	0.5 m ($\pm 3^\circ$ traverse, $45^\circ - 85^\circ$ elevation)
Weapon crew	2 (gunner/loader & commander) - manually muzzle loaded
Rate of fire	20 - 30 rounds/min (theoretical), 10 - 15 rounds/min (practical)
Muzzle velocity	110 - 220 m/s (depends on quantity of used charges)
Max. effective range	2540 m (with using optical day aiming sight 1.8x8° NSB-3)

Standard Weapon Equipment & Accessories:

- Field mortar with bipod and baseplate
- 1 pc of 1.8x Optical sight NSB-3 aiming device
- 1 pc of Mechanical artillery quadrant KO-1
- 2 pcs of Carrying frame with shoulder straps
- 1 pc of Water-proof Barrel protective cap
- 1 pc of Cleaning-kit and tool-kit Carrying bag
- 1 pc of Small spare parts and Tools maintenance kit
- 1 pc of Standard cleaning kit incl. cleaning rod, brush & oilcan



6.7 M69A Portable Infantry Field Mortar cal. 82mm

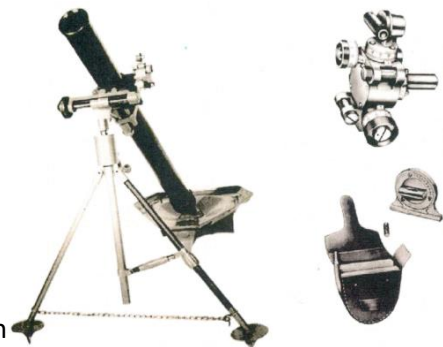
Main Characteristics: The infantry field mortar M69A cal. 82mm is a Yugoslavian (nowadays Bosnia) designed light-weight portable land forces support weapon. The M69A man-portable mortar is designed to operate as a field mortar with firing from the ground based on special-shaped baseplate or mounted on an installation on the pick-up vehicle. The M69A fires 82mm standard mortar shells of all available types of warhead in indirect fire to provide suppressive, effective and lethal fire support against soft-skinned or lightly fortified targets (light shelters, trenches, pick-ups, trucks, jeeps and sandbag-protected MG posts). It is used for neutralization and destruction of manpower and firing posts in open field as well as behind the obstacles or in urban areas. The mortar can be also used to breach wiring obstacles, to blind enemy observation posts, to create a smoke barrier, to illuminate by visible or IR light the battlefield etc. The light field mortar M69A is characterized by low mass of only 45 kg, simple and reliable design and construction, great range of fire 6050 m and can be fired from all kind of terrain as well as from the vehicle. Azimuth and elevation devices are of screwed type. Day sighting device NSB-4B uses a collimator sight and division of 1/6000 or 1/6400. The graduation and bubble levels are coated with tritium and are clearly visible at night. The mortar can fire all standard available 82 mm mortar shells – HE, HE-FRAG, HEAT, Smoke, Illumination (of visible and IR light) as well as Target practice rounds for training.



M69A Portable Field Mortar Basic Tactical-Technical Characteristics	
Field mortar type	Man-portable infantry field mortar
Mortar producer	European Weapons Factory (former Yugoslavia)
Caliber/Cartridge	Standard 82 mm (eastern types - HE, SMK, ILL, IR, TP)
Weight of weapon	28.5 kg (without baseplate), 45.0 kg (with baseplate)
Weapon/barrel length	1374 mm (1200 mm)
Weapon height	1.0 m ($\pm 3^\circ$ traverse, $45^\circ - 85^\circ$ elevation)
Weapon crew	4 (gunner, loader, ammo bearer & commander) - manually muzzle loaded
Rate of fire	20 - 30 rounds/min (theoretical), 10 - 15 rounds/min (practical)
Muzzle velocity	140 - 280 m/s (depends on quantity of used charges)
Max. effective range	6050 m (with using optical day aiming sight 1,8x8° NSB-4B)

Standard Weapon Equipment & Accessories:

- Field mortar with bipod and baseplate
- 1 pc of 1.8x Optical sight NSB-4B aiming device
- 1 pc of Mechanical artillery quadrant KO-1
- 3 pcs of Carrying frame with shoulder straps
- 1 pc of Water-proof Barrel protective cap
- 1 pc of Cleaning-kit and tool-kit Carrying bag
- 1 pc of Small spare parts and Tools maintenance kit
- 1 pc of Standard cleaning kit incl. cleaning rod, brush & oilcan



7. ANTI-AIRCRAFT AND ARTILLERY SYSTEMS

7.1. ZPU-2 Towed Anti-Aircraft Twin-MG cal. 14.5x114mm

Main Characteristics: The ZPU-2 is a twin-machine gun towed mobile gun system on 2-wheels carriage MR-2 equipped with 2 pcs of KPV heavy machine guns cal. 14.5x114mm originally designed as anti-aircraft system whereby on modern battlefield is mainly used as a heavy support mobile infantry weapon installed usually on pick-up or small trucks (technical) however used also as towed system (for defence purposes). Nowadays is primarily used against soft-skinned targets, stationary MG and other weapons posts, mobile unarmoured or lightly armoured targets as technicals, patrol and recon vehicles as well as against slow airborne targets as helicopters, UAVs etc. This system has been adopted in recent years by various African and Middle-east countries within mobile support units, counter-terrorist squads and various civil wars fractions as well as it is still popular with the paramilitary and guerrilla forces. The system is light-weight and thus highly mobile and can be operated by 4 - 5 soldiers and installed on pick-up can fastly change position in order to not be hit back. The ZPU-2 system is very easy and simple for operation and maintenance. ZPU-2 system has air-cooled quick-change barrels and can fire all kind of 14.5mm ammunition. Each barrel has a maximum rate of fire of around 600 rounds per minute, though this is practically limited to about 150 rounds per minute. The ZPU-2 system is installed on 2-wheels towed carriage MR-2 for high mobility towed after common pick-up/jeep/small truck.



ZPU-2 Twin-Machine Gun System Basic Tactical-Technical Characteristics	
Gun System type	Twin-machine gun KPV towed system on 2-wheels carriage MR-2
Gun System producer	European Weapons Factory (European Union)
Caliber/Cartridge	Standard 14.5x114mm
Weight of weapon	994.0 kg (transport weight), 639.0 kg (firing weight without carriage)
Weapon length	3.54 m (transport length with towing bar)
Weapon height / width	1.83 m / 1.92 m (transport height, barrels with 0° elevation)
Weapon crew	5 (1 gunner, 2 loaders, 1 observer & 1 commander)
Rate of fire	1200 rounds/min (theoretical), 300 rounds/min (practical)
Elevation / Traverse	Elevation: +90°/-7° Traverse: ±360°
Max. effective range	2000 m (against ground targets), 2500 m (against air targets)

Standard Weapon Equipment & Accessories:

- Towed twin-machine gun system with 2 x KPV MGs
- 1 pc of Fully-turnable double weapon mount
- 1 pc of Demountable 2-wheels towed transport carriage
- 2 pcs of Complete spare barrels with wooden holder
- 4 pcs of Ammo boxes each with 150-rounds belts
- 1 pc of Cooling box/tube for 2 KPV barrels
- 1 pc of Day optical aiming sight and back-up iron sight
- 1 pc of Barrel protective caps set & 1 pc cleaning-kit and tool-kit Carrying bag
- 1 pc of Standard cleaning kit, spare parts and tools maintenance kit



7.2. ZPU-4 Towed Anti-Aircraft Quad-MG cal. 14.5x114mm

Main Characteristics: The ZPU-4 is a quad-machine gun towed mobile gun system on 2-wheels carriage MR-4 equipped with 4 pcs of KPV heavy machine guns cal. 14.5x114mm originally designed as anti-aircraft system whereby on modern battlefield is mainly used as a heavy support mobile infantry weapon installed usually on 4x4 or 6x6 military trucks however used also as towed system (for defence purposes). Nowadays is primarily used against soft-skinned targets, stationary MG and other weapons posts, mobile unarmoured or lightly armoured targets as technicals, patrol and recon vehicles as well as against slow airborne targets as helicopters, UAVs etc. This system has been adopted in recent years by various African and Middle-east countries within mobile support units, counter-terrorist squads and various civil wars fractions as well as it is still popular with the paramilitary and guerrilla forces. The system is light-weight and thus highly mobile and can be operated by 4 - 5 soldiers and installed on small 4x4 military or civil truck can fastly change position in order to not be hit back. The ZPU-4 system is very easy and simple for operation and maintenance. ZPU-4 system has air-cooled quick-change barrels and can fire all kind of 14.5 mm ammo. Each barrel has a maximum rate of fire around 600 rds per minute, though this is practically limited to about 150 rds per minute. The ZPU-4 system is installed on 2-wheels towed carriage MR-4 for high mobility towed after common pick-up/jeep/small truck.



ZPU-4 Quad-Machine Gun System Basic Tactical-Technical Characteristics	
Gun System type	Quad-machine gun KPV towed system on 2-wheels carriage MR-4
Gun System producer	European Weapons Factory (European Union)
Caliber/Cartridge	Standard 14.5x114mm
Weight of weapon	1450 kg (transport weight), 1020 kg (firing weight without carriage)
Weapon length	3.94 m (transport length with towing bar)
Weapon height / width	2.12 m / 1.94 m (transport height, barrels with 0° elevation)
Weapon crew	5 (1 gunner, 2 loaders, 1 observer & 1 commander)
Rate of fire	2400 rounds/min (theoretical), 600 rounds/min (practical)
Elevation / Traverse	Elevation: +90°/-10° Traverse: ±360°
Max. effective range	2000 m (against ground targets) – 2500 m (against air targets)

Standard Weapon Equipment & Accessories:

- Towed quad-machine gun system with 4 x KPV MGs
- 1 pc of Fully-turnable double weapon mount
- 1 pc of Demountable 2-wheels towed transport carriage
- 4 pcs of Complete spare barrels with wooden holder
- 8 pcs of Ammo boxes each with 150-rounds belts
- 1 pc of Cooling box/tube for 2 KPV barrels
- 1 pc of Day optical aiming sight and back-up iron sight
- 1 pc of Barrel protective caps set & 1 pc cleaning-kit and tool-kit Carrying bag
- 1 pc of Standard cleaning kit, spare parts and tools maintenance kit



7.3. ZU-23-2 Towed Anti-Aircraft Twin Auto-Cannon cal. 23x152mm

Main Characteristics: The ZU-23-2 is a twin auto-cannon gun system on a 2-wheels towed carriage equipped with 2 pcs of 2A14 automatic cannons cal. 23x152mm originally designed as an anti-aircraft system whereby on modern battlefield is mainly used as a heavy support mobile infantry weapon installed usually on pick-up or small trucks (technicals) however used also as towed system (mainly for defence purposes). Nowadays is primarily used against soft-skinned targets, stationary MG and other weapons posts, mobile unarmoured or lightly armoured targets as technicals, patrol and recon vehicles as well as against slow and low-altitude airborne targets as helicopters, UAVs etc. The system is relatively light-weight and thus highly mobile and can be operated by 4 - 5 soldiers and installed on pick-up can fastly change position in order to not be hit back. The ZU-23 system is very easy and simple for operation and maintenance. ZU-23 system has air-cooled quick-change barrels and can fire all kind of 23x152mm ammunition (AP, API, API-T, HE, HEI, HEI-T). Each Auto-cannon 2A14 has a maximum rate of fire of around 1000 rounds per minute, though this is practically limited to about 200 rounds per minute (400 rds per minute for the system). The ZU-23-2 system is installed on 2-wheels towed carriage for high mobility towed after common pick-up/jeep/small truck.



ZU-23-2 Twin Auto-Cannon System Basic Tactical-Technical Characteristics	
Gun System type	Twin automatic cannon 2A14 towed system on 2-wheels carriage
Gun System producer	Russian Weapons Factory (former Soviet Union)
Caliber/Cartridge	Standard 23x152mm
Weight of weapon	950.0 kg (transport weight), 685.0 kg (firing weight without carriage)
Weapon length	4.57m (transport length with towing bar)
Weapon height / width	1.42m / 1.83m (transport position, barrels with 0° elevation, on wheels)
Weapon crew	5 (1 gunner, 2 loaders, 1 observer & 1 commander)
Rate of fire	2000 rounds/min (theoretical), 400 rounds/min (practical)
Elevation / Traverse	Elevation: +90°/-10° Traverse: ±360°
Max. effective range	2000 m (against ground targets) – 2500 m (against air targets)

Standard Weapon Equipment & Accessories:

- Towed twin auto-cannon gun system with 2 x 2A14 cannons
- 1 pc of Fully-turnable double weapon mount
- 1 pc of Demountable 2-wheels towed transport carriage
- 2 pcs of Complete spare barrels with wooden holder
- 4 pcs of Ammo boxes each with 50-rounds belts
- 1 pc of Cooling box/tube for 1 pc 2A14 barrel
- 1 pc of Day optical aiming sight and back-up iron ring sight
- 1 pc of Gun fabric cover & Barrel protective caps set
- 1 pc of Cleaning-kit and tool-kit Carrying bags / boxes
- 1 pc of Standard cleaning kit, spare parts, tools maintenance kit



7.4. GRAD-PL Portable Tripod-mounted Rocket Launcher cal. 122 mm

Main Characteristics: GRAD-PL light-weight portable tripod-mounted rocket system is a complete artillery weapon comprises a standard BM-21 Grad monotube single-round man-portable launcher (it can be reloaded and used again) for a 122 mm standard-long 9M22U (M-21OF) or a shorter version 9M28S HE-FRAG rockets, fire control panel and other functional equipment as a combined optical day sight 1-OMG-122, manual artillery quadrant KO-1, SPTA and cleaning set etc. This system has been adopted in recent years by various African and Middle-east countries within the mobile artillery and support units, counter-terrorist squads and various civil wars fractions as well as it is still popular with the paramilitary and guerrilla forces. The system is light-weight and thus highly mobile and can be carried by 3 soldiers after shot for changing position in order to not be detected. It can be also mounted on the pick-ups and other lightly armoured military or paramilitary vehicles as single-tube, double-tube or 4 up to 9 tubes launcher. The rocket launcher is loaded from the rear part and is very easy and simple for operation and maintenance. Grad-PL system can be used for direct as well as indirect fire against point or surface targets. The system is very reliable and is controlled remotely by the portable Fire control panel via armoured cable to avoid jeopardy for the operator.



GRAD-PL Portable Rocket Launcher Basic Tactical-Technical Characteristics	
Field launcher type	Man-portable tripod-mounted rocket launcher/reactive weapon
Field weapon producer	European Weapons Factory - Slovakia (European Union)
Caliber/Cartridge	122 mm smoothbore (9M22U standard-long Grad rocket HE-FRAG)
Weight of weapon	62.0 kg (without tripod), 94.0 kg (with tripod)
Weapon length	3010 mm
Weapon height	1.6 m (3.1 m width allowing full weapon traverse)
Weapon crew	2 (1 gunner and 1 loader) – manually loaded from the bottom side
Rate of fire	4 - 5 rounds/min (theoretical), 2 - 3 rounds/min (practical)
Muzzle velocity	680 – 690 m/s
Max. effective range	5000 – 20000 m (for indirect firing), 5000 m (for direct firing)

Standard Weapon Equipment & Accessories:

- Rocket launcher - mono-tube with ignition system
- 1 pc of Movable adjustable weapon support
- 1 pc of Adjustable folding carriage tripod
- 1 pc of Electric ignition device - Fire control panel
- 1 pc of Optical sight 1-OMG-122 firing aiming device
- 1 pc of Artillery quadrant KO - for indirect firing
- 1 pc of Barrel protective caps set
- 1 pc of Cleaning-kit and tool-kit Carrying bag
- 1 pc of Small spare parts and tools maintenance kit
- 1 pc of Standard cleaning kit incl. cleaning rod, brush & oilcan



8. ACCESSORIES AND EQUIPMENT FOR WEAPONS

8.1 PKM/M84 Demountable Ammo Belt for 7.62x54R Ammunition

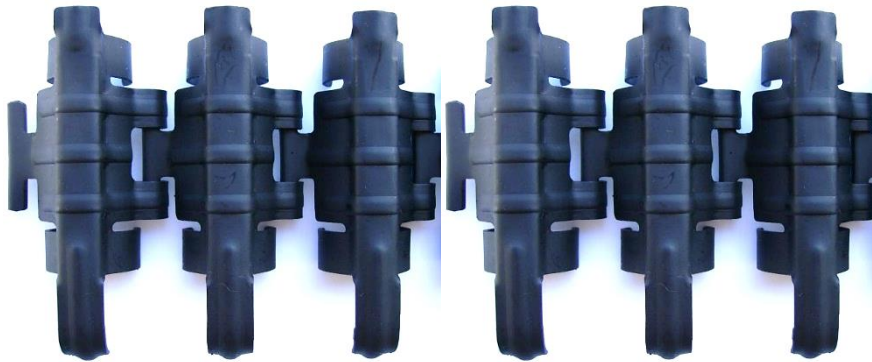
Main Characteristics: The standard demountable steel-links ammunition belt for 250-rounds consists of 5 pcs of 50-rounds ammo belt comprises 50 individual ammunition links flexible fixed together and is intended primarily for PKM/M84 general-purpose machine guns and it is designed to be filled by 7.62x54R MG ammunition of all types. It can be loaded by hand manually piece-by-piece or by using special coil hand-operated fast-loading machine. It is made from special bent shaped steel sheets weighing only 0.35 kg empty (50 rds ammo belt). It is made from high-quality spring steel with blacking surface protection. The ammo belt is suitable for filling by all kind of 7.62x54R ammunition of all types and producers around the world. It is intended and can be used for original PKM/PKMS incl. all its other modifications (bulgarian, serbian, romanian, chinese etc.) as well as for M84 infantry machine gun (Zastava made) and the most modern variant PKP Pecheneg incl. its all other modifications. It is reusable, very sturdy of solid design and production intended for harsh field conditions & military usage.



PKM/M84 Ammunition Belt Tactical-Technical Characteristics	
Ammo belt type	Demountable steel ammunition belt
Ammo belt producer	European Weapons Factory - Bulgaria (European Union)
Caliber/Cartridge	Standard 7.62x54R (all types and producers)
Weapon models	PKM/M84 and all its other modifications
Weight of ammo belt	1.75 kg (empty), 7.25 kg (filled with 250 rounds)
Ammo belt material	Bent shaped spring steel-sheets
Ammo belt capacity	250 rounds (consists of 50-rds demountable ammo belts)

8.2 DShKM Demountable Ammo Belt for 12.7x108mm Ammunition

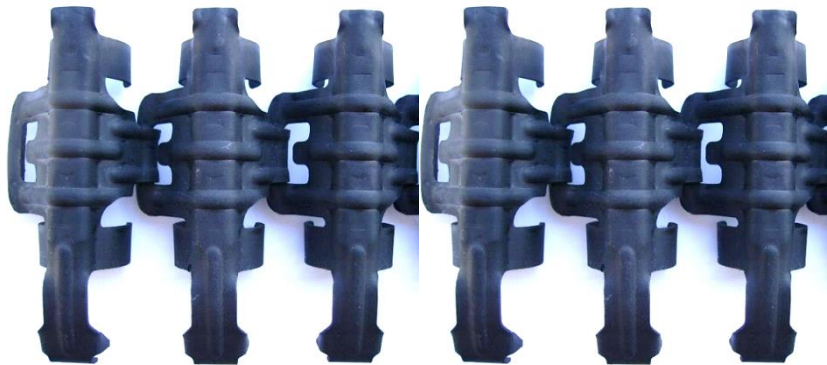
Main Characteristics: The standard demountable steel-links ammunition belt for 50-rounds consists of 5 pcs of 10-rounds ammo belt comprises 10 individual ammunition links flexible fixed together and is intended primarily for DShKM heavy machine gun and it is designed to be filled with 12.7x108mm MG ammunition of all types. It can be loaded by hand manually piece-by-piece or by using special coil hand-operated fast-loading machine. It is made from special bent shaped steel sheets weighing only 0.4 kg empty (10 rds ammo belt). It is made from high-quality spring steel with blacking surface protection. The ammo belt is suitable for filling by all kind of 12.7x108mm ammunition of all types and producers around the world. It is intended and can be used for original DShKM incl. all its other modifications (slovakian, romainan, bulgarian, chinese etc.) as well as in case of necessity also for KORD and NSV (M02 Coyote) heavy machine guns incl. its all other modifications - but not with 100% reliability during shooting. It is reusable, very sturdy of solid design and production intended for harsh field conditions & military usage.



DShKM Ammunition Belt Tactical-Technical Characteristics	
Ammo belt type	Demountable steel ammunition belt
Ammo belt Producer	European Weapons Factory – Bulgaria/Croatia (European Union)
Caliber/Cartridge	Standard 12.7x108mm (all types and producers)
Weapon models	DShKM and all its other modifications
Weight of ammo belt	2.00 kg (empty), 8.50 kg (filled with 50 rounds)
Ammo belt material	Bent shaped spring steel-sheets
Ammo belt capacity	50 rounds (consists of 10-rds demountable ammo belts)

8.3 NSV(T)/KORD Demountable Ammo Belt for 12.7x108mm Ammunition

Main Characteristics: The standard demountable steel-links ammunition belt for 50-rounds consists of 5 pcs of 10-rounds ammo belt comprises 10 individual ammunition links flexible fixed together and is intended primarily for NSV(T) and KORD heavy machine guns and it is designed to be filled with 12.7x108mm MG ammunition of all types. It can be loaded by hand manually piece-by-piece or by using special coil hand-operated fast-loading machine. It is made from special bent shaped steel sheets weighing only 0.4 kg empty (10 rds ammo belt). It is made from high-quality spring steel with blacking surface protection. The ammo belt is suitable for filling by all kind of 12.7x108mm ammunition of all types and producers around the world. It is intended and can be used for original NSV(T)/KORD incl. all its other modifications (Zastava made M02 Coyote) as well as in case of necessity also for DShKM heavy machine guns incl. its all other modifications (slovakian, bulgarian, romanian etc.) with 100% reliability during shooting. It is reusable, very sturdy of solid design and production intended for harsh field conditions & military usage.



NSV(T)/KORD Ammunition Belt Tactical-Technical Characteristics	
Ammo belt type	Demountable steel ammunition belt
Ammo belt Producer	European Weapons Factory – Bulgaria/Croatia (European Union)
Caliber/Cartridge	Standard 12.7x108mm (all types and producers)
Weapon models	NSV(T)/KORD and all its other modifications
Weight of ammo belt	2.00 kg (empty), 8.50 kg (filled with 50 rounds)
Ammo belt material	Bent shaped spring steel-sheets
Ammo belt capacity	50 rounds (consists of 10-rds demountable ammo belts)

8.4 PKM/M84 Detachable Ammo Box for 7.62x54R Ammunition

Main Characteristics: The standard steel-plates detachable 250-rounds ammunition box intended for PKM/M84 general-purpose machine guns designed for 7.62x54R MG ammunition of all types has light sheet-metal body with prominent reinforcing ribs weighing only 0.9 kg empty. It is made from high-quality steel sheets riveted and welded together with dark-green painting surface protection. The ammo box is suitable for filling by all kind of 7.62x54R ammunition of all types and producers around the world. It is intended and can be used for original PKM/PKMS incl. all its other modifications (bulgarian, serbian, romanian, chinese etc.) as well as for M84 infantry machine gun (Zastava made) and the most modern variant PKP Pecheneg incl. its all other modifications. It is reusable, very sturdy of solid design and production intended for harsh field conditions and military usage.



PKM/M84 Detachable Ammo Box Tactical-Technical Characteristics	
Ammo box type	Detachable steel ammunition box
Ammo box producer	European Weapons Factory - Slovakia (European Union)
Caliber/Cartridge	Standard 7.62x54R (all types and producers)
Weapon models	PKM/M84 and all its other modifications
Weight of ammo box	0.90 kg (empty), 7.20 kg (filled with 250 rounds)
Ammo box material	Riveted and welded steel-sheets
Ammo box capacity	250 rounds (incl. ammo 250 rds belt)

8.5 DShKM Detachable Ammo Box for 12.7x108mm Ammunition

Main Characteristics: The standard steel-plates detachable 50-rounds ammunition box intended for DShKM heavy machine gun designed for 12.7x108mm MG ammunition of all types has light sheet-metal body with prominent reinforcing ribs weighing only 1.5 kg empty. It is made from high-quality steel sheets riveted and welded together with dark-green painting surface protection. The ammo box is suitable for filling by all kind of 12.7x108mm ammunition of all types and producers around the world. It is intended and can be used for original DShKM incl. all its other modifications (slovakian, romanian, bulgarian, chinese etc.) as well as in case of necessity also for KORD or NSV (M02 Coyote) heavy machine guns incl. its all other modifications. It is reusable, very sturdy of solid design and production intended for harsh field conditions and military usage.



DShKM Detachable Ammo Box Tactical-Technical Characteristics	
Ammo box type	Detachable steel ammunition box
Ammo box producer	European Weapons Factory - Slovakia (European Union)
Caliber/Cartridge	Standard 12.7x108mm (all types and producers)
Weapon models	DShKM and all its other modifications
Weight of ammo box	1.50 kg (empty), 10.20 kg (filled with 50 rounds)
Ammo box material	Riveted and welded steel-sheets
Ammo box capacity	50 rounds (incl. ammo 50 rds belt)

8.6 NSV(T)/KORD Detachable Ammo Box for 12.7x108mm Ammunition

Main Characteristics: The standard steel-plates detachable 50-rounds ammunition box intended for NSV(T) and KORD heavy machine guns designed for 12.7x108mm MG ammunition of all types has light sheet-metal body with prominent reinforcing ribs weighing only 1.5 kg empty. It is made from high-quality steel sheets riveted and welded together with light-green painting surface protection. The ammo box is suitable for filling by all kind of 12.7x108mm ammunition of all types and producers around the world. It is intended and can be used for KORD machine gun incl. its all previous modifications (NSV, NSVT, M02 Coyote) as well as in case of necessity also for DShKM or NSV family heavy machine guns incl. its all other modifications. It is reusable, very sturdy of solid design and production intended for harsh field conditions and military usage.



NSV(T)/KORD Detachable Ammo Box Tactical-Technical Characteristics	
Ammo box type	Detachable steel ammunition box
Ammo box producer	European Weapons Factory - Slovakia (European Union)
Caliber/Cartridge	Standard 12.7x108mm (all types and producers)
Weapon models	NSV(T)/KORD and all its other modifications
Weight of ammo box	1.50 kg (empty), 10.20 kg (filled with 50 rounds)
Ammo box material	Riveted and welded steel-sheets
Ammo box capacity	50 rounds (incl. ammo 50 rds belt)

8.7 KPV(T) Detachable Ammo Box for 14.5x114mm Ammunition

Main Characteristics: The standard steel-plates detachable 50-rounds ammunition box intended for KPV(T) heavy machine gun designed for 14.5x114mm MG ammunition of all types has light sheet-metal body with prominent reinforcing ribs weighing only 1.6 kg empty. It is made from high-quality steel sheets riveted and welded together with dark-green painting surface protection. The ammo box is suitable for filling by all kind of 14.5x114mm ammunition of all types and producers around the world. It is intended and can be used for original KPV incl. all its modifications as well as for more modern KPVT heavy machine guns incl. its modifications, mounted as infantry support weapon on tripod (as KPV(T) gun) or inside the armoured vehicle turret (as KPVT gun). It is reusable, very sturdy of solid design and production intended for harsh field conditions and military usage.



KPV(T) Detachable Ammo Box Tactical-Technical Characteristics	
Ammo box type	Detachable steel ammunition box
Ammo box producer	European Weapons Factory - Slovakia (European Union)
Caliber/Cartridge	Standard 14.5x114mm (all types and producers)
Weapon models	KPV(T) and all its other modifications
Weight of ammo box	1.60 kg (empty), 13.80 kg (filled with 50 rounds)
Ammo box material	Riveted and welded steel-sheets
Ammo box capacity	50 rounds (incl. ammo 50 rds belt)

8.8 Manual loading machine for PKM/PKT cal. 7.62x54mm ammo belts



TECHNICAL DESCRIPTION:

The hand-operated portable loader for PKM/PKT cal. 7.62x54mm machine guns ammunition belts filling is produced currently in Slovak Republic (EU) from modern materials and using high-tech CNC technology, whereby its design has been based on original Russian and Polish produced PKM/PKT manual loaders and was modernized and slightly modified. This loading machine is light-weight, made from sturdy materials, fast and simple to use, hand-operated and is designed for PKM/M84 (universal MG) and PKT/M86 (vehicle-mounted MG) cal. 7.62x54mm ammunition belts filling with all kind of the cartridges indoor as well as in field conditions utilization. It comes with a wooden transport box, which also can serve as basement for loader mount for better stability during belts filling with the cartridges as well as with the small clamp for fixing to the edge of the table.

BASIC CHARACTERISTICS:

Type of product:	Hand-operated loading machine for 7.62x54mm ammo belt filling with cartridges
Loader producer:	Slovak Weapons Plant - Slovakia (EU)
Weight & dimensions:	4.5 kg (without belt and cartridges), 0.36 x 0.18 x 0.20 m (L x W x H)
Accessories:	Transport/mount basement wooden box, small adjustable fixing clamp

PACKING:

- 1 pc packed in water-resistant plastic foil packed in wooden box: 0.4 x 0.2 x 0.22 m, brutto: 5.5 kg
- 24 pcs packed in wooden box with paper walls and wax paper: 1.2 x 0.6 x 0.45 m, brutto: 156 kg
- 96 pcs packed on 1 pc EUR palette of total dimensions: 1.2 x 0.8 x 1.8 m, brutto: 645 kg
- **DGR class:** N/A, **UN No.:** N/A

8.9 Portable Foldable Gun Mount Tripod-type for DShKM cal. 12.7mm

Main Characteristics: The standard infantry portable foldable gun support of tripod-type designed specially for DShKM heavy machine gun cal. 12.7x108mm and/or 12.7x99mm NATO (.50 BMG) intended for tactical operations in the field of infantry units without necessity of using vehicles and shooting against ground as well as slow flying air targets (helicopters, small planes, small-class UAVs). The tripod-type gun mount is relatively light-weight made from welded profiles-metal body with cradle enables easy elevation and traverse of the gun even during shooting. The weight of the tripod-type gun mount is only 35 kg empty. It is made from high-quality steel profiles welded together with black painting surface protection. The support cradle is suitable for any type of DShKM-type heavy MG cal. 12.7x108mm or 12.7x99mm NATO ammunition of all types and producers around the world. It is intended and can be used for original DShKM incl. all its other modifications (slovakian, romanian, bulgarian, chinese etc.). It is reusable, very sturdy of solid design and production intended for harsh field conditions and military usage. It's very simple foldable and portable by 2 men, in case of necessity even 1 person can carry and prepare it for shooting. The height of the tripod mount for tactical purposes is adjustable by extending its legs to side.

Foldable Tripod Gun Mount for DShKM Tactical-Technical Characteristics	
Weapon mount type	Portable foldable tripod-type gun support
Gun mount producer	European Weapons Factory - Slovakia (European Union)
Weapon type mount	Heavy Machine Gun DShKM-type cal. 12.7x108mm / 12.7x99mm
Weapon models	DShKM and all its other modifications
Weight of gun support	35 kg (empty support), 68 kg (with machine gun and ammo box)
Gun support material	Welded steel profiles design
Gun support crew	2 operators (in case of necessity 1 operator)



8.10 Turnable Pick-up Gun Mount Pylon-type for DShKM cal. 12.7mm

Main Characteristics: The special turnable pick-up gun support of pylon-type designed specially for DShKM heavy machine gun cal. 12.7x108mm and/or 12.7x99mm NATO (.50 BMG) intended for mobile tactical operations in the field of mobile infantry or small units equipped with Toyota Land Cruiser 4x4 Off-road vehicles (Technicals) and shooting against soft-skinned or lightly armoured ground targets as well as low-altitude slow flying air vehicles (helicopters, small planes, small-class UAVs). The special designed turnable pylon-type gun mount is relatively light-weight with simple and effective operation equipped with eccentric arm made from welded profiles-metal body with cradle enables easy elevation and traverse of the gun even during shooting. The weight of the pylon-type gun mount for pick-up is approx. 75 kg empty. It is made from high-quality steel profiles welded together with black painting surface protection. The support cradle is suitable for any type of DShKM-type heavy MG cal. 12.7x108mm or 12.7x99mm NATO ammunition of all types and producers around the world. It is intended and can be used for original DShKM incl. all its other modifications (Slovakian, Romanian, Bulgarian, Chinese etc.). It is reusable, very sturdy of solid design and production intended for harsh field conditions and military usage. It's very easy to assembly, operate and maintain this pick-up gun stand.

Turnable Pick-up Gun Mount for DShKM Tactical-Technical Characteristics	
Weapon mount type	Turnable pick-up pylon -type gun support
Gun mount producer	European Weapons Factory - Slovakia (European Union)
Weapon type mount	Heavy Machine Gun DShKM-type cal. 12.7x99mm (.50 BMG)
Weapon models	DShKM and all its other modifications
Weight of gun support	75 kg (empty support), 108 kg (with machine gun and ammo box)
Gun support material	Welded steel profiles design
Pick-up vehicle mount	Toyota Land Cruiser 4x4 Off-road type
Gun support crew	2 operators (in case of necessity 1 operator)



9. AMMUNITION

9.1 Different kind of ammunition

We are offering wide range of ammunition as follows:

A. Infantry ammunition:

- a) cal. 9 x 19 mm FMJ
- b) cal. 7.9 x 57 mm Ball/Tracer
- c) cal. 5.56 x 45 mm Ball/Tracer
- d) cal. 7.62 x 63 mm Ball/AP/API
- e) cal. 7.62 x 63 mm Ball/Tracer
- f) cal. 7.62 x 39 mm Ball/AP/API
- g) cal. 7.62 x 51 mm Ball/AP/API
- h) cal. 7.62 x 54 mm Ball/Tracer/API
- i) Rds 30 mm HE/TP (e.g. Rds.30x29mm for AGS-17 AGL)
- j) Rds 40mm x 46 HE/HEDP/ Smoke CS/Illuminating/Practice
- k) Rds 40 mm HE/HEDP/Practice/Smoke/Illuminating (e.g. Rds40mm for GP-25 UBGL)



B. Anti-aircraft and medium calibre ammunition:

- a) Rds 12,7 mm x 99 Ball/AP/API/API-T/Tracer
- b) Rds 12.7 mm x 108 Ball/AP/API/API-T/Tracer
- c) Rds 14.5 mm x 114 API/APIT
- d) Rds 20 mm x 102 HE/HEI/AP-T
- e) Rds 20 mm x 110 HE/HEI/HE-T/HEI-T/AP-T/TP-T "Hispano"
- f) Rds 20 mm x 110RB HE/HEI/HE-T/HEI-T/AP-T/TP-T "Oerlikon"
- g) Rds 23 mm x 115 HE/HEI/API
- h) Rds 23mm x 152 HE/HEI/API-T/TP-T
- i) Rds 30 mm x 165 HE/HEI/HE-T/HEI-T/AP-T (for AK-630, 2A42, 2A72, GSh-301)
- j) Rds 30 mm x 173 HE/HEI
- k) Rds 57 mm x 348 HE-T/HEI-T



B. Artillery ammunition:

- a) Round 76 mm, separate loaded for gun 76 mm
 - b) Round 100 mm, fixed for gun 100 mm on tank T55
 - c) Round 105 mm, semifixed for howitzer 105 mm (HE/Smoke)
 - d) Round 105 mm illumination for howitzers
 - e) Cartridge 105 mm, BLANK for howitzer 105 mm
 - f) Round 122 mm separate loaded for howitzers (HE/Smoke)
 - g) Cartridge 125mm for tank guns T-72 (HEAT-T/HE-FRAG)
 - h) Cartridge 130 mm separate loaded for gun 130 mm (HE)
 - i) Rounds 155 mm (HE/Smoke)
-



9.2 Cartridge 9x19mm FMJ

CARTRIDGE 9 x 19 mm LUGER FMJ		
TECHNICAL DATA	Calibre [mm]	9 x 19 mm
	Round weight [g]	12.2 ± 0.2 g
	Projectile weight [g]	8.0 ± 0.1 g
	Propellant mass [g]	0.40 ± 0.05 g
	Powder smokeless charge type	Nctp, Ngsp
	Length of cartridge [mm]	29.67 – 29.72 mm
	Muzzle velocity [m/s]	320 ± 5 m/s
	Kinetic energy E ₀ [J]	461 ± 3 J
	Operating temperature [°C]	-30 ÷ +50°C
	Weapons compatibility	Semi-automatic and automatic pistols cal. 9x19 mm & Sub-machine guns (SMG)
PRODUCTION DATA	MANUFACTURER	EUROPEAN AMMO FACTORY
	YEAR OF PRODUCTION	NEW PRODUCTION
		
PACKING DATA	Type of packing:	
	50 rounds are packed in a paper box, the 20 boxes are packed in a cardboard pack: total 1000 pcs are packed in the package	
	DGR CLS	
	1.4S	
	UN No.	
0012		
PACKAGE DIMENSIONS [mm]		220 x 190 x 150 mm
VOLUME [m³]:		0.006 m ³
GROSS MASS [kg]:		13.2 kg



9.3 Cartridge 7.62x39mm BZ (API)

CARTRIDGE 7.62 x 39 mm BZ (API)		
TECHNICAL DATA	Calibre [mm]	7.62x39 mm
	Round weight [g]	16.5 ± 0.5 g
	Projectile weight [g]	7.9 ± 0.1 g
	Propellant mass [g]	1.55 ± 0.05 g
	Powder smokeless charge type	Nctp, Ngsp
	Length of cartridge [mm]	55.5 – 56.0 mm
	Muzzle velocity [m/s]	1 200 m
	Kinetic energy E ₀ [J]	715 ± 5 m/s
	Operating temperature [°C]	-40 ÷ +50°C
	Weapons compatibility	Automatic rifle 7,62mm AK-47/AKM & AKMS and Light machine gun RPK
PRODUCTION DATA	MANUFACTURER	RUSSIAN AMMO FACTORY
	YEAR OF PRODUCTION	IN STOCK, YOM 1970+
		
PACKING DATA	Type of packing:	
	660 rounds are packed in a steel sealed can, 2 cans are packed in a wooden case: total 1320 pcs are packed in the box	
	DGR CLS	
	1.4S	
	UN No.	
0012		
PACKAGE DIMENSIONS [mm]		485 x 355 x 160 mm
VOLUME [m³]:		0.028 m ³
GROSS MASS [kg]:		28.5 kg



9.4 Cartridge 12.7x108mm B-32 (API)

ROUND 12.7 x 108 mm B-32 (API)		
TECHNICAL DATA	Calibre [mm]	12.7 x 108 mm
	Round weight [g]	130 ± 5 g
	Projectile weight [g]	44 ± 1 g
	Propellant mass [g]	16 ± 0,4 g
	Length of cartridge [mm]	146.0 – 147.0 mm
	Muzzle velocity [m/s]	820 ± 5 m/s
	Maximum effective range [m]	1 800 m
	Armour penetration [mm]	15 ± 2 mm (at 0° angle up to 100 m)
	Operating temperature [°C]	-50 ÷ +50°C
	Weapons compatibility	Heavy machine gun 12,7mm DShKM, NSV & NSVT, newest KORD and Type 85
PRODUCTION DATA	MANUFACTURER	RUSSIAN AMMO FACTORY
	YEAR OF PRODUCTION	IN STOCK, YOM 1970+
		
PACKING DATA	Type of packing:	
	85 rounds are packed in a steel sealed can, 2 cans are packed in a wooden case: total 170 pcs are packed in the box	
	DGR CLS	
	1.4G	
	UN No.	
0300		
PACKAGE DIMENSIONS [mm]	485 x 355 x 160 mm	
VOLUME [m ³]: 0.028 m ³		
GROSS MASS [kg]: 28.0 kg		



9.5 Cartridge 12.7x99mm API/API-T

ROUND 12.7 x 99 mm API/API-T		
TECHNICAL DATA	Calibre [mm]	12.7 x 99 mm
	Round weight [g]	115 ± 5 g
	Projectile weight [g]	42 ± 1 g
	Propellant mass [g]	15 ± 0,4 g
	Length of cartridge [mm]	138.0 – 139.0 mm
	Muzzle velocity [m/s]	880 ± 5 m/s
	Maximum effective range [m]	1 800 m
	Armour penetration [mm]	15 ± 2 mm (at 0° angle up to 100 m)
	Operating temperature [°C]	-50 ÷ +50°C
	Weapons compatibility	Heavy machine gun 12.7mm M2, M2HB M2QCB and aircraft type FN M3P
PRODUCTION DATA	MANUFACTURER	EUROPEAN AMMO FACTORY
	YEAR OF PRODUCTION	NEW PRODUCTION
		
PACKING DATA	Type of packing:	
	140 rounds are packed in a M2A1 metal box, 2 boxes are packed in a wooden case: total 280 pcs are packed in the box	
	DGR CLS	
	1.4G	
	UN No.	
0300		
PACKAGE DIMENSIONS [mm]		380 x 330 x 180 mm
VOLUME [m³]:		0.023 m³
GROSS MASS [kg]:		32.0 kg



9.6 Cartridge 14.5x114mm B-32 (API)

ROUND 14.5 x 114 mm B-32 (API)		
TECHNICAL DATA	Calibre [mm]	14.5x114 mm
	Round weight [g]	201 ± 6 g
	Projectile weight [g]	64 ± 2 g
	Propellant mass [g]	31 ± 0,5 g
	Powder smokeless charge type	Nc7p, 4/7 Sv
	Length of cartridge [mm]	154.5 – 156.0 mm
	Maximum effective range [m]	2 000 m
	Muzzle velocity [m/s]	985 ± 10 m/s
	Operating temperature [°C]	-40 ÷ +50°C
	Weapons compatibility	Heavy machine gun 14.5mm KPV(T) and Anti-aircraft systems ZPU-2 and ZPU-4
PRODUCTION DATA	MANUFACTURER	RUSSIAN AMMO FACTORY
	YEAR OF PRODUCTION	IN STOCK, YOM 1970+
		
PACKING DATA	Type of packing:	
	40 rounds are packed in a steel sealed can, 2 cans are packed in a wooden case: total 80 pcs are packed in the box	
	DGR CLS	
	1.4G	
	UN No.	
0300		
PACKAGE DIMENSIONS [mm]		485 x 355 x 160 mm
VOLUME [m³]:		0.028 m ³
GROSS MASS [kg]:		23.0 kg

9.7 Cartridge 14.5x114mm MDZ (HEI)

ROUND 14.5 x 114 mm MDZ (HEI)		
TECHNICAL DATA	Calibre [mm]	14.5x114 mm
	Round weight [g]	201 ± 6 g
	Projectile weight [g]	64 ± 2 g
	Propellant mass [g]	31 ± 0,5 g
	Powder smokeless charge type	Nc7p, 4/7 Sv
	Length of cartridge [mm]	154.5 – 156.0 mm
	Maximum effective range [m]	2 000 m
	Muzzle velocity [m/s]	985 ± 10 m/s
	Operating temperature [°C]	-40 ÷ +50°C
	Weapons compatibility	Heavy machine gun 14.5mm KPV(T) and Anti-aircraft systems ZPU-2 and ZPU-4
PRODUCTION DATA	MANUFACTURER	RUSSIAN AMMO FACTORY
	YEAR OF PRODUCTION	IN STOCK, YOM 1970+
		
PACKING DATA	Type of packing:	
	40 rounds are packed in a steel sealed can, 2 cans are packed in a wooden case: total 80 pcs are packed in the box	
	DGR CLS	
	1.4G	
	UN No.	
0300		
PACKAGE DIMENSIONS [mm]		485 x 355 x 160 mm
VOLUME [m³]:		0.028 m ³
GROSS MASS [kg]:		23.0 kg

9.8 Cartridge 23x152mm BZ (API)

ROUND 23 x 152 mm BZ (API)		
TECHNICAL DATA	Calibre [mm]	23x152 mm
	Round weight [g]	447 ± 8 g
	Projectile weight [g]	189 ± 3 g
	Propellant mass [g]	78 ± 1 g
	Powder smokeless charge type	Nctp, Ng7p
	Length of cartridge [mm]	232.0 – 233.5 mm
	Maximum effective range [m]	2 500 m
	Muzzle velocity [m/s]	970 ± 10 m/s
	Operating temperature [°C]	-30 ÷ +50°C
	Weapons compatibility	Anti-aircraft automatic cannon 23mm ZU-23-2 and ZSU-23-4 Shilka
PRODUCTION DATA	MANUFACTURER	EUROPEAN AMMO FACTORY
	YEAR OF PRODUCTION	NEW PRODUCTION
		
PACKING DATA	Type of packing:	
	14 rounds are packed in a steel sealed can, the 3 cans are packed in a wooden case: total 42 pcs are packed in the box	
	DGR CLS	
	1.2F	
	UN No.	
0007		
PACKAGE DIMENSIONS [mm]		920 x 390 x 160 mm
VOLUME [m³]:		0.057 m ³
GROSS MASS [kg]:		28.0 kg

9.9 Unguided Rocket 9M22U (M-21OF) GRAD 122 mm

Main Characteristics: Surface-to-surface unguided rocket cal. 122mm 9M22U (Russian production), respectively M-21OF (Czechoslovakian production) intended for firing from various GRAD MLRS or single-tube systems with high-explosive fragmentation warhead is standard rocket artillery ammunition of Russian and all former Warsaw pact armies including more than other 50 armies all over the world from South America, through Africa, Middle east up till to Far-east countries. This rocket (fired from various factory-made or field-made vehicle or portable launchers) has been adopted in recent years also by the last terrorist-groups and different fractions within the actual ongoing civil wars as well as it is still popular with the paramilitary and guerrilla forces for its low weight and high efficiency at the target. Originally this GRAD unguided rocket has been designed to be used for indirect firing against point or surface targets especially fired by salvo, but in last decade the lightweight portable systems enable to use it also for direct firing has been developed as well.



Unguided Rocket 9M22U/M-21OF GRAD Basic Tactical-Technical Characteristics	
Type of rocket	Unguided surface-to-surface with HE-FRAG warhead fired from MLRS
Rocket manufacturer	former Soviet Union (Russia) / former Czechoslovakia (Europe)
Rocket diameter	122 mm (standard-long GRAD rocket)
Weight of rocket	66.8 kg (with fuze, without braking ring)
Weight of warhead	19.2 kg (HE-FRAG), 6.35 kg (explosive), MRV or MRV-U head-fuze
Rocket length	2870 mm (full rocket length)
Maximum velocity	690 - 710 m/s
Min. effective range	1000 – 5000 m (for direct firing from GRAD-PL system)
Max. effective range	15900 mm (small braking ring) – 20000 m (ringless - for indirect firing)

The GRAD rocket 9M22U/M-21OF is electrically initiated, designed for surface-to-surface firing, fin- and spin-stabilized primarily intended against living and soft-skinned targets, destroying enemy gun and rocket artillery positions and stationary targets as trenches, shelters, army vehicles concentration point, command HQs, ammo and fuel storage, parked airborne technics (jets, helicopters, transport planes), tracking radar and AA defence means etc. The rocket consists of HE-FRAG warhead, rocket motor for solid propellant, jet bottom with stabilizer and head-fuze. The fuzes MRV or MRV-U are mechanical, nose type, point-detonating with selectable super-quick or a short or long delayed action with mask safety. The maximum range of fire of standard rocket for indirect firing is approx. 20 km and minimum 5 km while when shorter range is needed the braking rings for successful head-fuze initiation are necessary to use – great braking ring has a diameter of 112 mm and a small breaking ring has a diameter of 90 mm. The GRAD rocket is intended to be fired from MLRS and single-tube systems BM-21 Grad, RM-70/85 Tatra, modular systems 9K51 Grad and 9K54 Grad-B, lightweight portable single-tube system GRAD-PL, 22 pcs launcher A-215 Grad-M, 40 pcs launcher MLRS RS-122, WR-40 Langusta, APRA-40, LRSVM Morava etc.

9.10 Long-Range 40 km HE Unguided GRAD Rocket 122mm

Main Characteristics: Surface-to-surface long-range unguided GRAD rocket cal. 122mm is designed for firing from various GRAD MLRS or single-tube systems with high-explosive fragmentation warhead (HE-FRAG) is the modern rocket artillery ammunition of European production with extended range up to 40 km compared to the original wide-used 9M22U 3m long GRAD rocket with max. range less than 20 km. This rocket can be fired from various factory-made or field-made vehicle or portable launchers as standard GRAD rocket. This rocket is currently the longest-range rocket in the market within this caliber. Its rocket engine has completely new up-to-date design whereby the HE warhead, fuze, rocket guide and contact cover is the same as in original GRAD rocket. This long-range rocket is fully compatible with the all MLRS or Single-tube or Multi-tube rocket launchers such a BM-21, RM-70, Grad-PL or similar existing systems. Rocket propellant used for grain production is a modern thermoplastic composite propellant with high percentage of aluminium with burning temperatures exceeding 3000K and with a high value of a specific volume. The steel nozzle with abounded ablative materials has one graphite throat.



Long-Range Unguided GRAD Rocket Basic Tactical-Technical Characteristics	
Type of rocket	Longe-range unguided surface-to-surface with HE-FRAG warhead
Rocket manufacturer	European ammunition factory
Rocket diameter	122 mm (standard-long 3m longe-range GRAD rocket)
Weight of rocket	69.0 kg (complete rocket)
Weight of warhead	19.1 kg (HE-FRAG), 6.35 kg (explosive), MRV-U head-fuze
Rocket length	2875 mm (full rocket length)
Maximum velocity	710 - 730 m/s
Min. effective range	1000 – 5000 m (for direct firing from GRAD-PL system)
Max. effective range	40200 m (for indirect firing from MLRS system)

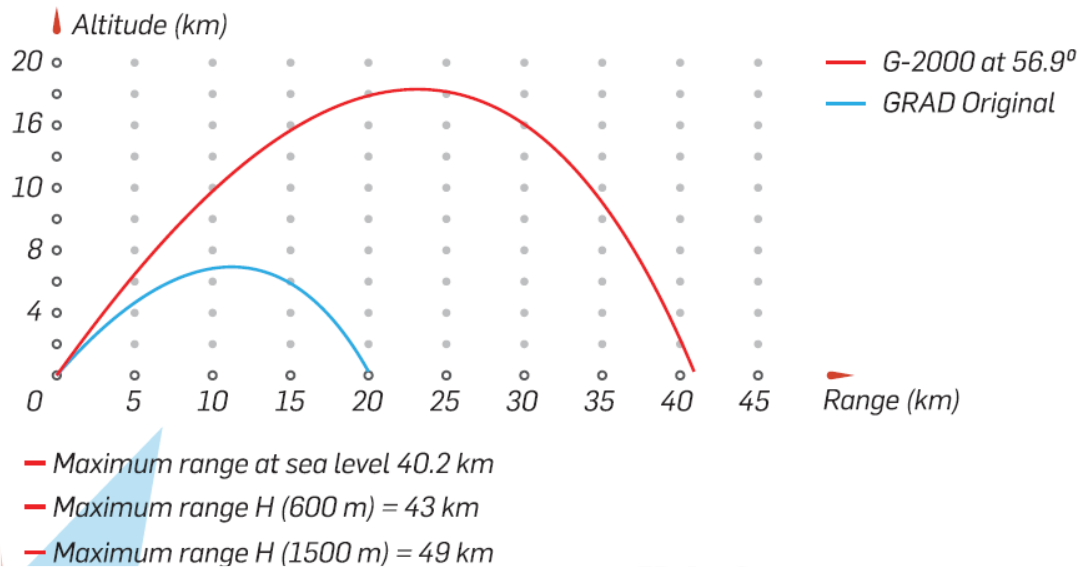
The long-range 40km GRAD rocket is electrically initiated, designed for surface-to-surface firing, fin- and spin-stabilized primarily intended against living and soft-skinned targets, destroying enemy gun and rocket artillery positions and stationary targets as trenches, shelters, army vehicles concentration point, command HQs, ammo and fuel storage, parked airborne technics (jets, helicopters, transport planes), tracking radar and AA defence means etc. The rocket consists of HE-FRAG warhead, rocket motor for solid propellant, jet bottom with stabilizer and head-fuze MRV-U. The fuze MRV-U is mechanical, nose type, point-detonating with selectable super-quick or a short or long delayed action with mask safety. The maximum range of fire of this long-range GRAD rocket for indirect firing is approx. 40 km from any standard GRAD rocket launchers (9K51 Grad and 9K54 Grad-B, MLRS RS-122, WR-40 Langusta, APRA-40).

Comparative technical characteristics of Long-range and original Standard-range GRAD rocket:

<i>TECHNICAL CHARACTERISTICS</i>	<i>"GRAD ORIGINAL"</i>	<i>G-2000</i>	<i>UNITS</i>
Caliber	122	122	mm
Length	2875	2875	mm
Temperature range	-30 ~ +50	-30 ~ +50	°C
Total mass	66	69.0	kg
Warhead mass with fuse	19.1	19.1	kg
Propellant mass	20.45	27.3	kg
Burning time	2.0	2.7	s
Total motor impulse	39700	62800	Ns
Specific motor impulse	1941	2300	Ns/kg
Max. Velocity at Xe.	690.6	1100	m/s
Top of the Trajectory at Xe.	7100	17800	m
Time of Flight at Xe.	76	126	s
Elevation	50.0	56.9	°
Range (Xe.)	20.3	40.2	km
CEP at max. range	1.27	0.96	%



Altitude and range charts



TOWED HOWITZER M56/15 105mm

TECHNICAL SPECIFICATION AND DETAILS

M56/15 105mm 37cal Howitzer is artillery system which is intended to be used as a general support weapon – for direct and indirect fire support. It is upgrade of Yugoslav howitzer M56 with initial requirement: longer range, with minimum of intervention to basic model. Modernization includes the following elements: longer barrel, new higher efficiency muzzle brake, breeching and breech block made of high-quality material and additional stabilizing weights on trails.

M56/15 105mm 37cal howitzer main tactical purpose:

- Counter-battery fire: delivered for the purpose of destroying or neutralizing the enemy's fire support system.
- Counter-preparation fire: intensive prearranged fire delivered when the imminence of the enemy attack is discovered.
- Covering fire: used to protect troops when they are within range of enemy small arms.
- Defensive fire: delivered by supporting units to assist and protect a unit engaged in a defensive action.
- Final Protective Fire: an immediately available prearranged barrier of fire designed to impede enemy movement across defensive lines or areas.
- Harassing fire: a random number of shells are fired at random intervals, without any pattern to it that the enemy can predict. This process is designed to hinder enemy forces' movement, and, by the constantly imposed stress, threat of losses and inability of enemy forces to relax or sleep, lowers their morale.
- Interdiction fire: placed on an area or point to prevent the enemy from using the area or point.
- Preparation fire: delivered before an attack to weaken the enemy position.



Weapon is particularly featured with high on-road and off-road tactical and operational mobility by using of light/medium capacity 4x4 formula towing truck, as well as favourable helicopter and transport aircraft transportability due to lightweight and compact design.

In conventional artillery armament for direct support, the 105mm howitzer M-56/15 represents a very successful design. When compared to other weapons of like design, it is characterized by great range, precision, accuracy and high mobility. The favourable rate and length of fire have been achieved through a special thermo regulator hydro-elastic system. The weapon possesses to a large extent the characteristics of an anti-tank weapon, and can fire at armoured targets of ranges up to 1,000 meters. As a rule, it is serviced by a six-man crew.

The M56/15 105mm 37cal howitzer is a 105 mm towed artillery piece that features both low weight and a high level of



The modernized M56/15 variant with a barrel of 105-mm / 37 caliber. This new barrel has been evaluated for a life cycle of at least 18,000 shots of ammunition.

The 105mm M56/15 include a new dual braking device the slipstream of the barrel, which are aimed to better gases released upon firing, it prevents excessive elevation of the tube, suitable for rapid firing sequence and raise safety levels for system operators.

Furthermore it has been integrated a closing chamber (breech block) and a horizontally sliding mechanism manufactured from harder steel, a hydro pneumatic balancer to compensate for the increased weight caused by the larger tube and the rear thrust weapon now between 900 and 1,150 mm.

In addition to being used in large quantities by Ex-Yugoslavia countries, it was exported to a number of countries including Cyprus, El Salvador, Guatemala, Indonesia, Mexico, Nigeria and Bangladesh.

The new M56/15 37cal howitzer system can fire the older US developed 105 mm M1 high-explosive (HE) projectile out to

BALLISTIC DATA	
Calibre (mm)	105
Barrel length (cal.)	37
Weight in travelling order (kg)	2.370
Range (m):	
HE 105	12.2km
HE ER 105	15.4km
HE ER – BB 105	19.2km
Muzzle velocity (m/s):	
HE ER – BB 105	706m/s
Maximum normal service pressure (bar)	2.650
Rate of fire (rds/min)	6 to 7
Field of fire (°):	
Elevation	-10 to +62
Traverse	26 left and right each
Dimensions in traveling order (mm):	
Length	6.880
Width	2.150
Height	1.560
Length in firing position (mm)	6.255
Trunnion height (mm)	1.130
Crew	6

