EN | PRODUCT CATALOG

EXCALIBUR ARMY

PRODUCT CATALOG

www.excaliburarmy.cz

EXCALIBUR ARMY

PROTECT YOUR WORLD

EXCALIBUR ARMY

We believe in a peaceful world where people are free to live by their traditions and feel safe so they can live to the full extent of their dreams. Yet freedom and security are values that need to be protected.

EXCALIBUR ARMY designs, develops and produces a wide range of military vehicles and equipment. We strive to offer only high quality products and provide a variety of services for our customers all around the world. Our production and repair facilities have decades long tradition that reaches back to 1950s. All these years we have never ceased to understand the importance of military industry for national and international security and we are still standing proud by the code that of freedom in defence of which so many lives were lost.

Just as the soldiers of today, we would never wish for history to repeat.
We admire their motivation, we are grateful for their determination and thankful for their service.
Our first mission is to equip and protect those who have decided to protect you,
your future, your world, your way of life and your peaceful traditions and values.

We are here to help you protect everything that is dear to you.

EXCALIBUR ARMY

EXCALIBUR ARMY

ARMOURED PERSONNEL CARRIERS AND INFANTRY FIGHTING VEHICLES

Our armoured APCs and IFVs comprise a range of tracked and wheeled vehicles for battle engagement, area control and a variety of tactical and special operations.

Our Šternberk facility is renowned for its history and experience in repairs, service, renovation, modernization and production of BMPs, T-72 MBTs and other numerous armoured, artillery, engineering, military and special logistic vehicles. In the recent years we have successfully started to cooperate in cross-national projects, e.g. the PANDUR APC. We also develop our own solutions for infantry support and mobility and we have lately introduced the MEXCA IFV or PATRIOT APC vehicles.

High level of protection, efficient controls and effective reliable weapon systems are at the core of our development engineering.

EXCALIBUR ARMY

PROLONGED VERSION

PATRIOT offers various upgrades over the original PATRIOT, one of them being the prolonged and wider cabin with higher capacity for crew or special equipment.

ON-ROAD/OFF-ROAD MOBILITY

TATRA FORCE chassis, clearance adjustment on the go, automatic transmission for exceptional terrain performance... Yet vehicle is perfectly fit for common road traffic.

VERSATILE PLATFORM

Mission kit can be modified as per customer request.

CREW COMFORT AND SAFETY

Ballistic and anti-mine protection, A/C, NBC filtration system.

SAFETY & ENDURANCE

Fire-extinguishing system for the cabin and engine, anti-mine seats, optional jammers coupled with a long range of 700 km.

PATRIOT

MULTI-PURPOSE PLATFORM FEATURING SUPERIOR OFF-ROAD MOBILITY

1+1+6 | **110** KM/H | TATRA

The PATRIOT is an upgraded modular wheeled combat tactical vehicle that features excellent mobility in difficult terrain thanks to the unique TATRA chassis. It offers wide range of mission kits and armament choices - remote or manually controlled machine guns, or even a 20 mm cannon with superior firepower, grenade launchers or ATGMs.

The vehicle provides a unified platform for the „PATRIOT family" of defence and civil safety applications, such as reconnaissance, special operations, communications, command and control, chemical, medevac, EOD, PSYOPS, riot control, and of course troops transport or direct combat. Any configuration is possible for the PATRIOT.

BALLISTIC PROTECTION
Level 2 - 4 STANAG 4569

ANTI-MINE PROTECTION
Level 2a/2b - 3a/3b STANAG 4569

TATRA CHASSIS - HIGH PAYLOAD & GREAT MOBILITY

Weapon station ARX 20 application by Nexter Systems

PARAMETERS

weight		13.5 - 17.5 t (per vehicles type of protection and equipment)
dimensions	L	6,250 mm
	W	2,550 mm
	H	2,800 mm
	wheelbase	3,650 mm
engine	type A	Cummins ISL / water-cooled
	type B	Tatra T3C-928-90 / air-cooled
	output A	270 kW
	output B	325 kW
mobility	top speed - on road	110 km/h
	top speed - off road	45 km/h
	cruising range	700 km
	fording depth (instant)	1.2 m
	gradient	45°
	side slope	33°
	vertical obstacle	0.5 m
	trench crossing	0.9 m

SPECIFIC PARAMETERS

armament	main	up to 20 mm RCWS
	options available	7.62 mm / 12.7 mm / 14.5 mm manned gun turret
		mortar (pick-up vehicle version)
		AG/SG launchers
		ATGM launchers

EXCALIBUR ARMY

TRITON

CZS 15

SPECIAL EMERGENCY SERVICES SUPPORTING VEHICLE

2+2 | **110** KM/H | **2,000** L

TRITON is a specialty improved command-reconnaissance vehicle designed to support the civil sector emergency services. Specific vehicle design ensures operation at extreme terrain conditions and environment with high degree risk to safety of water engine, chassis and fire-extinguishing technology.

Vehicle has been designed to be deployed in:

- areas where unexploded explosive ordnance may occur
- areas where pressure bottles and containers may occur
- areas to remove residues after a terrorist attack
- chemical and petrochemical plants
- large-scale natural disaster especially forest fire
- contaminated zones for research and monitoring
- usual low-risk locations, if its service is required if needed

PUMPING DEVICE

Vehicle is equipped with a pump with a 1,500 l/min nominal flow, 2,000 l water tank and bumper fire monitor.

SEARCHING LIGHT

Rotating searching light with a 3,000 lm luminous flux controlled from the crew cab is located at the vehicle rooftop. The searching light is rotating 270° horizontally and 120° vertically.

BUMPER FIRE MONITOR

The vehicle is equipped with the ALCO APF2-DC bumper fire monitor at the front-end section controlled from the crew cab.

SELF-PROTECTIVE NOZZLES

The vehicle is equipped with water cooling installation as a heat protection. Set of nozzles ensures surface cooling of superstructure body and crew cab with optional timer setting.

CONTROL PANEL

Cabin driver control panel includes both NBC and A/C controls as well as Téléflow CTIS enabling change in tyre pressure during driving. The vehicle is further equipped with the all-round view camera system.

ACCESSORIES AND EQUIPMENT

The vehicle includes fire fighting items at the rear part of the superstructure storage compartment.
Part of equipment is an electric winch with 5 tons pull, 30 m long rope and 10 m control cable.

PARAMETERS		
weight		13.5 - 15 t (per vehicles type of protection and equipment)
dimensions	length	6,250 mm
	width	2,550 mm
	height	2,800 mm
	wheelbase	3,650 mm
engine	type	TATRA T3C-928.90 / air-cooled
	power	300 kW
mobility	top speed - on road	110 km/h
	top speed - off road	45 km/h
	cruising range (no fuel cans)	600 km
	fording depth (instant)	1.2 m
	gradient	45°
	static side slope	30°
	vertical obstacle	0.5 m
	trench crossing	0.9 m

SPECIFIC PARAMETERS		
pumping device - THT PJA 1500 pump	nominal flow	1,500 l/min
	nominal manometer pressure	1,0 MPa
	nominal suction head	3 m
tank		2,000 l
fender nozzle	type	ALCO APF 2-DC
	nozzle	MTV 2000
	foam extension	SWA 2000
	control	remote control (joystick)

BALLISTIC PROTECTION
Level 2

MINE PROTECTION
Level 2a/2b

EXCALIBUR ARMY

RIOTEAR

SPECIAL VEHICLE CONFIGURATION FOR POLICE AND SPECIAL ENFORCEMENT UNITS

2–8
CREW

ANTI-MINE PROTECTION
Level 2a/2b

BALLISTIC PROTECTION
Level 2-3

RIOTEAR is a vehicle for special law enforcement and police units to counter various threats to internal security and public safety and enhance police protection and peace-keeping capabilities.

The vehicle can be armed with up to 20 mm RCWS or up to 14.5 mm HMG manned turrets, smoke grenade ejectors and 360° surveillance equipment. A range of non-lethal means is available for various purposes of traffic and crowd control.

Providing all its users with high level of protection against projectiles, IEDs and even land-mines RIOTEAR can also be further adapted for special police forces, counter-terrorist units and SWAT teams.

ON-ROAD/OFF-ROAD MOBILITY

TATRA FORCE chassis, clearance adjustment on the go, automatic transmission for exceptional terrain performance... Yet vehicle is perfectly fit for common road traffic.

VERSATILE PLATFORM

Mission kit can be modified as per customer request.

CREW COMFORT AND SAFETY

Ballistic and anti-mine protection, A/C, NBC filtration system.

SAFETY & ENDURANCE

Fire-extinguishing system for the cabin and engine, anti-mine seats, optional jammers coupled with a long range of 700 km.

OTHER POSSIBLE CONFIGURATIONS:

POLICING

- monitoring & patrolling
- transport & evacuation of VIPs
- the support of other security forces

SWAT

- suppression of terrorist threats
- neutralization of a higher number of dangerous militants

ANTIRIOT

- ensuring safety in case of large scale disturbance of public order
- crowd control

OPTIONAL PROTECTION AND OPERATIONAL UPGRADES

- self-cooling system
- A/C and NBC filtration system
- front ramp and protective shield, mesh screen window protection
- full 360° camera observation system
- camera recording system with on-board data back-up and an uplink to command center
- GPS

EXCALIBUR ARMY

PANDUR

MULTI-PURPOSE WHEELED ARMOURED PERSONNEL CARRIER FEATURING SUPERIOR OFF-ROAD MOBILITY

✳ 4+7 | 105 KM/H | 10 KM/H

PANDUR vehicle was developed upon the Czech Army request but the platform has already been well-proven in the armies worldwide.

The amphibious wheeled armoured personal carrier with armour and waterproof body is capable of effective water gap, water reservoir or coastal water crossing. PANDUR vehicle has proven itself with superior off-road mobility, maneuverability and high reliability and resistance. In addition to the basic personal carrier function, the vehicle can be modified and fitted with various types of weapon stations up to 105 mm calibre, the mortar or other special equipment.

✳ Crew and troop capacity depends on the configuration. W/o turret the vehicle carries up to 2+12.

OPTIMAL CREW SAFETY & COMFORT

Air-conditioning, comfortable seats, hydraulic ramp, independent wheel suspension. Optimized STANAG 4569 and NBC protection.

DESIGNED FOR OFF-ROAD

High off-road mobility capabilities, heavy duty chassis, break steering, CTIS and ADM for perfect power delivery and great swimming abilities.

EFFICIENT MOBILITY

Low fuel consumption extends the cruising range for easier long distance deployment.

UPGRADES AVAILABILITY

A range of upgrades for easier maneuverability (e.g. automatic transmission), firepower and protection enhancement.

BALLISTIC PROTECTION

Level 1-4 / STANAG 4569

ANTI-MINE PROTECTION

Level 1-4 - STANAG 4569

AVAILABLE CONFIGURATIONS

- AMPHIBIOUS INFANTRY CARRIER
- INFANTRY FIGHTING VEHICLE
- MORTAR OR ATGM CARRIER
- COMMUNICATION VEHICLE
- RECONNAISSANCE VEHICLE (RADAR OPTIONAL)
- ENGINEERING VEHICLE
- ARMOURED AMBULANCE
- COMMAND POST

PARAMETERS

weight		18.7 t
dimensions	L	7,384 mm
	W	2,670 mm
	H	3,987 mm
engine	type	Cummins Diesel ISLe T450 HPCR
	output	335.6 kW
mobility	top speed - on road	105 km/h
	top speed - off road	32 km/h
	cruising range	700 km
	fording depth (instant)	1.5 m / swimming ability (AMPH configuration)
	gradient	35°
	side slope	30°
	vertical obstacle	0.6 m
	trench crossing	2.2 m

RCWS SAMSON MK II ADVANTAGES

under armor reloading
- low silhouette
- wide range of weapons portable
- optional ATGM and SGL effectors
- 360° traverse, -20° to +70° elevation (vehicle restrictions may apply)

SPECIFIC PARAMETERS

armament (standard)	main	30 mm automatic cannon Mk 44 / SPIKE-LR ATGM
other options available	secondary	7.62 mm coaxial MG FN MAF (M240)
		76 mm SGL type Wegmann /8 units/

EXCALIBUR ARMY

MEXCA

A MODERN, STRONGER AND SAFER BMP YET WELL COMPATIBLE WITH BMP-1 AND BMP-2

3+6 | 65KM/H

The armoured tracked infantry fighting vehicle has been designed to transport infantry troops to the battlefield and to provide direct fire support, including engagement against enemy armoured vehicles.

Featuring the increased level of ballistic protection, high and easy maneuverability and possibility to fit wide range of special systems, the vehicle has been pre-determined for deployment at asymmetric missions.

The platform can be fitted with many different types of mission kits - recon, engineering, medical, recovery, workshop, communication and information, command and staff and other.

INCREASED PROTECTION

Level 2, optionally higher.

EASIER HANDLING

Automated transmission, decrease of driver's workload, easier vehicle handling.

ENLARGED INTERIOR

Bigger compartment and improved interior arrangement to transport the unit, advanced ergonomics, troops boarding and exit much more effective.

OPEN ARCHITECTURE

Enabled versatility to installation of weapon systems, passive and active protection, communication systems and other military technology.

PLATFORM CONSISTENCY

Spare parts and servicing procedures highly consistent with the original BMP-1 and BMP-2 platform, especially chassis and transmission mechanisms and vehicle turning mechanism.

BALLISTIC PROTECTION

3 - STANAG 4569

ANTI-MINE PROTECTION

2a/1 - STANAG 4569

BACK RAMP

Removes the disadvantage of the original solution and allows an easy entry by the troops.

PARAMETERS		
weight		18.8 t
dimensions	L	6,753 mm
	W	3,047 mm
	H	2,760 mm
engine	type	Caterpillar C9.3
	output	300 kW
mobility	top speed - on road	65 km/h
	top speed - off road	45 km/h
	cruising range	400 km
	fording depth (instant)	1.3 m
	gradient	35°
	side slope	30°
	vertical obstacle	0.7 m
	trench crossing	2.5 m

SPECIFIC PARAMETERS		
armament	turrets	TURRA 30 turret
	options available	SAMSON MK II or DVK 30 gun turret
	weapons	stabilized 30 mm 2A42 / CZ-30 autocannon
		7.62 mm PKT coaxial machine gun

THOROUGHLY MODERNIZED INTERIOR

New ballistic seats and more space for the whole crew and new controls for driver, commander and gun operator.

EXCALIBUR ARMY

BMP-1

A RENOWNED CLASSIC AND BATTLE PROVEN INFANTRY SUPPORT VEHICLE

3+8 | **6-23MM ARMOUR** | **65KM/H** | **7KM/H**

The BMP-1 is an amphibious tracked infantry fighting vehicle designed to transport the troops to the battlefield and to provide direct fire support, including engagement against enemy armoured vehicles.

The platform features high maneuverability and excellent off-road capability. With regard to the vehicle armament /73 mm 2A28 Grom gun firing HEAT rounds and launcher for the 9M14 Maljutka ATGM/ it is often classified as the „Tank Destroyer".

MANEUVERABILITY

Excellent maneuverability and superior off-road capability, high travel speed.

VERY EFFECTIVE VEHICLE

Highly reliable, ease of control, simple design.

PROVEN DESIGN

Timeless concept and the overall arrangement whilst keeping the low-silhouetted vehicle profile.

AMPHIBIOUS CAPABILITY

Vehicle suitable for immediate fording and water obstacle crossing.

LIFE-CYCLE EFFIENCY

Large spare parts availability.

AMPHIBIOUS CAPABILITY

The BMP-1 is amphibious, propelling itself in the water using its tracks, assisted by hydrodynamic fairings on the track upper side covers.

Top swimming speed is 7 km/h.

PARAMETERS		
weight		13 t
dimensions	L	6,735 mm
	W	2,940 mm
	H	1,924 mm
engine	type	UTD-20
	output	220 kW
mobility	top speed - on road	65 km/h
	top speed - off road	45 km/h
	cruising range	600 km
	fording depth (instant)	swimming ability
	gradient	35°
	side slope	25°
	vertical obstacle	0.7 m
	trench crossing	2.0 m

SPECIFIC PARAMETERS		
armament	main	73 mm semi-automatic gun 2A28
		9M 14M ATGM (Maljutka) / optionally without the launcher
	secondary	7.62 mm PKT coaxial machine gun

UTD-20

6-CYLINDER
V 120 DEGREES
DIRECT INJECTION
4 STROKE
WATER COOLED

EXCALIBUR ARMY

SELF-PROPELLED HOWITZERS

EXCALIBUR ARMY offers a range of self-propelled howitzer class artillery guns with 122, 152 and 155 mm calibre available.

Most of our howitzers are mounted on a wheeled original Tatra chassis and therefore are suitable for high speed travel on road as well a swift deployment in rough terrain. This increases the safety of the crew that often needs to carry out the given task and leave the firing post as soon as possible to avoid enemy countermeasures.

Our howitzer systems are proved by active duty in a number of defence forces.

EXCALIBUR ARMY

CREW PROTECTION

The crew handles the whole system from within the protected modular EA Puma cabin that is certified for STANAG 4569 Level 2 against both ballistic and landmine threats. The cabin is pressurized and the air intake is fitted with NBC filters.

AUXILIARY POWER HYDRAULIC UNIT

Extra power source for independent turret operation – a lot more silent than vehicle engine and with low heat signature.

THREAT AWARENESS

Laser warning receiver system for detection of enemy surveillance and targeting means is available.

EMERGENCY WORKPLACE

The gun turret has an additional workplace for emergency manual aiming mode.

MORANA

STATE OF THE ART ARTILLERY SYSTEM FOR FAST AND PRECISE FIRE SUPPORT

★ NEW PRODUCT | 3 CREW | 90 KM/H | 41.5 KM

The Morana self-propelled gun howitzer is a sophisticated NATO standard artillery weapon with automatic aiming and loading system, designed for highly effective support of ground forces. Its reliable gun, advanced fire control system, cutting edge computing and diagnostics technology enable carrying out the combat tasks rapidly, effectively and with a very high level of precision.

ANTI-MINE PROTECTION
Level 2a/2b

BALLISTIC PROTECTION
Level 2

PRIMARY WEAPON

The main gun is located in the rear of the vehicle and mounted in a fully self-powered and autonomous turret that can eventually be placed on different suitable chassis. Firing cycle is managed by a proven and reliable automatic loading and locking mechanism. The charge compartment and emergency workplace are protected with aditional ballistic armor (Level 2 STANAG 4569) and equipped with and A/C unit.

SECONDARY WEAPON

Morana is equipped with the Escribano Securtor - a remote controlled weapon station with a 12.7 mm machine gun. It is located in the gun superstructure and elevated into action position by a lifting mechanism by the shooter. Secutor offers high precision shooting even during vehicle movement. It allows 360° rotation and over 10 km target recognition range ability. Its sensors can be aligned and locked with the main 155 mm gun to greatly enhance the howitzer direct fire capabilities.

PARAMETERS		
weight		36 t
dimensions	length	13,200 mm
	width	3,100 mm
	height	3,550 mm
engine	type	Cummins X15E3 600
	output	447 kW
transmission		automatic
other subsystems		CTIS, ABS, A/C, FVU, hydraulic supports, communication system with intercom, blackout lights, side/rear cameras, hydraulic doors

Base variant specification. Final specification may change per customer requirements.

MOBILITY	
max. speed - on road	90 km/h
cruising range	600 km
fording depth (instant)	1.2 m
gradient	30°
side slope	18°
vertical obstacle	600 mm
trench crossing	2.0 m
turning circle diameter	21 m

PARAMETERS - SECONDARY WEAPON	
secondary weapon	12.7 mm
firing range	1,800 m effective / 7,400 m maximum
elevation	-20/+60°
traverse	360°
rate of fire	200 rpm
firing modes	single shot / short burst / fully automatic
carried ammunition	300 rounds loaded / 900 rounds reserve

PARAMETERS - PRIMARY WEAPON	
main	155 mm gun
firing range	35 km / 41.5 km
elevation	-3,5-70°
traverse	±60°
rate of fire - 1st minute	6 / min.
rate of fire - sustained	5 / min.
carried ammunition	40 pcs autoloader / 5 pcs reserve compartment

EXCALIBUR ARMY

DITA

NEW NATO STANDARD 155 MM AUTOMATED SELF PROPELLED HOWITZER

1+1 | **90** KM/H | **39** KM

The 155 mm DITA self-propelled howitzer is a new modern artillery weapon using a NATO standard 155 mm ammunition. It derives from the original Czechoslovak concept of Tatra truck-mounted howitzers, but it takes the autonomy of operation into a new level - DITA offers an unprecended rate of fire with only 2 members of the crew. It features a modern fire control system, high speed in taking up and leaving the firing position, great accuracy and excellent hard terrain crossability.

The DITA howitzer is equipped with a powerful Onboard Control System which contains subsystems of diagnostics, navigation, automatic gun aiming, autonomous calculation of shooting elements and ammunition selection subsystem.

155 mm CALIBER

DITA uses a standard 155 mm caliber ammunition on a gun of 45 caliber, easily available extensive range up to 39 km.

MINIMAL CREW REQUIREMENTS

Thanks to full automation of the system, the vehicle is operated by a crew of only 2 - driver and commander.

CREW COMFORT AND PROTECTION

High performance heating, A/C and NBC filtration system. Cabin protected according to STANAG 4569 Level I.

SMART CONTROLS

Vehicle is equipped with new ergonomically distributed driver's and commander's controls – vehicle controls, C2I systems, FCS, CTIS etc.

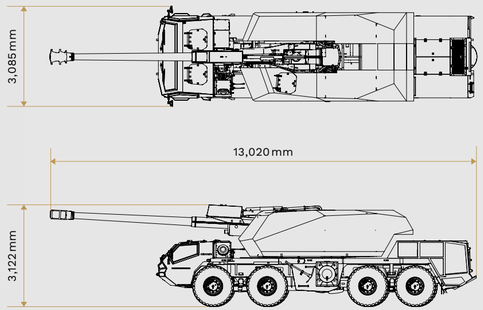
AUTOMATIC GUN AIMING

The DITA howitzer is equipped with a special A.S.A.P. system (Automatic Setting of Action Position) and with an ammunition control system which greatly enhance the speed of task execution and overall effectivity of the weapon.

APHU

An auxilliary 24 V hydraulic power unit serves as the main source for weapon systems and turret operation.

Autonomous gun superstructure portable to different types of chassis, e.g. tracked.



PARAMETERS

weight		29 t
dimensions	L	13,020 mm
	W	3,085 mm
	H	3,122 mm
engine	type	Tatra T3C-928-90
	output	300 kW
mobility*	top speed - on road	90 km/h
	top speed - off road	25 km/h
	cruising range	600 km
	fording depth (instant)	1.2 m
	gradient	30°
	side slope	15°
	vertical obstacle	0.47 m
	trench crossing	2.0 m

*) Preliminary parameters.

SPECIFIC PARAMETERS

armament	main	155 mm howitzer
	firing range	39,000 m
	elevation	-3° / 70°
	traverse	± 60°
	guidance of weapon	fully automatic / manual (emergency)
	loading	automatic loading
	rate of fire - 1st minute	6/min.
	rate of fire - sustained	5/min.
	carried ammunition	40
	control of fire	on board control system with ballistic computer

EXCALIBUR ARMY

DANA M2

LATEST AND MOST ADVANCED VARIANT OF THE 152 MM DANA VZ. 77 SELF-PROPELLED GUN HOWITZER

1+4 | **90** KM/H | **25.5** KM | BATTLE PROVEN

The 152 mm DANA vz. 77 self-propelled gun howitzer has gone through a major modernization presenting the most recent DANA M2 system featuring high speed in taking up and leaving the firing position, greater accuracy and excellent hard terrain crossability.

The DANA M2 howitzer is equipped with a powerful Onboard Control System which contains subsystems of diagnostics, navigation, automatic gun aiming, autonomous calculation of shooting elements and ammunition selection subsystem.

Thanks to the new more resistant cabin and the NBC filtration system the DANA M2 provides the crew with the highest level of comfort and protection. The newly implemented automatic guiding system allows fast and fully-automatic weapon adjustment into fire position.

BALLISTIC PROTECTION

Cabin according to STANAG 4569 Level I.

ON-BOARD DIAGNOSTIC

Integrated dignostic system with automatic record of operating units.

CREW COMFORT

High performance heating, A/C and NBC filtration system.

EXTRA POWER

Auxiliary power unit is available, including a hydraulic pump.

PARAMETERS

weight		30.2 t
dimensions	L	11,456 mm
	W	3,000 mm
	H	3,350 mm
engine	type	Tatra T3-930-52M, V12
	output	265 kW
mobility	top speed - on road	90 km/h
	top speed - off road	25 km/h
	cruising range	600 km
	fording depth (instant)	1.4 m
	gradient	30°
	side slope	15°
	vertical obstacle	0.6 m
	trench crossing	2.0 m

DANA M2 SYSTEM

SPECIFIC PARAMETERS

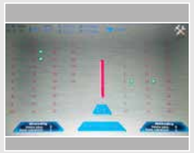
armament	main	152.4 mm howitzer
	firing range	20,000 m (25,500 m with DN1CZ ammunition)
	elevation	-4° / 70°
	traverse	±225°
		± 45° a full range elevation
		± 220° with elevation to 10° (except DN1CZ)
	rate of fire – 1st minute	5/min.
	rate of fire – sustained	4/min.
	carried ammunition	40
	secondary weapon	12.7 mm NSVT anti-aircraft machine gun

CONTROL PANEL

Basic screen

Semi-automatic aiming using arrows

Semi-automatic aiming using dial



Optional ammunition selection subsystem

NEW CONTROLS

Vehicle is equipped with new ergonomically distributed driver's and commander's controls (vehicle controls, C2I systems, FCS, FVS, CTIS etc.).

AUTOMATIC GUN AIMING

DANA M2 howitzer is equipped with a special A.S.A.P. system (Automatic Setting of Action Position) and with an ammunition control system which greatly enhance the speed of task execution and overall effectivity of the weapon.

APHU

Auxiliary 24 V source with a hydraulic pump allows emergency control of gun, battery charging and electrical system powering in case of accidental engine stopping.

IMPROVED UNDERCARRIAGE

Improved engine, new clutch, semi-automatic TATRA NORGREN transmission, new steering with servo, diagnostics and other improvements. Activation and retraction of support pads is 65% faster.

EXCALIBUR ARMY

MULTIPLE LAUNCH ROCKET SYSTEMS

EXCALIBUR ARMY produces a range of multiple launch rocket systems. Our MLRS vehicles are built on the unique Tatra chassis which allows them to pass through very difficult terrain with certainty and at surprising speed. The launcher platform is derived from the well-known, proven and widely used RM-70 and BM-21 MLRS systems. To allow fast and accurate firing, our MLRS vehicles are equipped with a new aiming system and optionaly with Fire Control System with navigation system and ballistic computer that allows fire elements calculation. According to the calculation aiming system automatically aims and deregulates the launch tubes towards the target.

Apart from the new MLRS production, we also specialize in modernization of existing technology to allow our customers continuous use of their current undercarriage and superstructure platforms.

EXCALIBUR ARMY

RM-70 VAMPIRE 4D

MULTIPLE LAUNCH ROCKET SYSTEM DELIVERING
EXTENSIVE FIREPOWER FAST AND WITH HIGH PRECISION

1+3 | UP TO 40KM | TATRA | BATTLE PROVEN

DIGITAL INTERFACE OF THE ELECTRIC SYSTEM

Digital interface of the main weapon systems enables implementation of the Fire Control System with new aiming system according to calculated shooting elements with the possibility of manual control, voice and data communication with the upper levels of command and the new navigation system.

NEW TATRA CHASSIS

Overall design of whole system increased by unique Tatra chassis T815-7 with its high cruising speed and high crosscountry capability, good maneuverability and excellent chassis properties.

The RM-70 VAMPIRE 4D is a forty-tube, multi-launch, self-propelled rocket artillery system with a loading device, which is used to provide converging fire support for troops, firing unitary high-explosive fragmentation rocket projectiles (122-JROF-RM 70) at larger area targets.

The RM-70 VAMPIRE 4D is a hugely upgraded variant of the original Czechoslovak RM-70 GRAD MLRS with a loading device.

The rocket launcher can fire both single rounds and volleys from the cab or using a portable device from a nearby trench. The basic type of the fire is indirect fire. If a combat operation requires direct fire with elevation from 0° to 10°, it can only be done within the range determined by elevation and traverse sensors.

The original T-813 chassis was replaced with the new T815-7 chassis with air axle suspension. Two-door variant is also available.

NEW CONTROL BOXES

fitted with the latest electronic components

AREA OF EFFECT

3,000m² **SINGLE ROUND**

30,000m² **SALVO** (40 ROCKETS)

PARAMETERS

combat weight		25.7 t
dimensions	L	9,550 mm
	W	2,550 mm
	H	2,930 mm
chassis		T 815-7T3RC1 8x8.1
engine	type	Tatra T3C-928.90, V8
	output	300 kW
mobility	top speed / off road	85 km/h / 30 km/h
	cruising range	700 km
	fording depth (instant)	1.2 m
	gradient	27°
	side slope	18°
	vertical obstacle	0.6 m
	trench crossing	2.1 m

SPECIFIC PARAMETERS

armament	main	122 mm JROF rockets /40+40/ max. range 20 381 m (GRAD original at 50°) 40 000 m (G-2000 at 52,9°) - optional

Conversion time is measured in fully automatic mode of aiming supported by Fire Control System and navigation system.

fully combat readiness in combat posit.	< 60 s
from combat to travelling position	1,5 min
time of firing a salvo	18 s – 22 s
time of reloading 40 rockets	from 30 up to 36 s
time to prepare 2nd salvo	1,5 - 2,5 min

LOADING UNIT

The unique RM-70 loading unit allows for an unprecedented rate of fire - 80 rockets in 2 minutes.

EXCALIBUR ARMY

RM-70 M1

UPGRADED VARIANT OF THE RM-70 GRAD MLRS

1+3 | UP TO 40 KM | TATRA

The RM-70 M1 is a forty-tube, multi-launch, self-propelled rocket artillery system with a loading device, which is used to provide converging fire support for troops, firing unitary high-explosive fragmentation rocket projectiles (122-JROF-RM 70) at larger area targets.

The RM-70 M1 is a hugely upgraded variant of the original Czechoslovak RM-70 GRAD MLRS with a loading device.

The rocket launcher can fire both single rounds and volleys from the cab or using a portable device from a nearby trench. The basic type of the fire is indirect fire. If a combat operation requires direct fire with elevation from 0° to 10°, it can only be done within the range determined by elevation and traverse sensors.

The original T-813 chassis was replaced with the new T815-VPR 9M chassis with air axle suspension.

ARMOURED CABIN

The cabin is armoured type, low profile, prolonged with two doors. The interior can be heated with the use of independent heating or cooled down by means of the dependent or independent air conditioning system.

NEW TATRA CHASSIS T815-VPR 9M

Overall design of whole system increased by unique Tatra chassis T815-VPR 9M with its high cruising speed and high cross-country capability, good maneuverability and excellent chassis properties.

CREW COMFORT

Easier and safer vehicle handling by the driver, semi-automatic Norgren gear-shifting system and better comfort of the crew when travelling.

RM-70 M1 BATTERY

When equipped with the FCS, the vehicle can function alone or tradionally for increased firing volume as a part of a larger battery.

OPTIONAL CABIN VERSIONS

ARMOURED CABIN

SOFT CABIN

NEW CONTROL BOXES

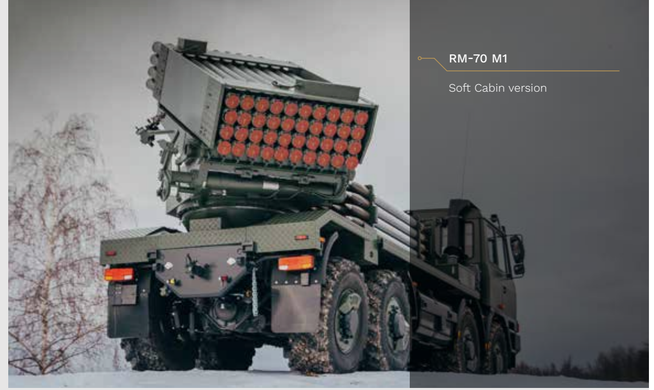
fitted with the latest electronic components

AREA OF EFFECT

3,000 m² SINGLE ROUND

30,000 m² SALVO (40 ROCKETS)

PARAMETERS		
combat weight		25.9 t
dimensions	L	9,250 mm
	W	2,590 mm
	H	3,050 mm
chassis		T 815 - VPR9M 29 265 8x8.1R with armoured cab and filtration system
engine	type	Tatra T3-930-50M, V12
	output	264 kW
mobility	top speed - on road	85 km/h
	top speed - off road	25 km/h
	cruising range	1,000 km
	fording depth	1.2 m
	gradient	27°
	side slope	18°
	vertical obstacle	0.5 m
	trench crossing	2.0 m



RM-70 M1

Soft Cabin version

SPECIFIC PARAMETERS		
armament	main	122 mm JROF rockets /40+40/ max. range 20.4/40.1 km - optional

NIGHT VISION CAMERA

TATRA T 815 CHASSIS

The TATRA T 815 is a proven and reliable vehicle with good availability of spare parts.

EXCALIBUR ARMY

STRIGA BM-21 MT

4×4 WHEELED MLRS BASED ON TATRA CHASSIS
FOR FAST DEPLOYMENT

1+2 CREW | UP TO **40**KM | TATRA | BATTLE PROVEN

The BM-21 MT is a mobile platform for the 40-round high explosive fragmentation artillery system providing concentrated fire support to the troops over large target areas covering ranges depending on the type of used shell.

The rocket launcher can fire both single rounds and salvos from the cab or via remote control device from a nearby trench.

The principal mode of fire is indirect fire, direct fire can be performed only within the range determined by traverse and elevation sensors.

The original URAL chassis was replaced with the T-815-7 chassis with air axle suspension. The vehicle chassis is the newest generation of TATRA military vehicles with exceptional terrain handling.

DEPLOYMENT AND TERRAIN CAPABILITIES

The rocket launcher is mounted on the TATRA chassis with central tube and axles with independent suspended swinging half-axles. The chassis is suitable for quick deployment in light and medium terrain.

ZIP 1:1

The logistics kit of spare parts, tools and accessories is intended for superstructure operating, replacing defective parts, for repairing minor faults by the crew and for launcher maintenance.

EQUIPMENT

Dependent heating, ventilation and air conditioning unit (HVAC), optionally – APU, independent heating, AC unit and NBC filtration system.

FIRING ACCURACY AND EFFECTIVITY

STRIGA features a 122 mm JROF rockets capable of reaching over 40 kilometers distance. The crew has forty carried rounds. Launcher allows for an unprecedented rate of fire – 40 rockets in minutes. Goal of a new system is fully automatic mode of aiming and firing, which reduce time needed for assuming combat position and increase fire accuracy in the target area.

PARAMETERS		
combat weight		16,3 t (soft cabin version)
dimensions	length	7,650 mm
	width	2,550 mm
	height	2,950 mm
chassis		T815-7T3R21 4x4.1R
engine	type	Tatra T3C-928.81, V80
	output	270 kW
mobility	top speed - on road	90 km/h
	top speed – off road	30 km/h
	cruising range	600 km
	fording depth (instant)	1.2 m
	gradient	30°
	side slope	20°
	obstacle height	0.6 m
	trench crossing	0.9 m

SPECIFIC PARAMETERS	
armament	122 mm JROF (40 rockets) max. range 20.4 / 40.1 km – optional
max. projectile speed	700 m/s
fully combat readiness in combat position	60 s
from combat to travelling position	40 s
time of firing a salvo	18 – 22 s

AREA OF EFFECT

3,000m² SINGLE ROUND

30,000m² SALVO (40 ROCKETS)

MULTIPLE LAUNCH ROCKET SYSTEMS
FIRE CONTROL SYSTEM AND AIMING SYSTEM FOR ALL EA MLRS

FIRE CONTROL SYSTEM (FCS)

The Fire Control System consists of commander ballistic computer, communication subsystem and navigation system.

We offer two possibilities of the FCS with two different solution of the navigation system:

1. **LANSYR-LIR Fire Control System with I-GEO navigation system**
   - Independent of external surroundings with no interference chances.
   - Coordinates are continually recalculated according to the movement of the rocket launcher in terrain.
   - Accurate values of the superstructure elevation and direction towards true north.
2. **LANSYR-MQR Fire Control System with Q-GEO navigation system**
   - The dual GPS sensors are linked to the top of the rocket tubes bundle, which secures that the system obtains accurate values of the superstructure direction towards true north.
   - Coordinates of the actual position are continually recalculated in the real time.

FCS provides following main features:

- Calculation of shooting elements with automatic correction in the commander´s tablet.
- Automatic topographic orientation capability.
- Sending data and commands to other vehicles with RF20 radio in P2P mode.
- Possible operation with or without radio communication.
- Creating geodetic objects: posts, targets, areas on the map.
- Slope calculation in course of vehicle according to the elevation data.
- Automatic command system.
- Firing from prepared or unprepared firing positions with topographic preparation.
- Easy preparation of various number of alternative firing posts.
- Displaying positional information on the digital maps.

MODES OF THE AIMING SYSTEM

1. Fully automatic using a ballistic computer with FCS
2. Semi-automatic using control panel
3. Manual using a joystick and artillery sight RM-70
4. Emergency using a handwheel and artillery sight RM-70

AIMING SYSTEM

- The aiming system allows reliably, quick and accurate aiming into calculated fire direction with all necessary superstructure and chassis subsystems and parts.
- The aiming system is controlled directly through the ballistic computer with automatic deregulation of the aiming or through the control panel and joystick.
- Aiming system consists of new electronic control boxes and panels.
- Non-NATO (360 = 60.00) and NATO (360 = 64.00) aiming circles are available.
- Sensor accuracy is 0.35 mils for elevation and traverse.
- Inclinometer tilt angle is ±5° with accuracy 0.2°.

FCS MAIN COMPONENTS


Commanders ballistic computer


I-GEO navigation system


Q-GEO navigation system


Military radio

AIMING SYSTEM COMPONENTS


Control panel of the aiming


Firing device


Loading unit control panel


Joystick


Portable device

NAVIGATION SYSTEM

We offer two different solution of the navigation system:

I-GEO navigation system based on Inertial Navigation System and GPS.

- Designed for heavy artillery solutions.
- No maintenance.
- Sensors: 3 gyro, 3 accelerometer.
- Bearing and elevation accuracy <2 mils.
- Cold start:
  - 4 min for initial alignment,
  - 10 min for fine alignment.

Q-GEO navigation system based on dual GPS sensors with Q-GEO navigation unit.

- Based on dual GPS sensors with Q-GEO navigation unit.
- Electronic assembly with high accuracy, repeatability, and low power consumption.
- No maintenance.
- Bearing accuracy better than 2 mils.

EXCALIBUR ARMY

MILITARY ENGINEERING VEHICLES

EXCALIBUR ARMY designs, develops and produces a range of military engineering vehicles for gap crossing, recovery and support missions. Though our primary customer target is the military, our solutions find use in civil engineering, post-conflict recovery and natural disaster relief.

For crossing both wet and dry gaps of even over 100 m we offer our own AM-70 EX and AM-50 EX bridge layers.

For the purposes of recovery of damaged vehicles, manipulation with debris and other objects or earth moving we have a wide range of tracked and wheeled vehicles available.

We have developed the DECON vehicle to address the CBRN threats nations may face all around the world.

EXCALIBUR ARMY

AM-70 EX

MOBILE BRIDGE

THE NEW BRIDGE LAYING VEHICLE FEATURING MLC 70 HIGH LOAD CAPACITY BASED ON THE WELL-PROVEN TATRA CHASSIS

3 | 90 KM/H | TATRA

The AM-70 EX Bridge Laying Vehicle is a new mobile vehicle-launched bridge designed to provide the necessary maneuverability to military units by fast deployment over dry or wet gaps, featuring above all the MLC 70 class high load-carrying capacity. Thanks to the ability to interconnect individual bridge sections, the AM-70 EX offers an insuperable flexibility and a maximum width of spanned gap.

The AM-70 EX is a successor to the well-known successful AM-50 EX and conceptually also to the formerly produced and proven AM-50 and AM-50 B vehicles still in use with many armed forces worldwide. The new scissor type 4-girder light construction of the M-70 EX bridge is also fully compatible with older bridge generations. Equipped with a full bridge deck and curbs the AM-70 EX bridge may also be applied in civil rescue operations or building industry and forestry.

HIGH LOAD CAPACITY

MLC 70 load-carrying capacity according to STANAG 2021 ensures support to heavy or extremely heavy combat vehicles.

FLEXIBILITY – INTERCONNECTABLE BRIDGE SECTIONS

Gradual connection of bridge sections can span a gap up to 106 m wide.

BRIDGE SECTIONS COMPATIBILITY

The new M-70 EX is compatible with former M-50, M-50 EX and M-50 B generations.

MODERN HEAVY DUTY TATRA T 815-7 CHASSIS

Ultimate terrain crossing and easy maintenance.

OPTIONAL CABIN BALLISTIC PROTECTION

The cab can be optionally protected with an armour up to STANAG 4569 LEVEL II.

DOZER BLADE OPTION

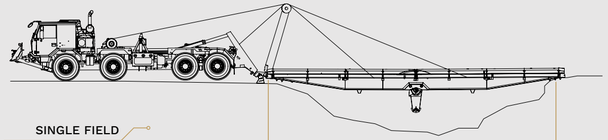
Enables the vehicle to prepare the terrain for bridge deployment.

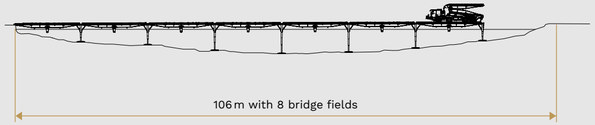
POWERFUL HYDRAULIC SYSTEM

High-performance winch, simplified vehicle electrical equipment using the latest switches.

VARIABLE CAB

Two-door or four-door, standard or armoured – customized.





2 AND MORE FIELDS

6 m depth maximum.

SPECIFIC PARAMETERS

bridge field	load-carrying capacity	MLC 70
	length	13,500 mm
	width	4,300 mm
	travelling width	3,500 mm
detachable trestle	height retracted	2,000 mm
	fully extended	6,000 mm
vehicles per one set	4	

TATRA T3C-928.90

Powerful and reliable eight-cylinder, four-stroke, V-type, TATRA Diesel engine.

PARAMETERS

with standard cabin		33 t
dimensions	length (with blade)	12,400 mm
	width	3,650 mm
	height	3,900 mm
engine	type - optional, i.e.	TATRA T3C-928.90
	output	300 kW at 1,800 rpm
mobility	top speed – on road	90 km/h
	top speed – off road	40 km/h
	cruising range (w/o jerry cans)	>500 km
	fording depth (with preparation)	1.5 m
	gradability	25°
	static side slope	20°
	vertical obstacle (with blade)	420 mm
	trench crossing	2 m

EXCALIBUR ARMY

AM-50 EX

MOBILE BRIDGE

UNIQUE SOLUTION FOR WIDE GAP CROSSING

SWIFT DEPLOYMENT

A bridge section can be laid in just a few minutes.

RELIABILITY

Bridge is extremely sturdy and the supports feature unique hydraulic coils.

INTEROPERABILITY

AM-50 EX system can be fitted to previous models with no extra requirements.

HEAVY DUTY

Rigid chassis reduces torsion related superstructure damage.

EARTH MOVING

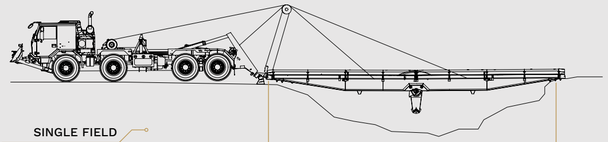
Optional dozer blade for earth moving.

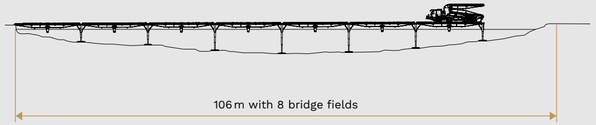
3 | 85 KM/H | TATRA | 13.5-106M

The AM-50 EX bridge layer vehicle is designed to overcome concave terrain obstacles, both dry and wet. This way it provides the necessary maneuverability to military units, featuring a MLC 50 class load-carrying capacity.

Each vehicle is fitted with a single bridge section of 13.5 m length which is installed in a few minutes, allowing another vehicle to append a new one in order to cross a wider obstacle. Up to 8 sections in total can stretch over up to 106 m wide gaps with its supports reaching into up to 6 meters deep trenches.

Thanks to the durable and efficient chassis the vehicle can operate in rough and difficult terrain conditions and allow safe simultaneous crossing for both military vehicles and infantry.





2 AND MORE FIELDS

6 m depth maximum.

SPECIFIC PARAMETERS		
bridge field	load-carrying capacity	MLC 50
	length	13,500 mm
	width	4,000 mm
	maximum gradient	10°
	maximum crossfall	5°
detachable trestle	height retracted	2,000 mm
	fully extended	6,000 mm
vehicles per one set	4	

TATRA T 815-7 CHASSIS

Modern, heavy-duty design. Ultimate terrain crossing and easy maintenance.

PARAMETERS		
weight		26.1 t
dimensions	L	11,250 mm
	W	3,415 mm
	H	3,830 mm
engine	type	Tatra T3C-928.90
	output	300 kW
mobility	top speed - on road	85 km/h
	top speed - off road	40 km/h
	cruising range	500 km
	fording depth (instant)	1.2 m
	gradient	25°
	side slope	20°
	vertical obstacle	0.5 m
	trench crossing	2.0 m

EXCALIBUR ARMY

EXCELLENT MOBILITY

Light 4×4 configuration of the Tatra chassis for easy access to both urban and natural terrain areas.

EFFECTIVE PUMPS

High capacity intake pump and a floating pump for natural water reservoir sourcing or draining flooded spaces.

OPERATOR PLATFORM

Allows high reach and multiplies the options to use the vehicle.

WIDE DECONTAMINATION OPTIONS

Decontamination by hand gun, stationary automated or in movement thanks to frontal spray bar - fast decontamination of roads, airports or decontamination areas. Ability to decontaminate people, fight fires and mitigate industrial, ecological or health catastrophies.

PLATFORM VARIABILITY

The option to equip the vehicle with an armoured cabin, another axles or option to customize the superstructure equipment as needed.

DECON

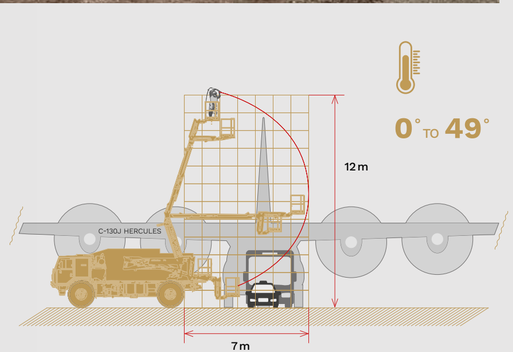
DECONTAMINATION VEHICLE

VERSATILE DECONTAMINATION AND DISINFECTION VEHICLE WITH A PRACTICAL HIGH-REACH OPERATOR PLATFORM

1+2 | 115 KM/H | TATRA

The DECON decontamination vehicle is designed to perform the entire decontamination of vehicles, people, armament and gear, incl. oversized equipment, decontamination of terrain, aircrafts, buildings and various objects thanks to the use of high-reach operator platform.

This vehicle is able to operate individually and also by the way of establishing decontamination workplaces for team-linked decontamination. It allows manual and automated decontamination thanks to use of a spraying bar on the platform or decontamination frame. It is a highly mobile vehicle on a modern TATRA military chassis with a 4x4 configuration. Optionally the vehicle can be made in a 6x6 configuration which allows higher tank capacity, even higher performance or reach of the platform. In case of customer preference, the vehicle can also be equipped with an armoured cabin.



PARAMETERS		
weight		19 t
dimensions	L	7,820 mm without the platform
		9,100 mm with the platform
	W	2,550 mm
	H	3,150 mm
engine	type	Tatra T3C-928.81, V8
	output	270 kW
mobility	top speed - on road	115 km/h (without limiter)
		90 km/h (with limiter)
	top speed - off road	30 km/h
	cruising range	1,000 km
	fording depth	1.2 m (instant) / 1.5 m (with preparation)
	gradient	40°
	side slope	17°
	obstacle	0.5 m
	trench crossing	0.9 m

SPECIFIC PARAMETERS	
overall tank capacity	2,400 l
individual tank capacity	2 x 700 l + 1 x 1,000 l
platform height reach	12 m
platform side reach	7 m
platform load capacity	200 kg
pressure unit operation	cold at high pressure
	warm at low pressure
	hot at high pressure
	steam decontamination
	liquid and powderized decontamination mixes
	auxiliary electrical source

EXCALIBUR ARMY

DECON ER

DECONTAMINATION VEHICLE

CIVILIAN RESCUE VERSION OF THE DECON VEHICLE
FOR DISINFECTION AND DECONTAMINATION

12M HEIGHT REACH | **7M** SIDE REACH | **2,400L** TANK CAPACITY

The DECON vehicle is designed to perform the entire decontamination of vehicles, people and their gear including oversized equipment, decontamination of terrain, aircraft, buildings and various objects thanks to the use of high-reach operator platform.

DECON can be configured for service in civilian rescue forces such as special firefighter units and Civilian Defence Forces, enhancing the user capabilities with latest technology of high pressure hot water sanitation. Almost any liquid mixture for treatment of object surfaces is available as the system does not rely on any specific substance.

BOOMLIFT PLATFORM

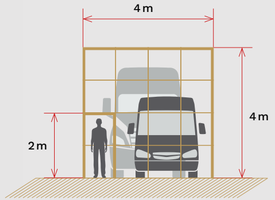
A platform for 1-2 operators is fitted to a telescopic boom. The platform can be lifted, rotated and tilted. Controls are easy and mounted inside the cage and on the vehicle.

NOZZLE SPRAY BARS

Bars are mounted at the bottom of the moving platform which is lifted above the passing vehicle silhouette. By simple platform positioning its height and angle can be changed on the go to optimize the efficiency of the water curtain through which the vehicles pass.

STATIONARY GATE FRAME

Static gate can be deployed next to the vehicle with nozzles aimed inwards at the passing vehicle. A hardened rubber catch tank gathers contaminated water which is drained into a self-sustained bag for efficient disposal.



DECONTAMINATION FRAME

The disinfection gate can be installed on any even ground, one or in series to speed up the process. Each DECON vehicle carriers one decontamination gate with accessories.

PARAMETERS		
weight		19 t
dimensions	L	7,820 mm without the platform
		9,100 mm with the platform
	W	2,550 mm
	H	3,150 mm
engine	type	Tatra T3C-928.81, V8
	output	270 kW
mobility	top speed - on road	115 km/h (without limiter)
		90 km/h (with limiter)
	top speed - off road	30 km/h
	cruising range	1,000 km
	fording depth	1.2 m (instant) / 1.5 m (with preparation)
	gradient	40°
	side slope	17°
	obstacle	0.5 m
	trench crossing	0.9 m

SPECIFIC PARAMETERS	
overall tank capacity	2,400 l
individual tank capacity	2 x 700 l + 1 x 1,000 l
platform height reach	12 m
platform side reach	7 m
platform load capacity	200 kg
pressure unit operation	cold at high pressure
	warm at low pressure
	hot at high pressure
	steam decontamination
	liquid and powderized decontamination mixes
	auxiliary electrical source

EXCALIBUR ARMY

TREVA-30

TACTICAL RECOVERY AND EVACUATION VEHICLE

★ NEW PRODUCT

2(+3) CREW

30 TONNES MAX. LOAD CAPACITY

The TREVA-30 is a special vehicle designed for the recovery of stranded equipment and other objects, their handling, removal of damaged equipment, evacuation and rescue work, crane work, engineering terrain modifications and removal of obstacles for the needs of recovery and rescue work.

Conceptually and generationally, it is a completely new piece of Czech made recovery machinery. The vehicle is equipped with a winch that has a basic pull of 25 tonnes and a 2-reel crane with a lifting capacity of 30 tonnes. The crane can be used alone and for the purpose of extrication, multi-point recovery or recovery over an obstacle. It uses a hydraulic fork installed in the rear of the vehicle to move cars, armoured wheeled vehicles and other equipment. The vehicle is equipped with an armoured four-door cab that can accommodate not only the driver and operator, but also the crew of the towed vehicle.

HIGH CAPACITY CRANE

The vehicle is equipped with a 2-reel crane with a capacity of 30 tons.

POWERFUL WINCH

Basic pull of 25 tonnes, up to 57 tonnes when using 2 pulleys, rope of 100 m.

SUSPENDED TOWING DEVICE

A hydraulically operated suspended towing device is located in the rear of the vehicle and allows 12 tons of perpendicular directed suspension force, enough to recover heavy 8×8 military vehicles.

ARMOURED CABIN

A STANAG 4569 Level 2 protected cabin can accommodate also the crew of the towed vehicle.

CRANE / RECOVERY BOOM

The vehicle is equipped with a telescopic crane with two extensions and two crane winches each with a basic pull of 80 kN. The crane is mounted on a turntable with a 360° rotation and is designed as a cabinless crane with remote control. Both winch ropes are finished with locking hooks and can be interwoven for maximum load capacity. The work of both winches can be synchronous or asynchronous, which allows lifting of one side of the load or lifting of unusual shapes or unbalanced loads. In synchronous crane operation, the rope ends of both winches can be anchored to one pulley and operated like a conventional crane.

AUXILIARY WINCH

Stored on a crane turntable driven by its own hydraulic motor. The auxiliary winch is used to transport the rope of the main winch to the object to be recovered and to transport the pulleys during the assembly of the pulley system.

PARAMETERS

weight		40 t
dimensions	L	10,100 mm
	W	2,550 mm
	H	3,300 mm
engine	type	T3-930-EA
	power	398 kW
mobility	max. speed	90 km/h
	cruising range	500 km
	fording	1,500 mm
	vertical obstacle	600 mm, with dozer blade 400 mm
	trench crossing	2,100 mm
	turning diameter	26 ±1 m
	static lateral tilt	25°

SPECIFIC PARAMETERS

crane load capacity	30 t
max. crane outreach	12 m
pulling force of the main winch	200-250 kN / 400 kN when using 1 pulley, 570 kN when using 2 pulleys
length of main winch rope	100 m
length of auxiliary winch rope	200 m
suspended towing capacity	12 t

ARMOURED CABIN

Armoured 4-door, 5-seater cab with LEVEL 2 durability. Unique door opening system (each door independently driven by its own medium) including several emergency opening modes in case of overturning and different positions up to manual mode.

EXCALIBUR ARMY

VT-55A

RECOVERY VEHICLE

SAFE OPERATION IN DEMANDING CONDITIONS

75 TONS | **3** | **50** KM/H | EA

FOR ROUGH TERRAIN

Tracked vehicle can recover vehicles in the most demanding terrain conditions.

STRONG WINCH

Strong winch - up to 75 tons of towing power.

ECONOMIC SERVICE

T-55 chassis is common and its operation and servicing is economic.

UNIVERSAL USE

Suitable for both tactical and civilian environment.

EXTRA PROTECTION

Crew is protected against NBC threats.

The VT-55 has been designed and produced for recovery and towing of immobile tanks, derailed train cars and crashed vehicles in especially difficult terrain.

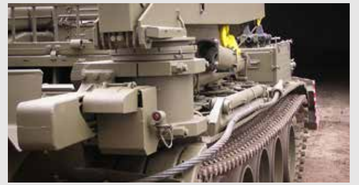
It is equipped with a dozer blade, a strong winch, a crane and welding tools. It operates on a T-55 light tank chassis and therefore has excellent manoeuvring capabilities. The tank hull protects the crew against falling objects allowing the VT-55 to safely operate also in the proximity of unstabile structures, walls or debris or, naturally, in combat operations.

AVAILABLE EQUIPMENT

CRANE | **MAIN WINCH + 2 PULLEYS** | **AUXILIARY WINCH** | **WELDING SET**

PARAMETERS		
weight		35.0 t
dimensions	L	7,150 mm
	W	3,280 mm
	H	2,250 mm
engine	type	V 55A
	output	427 kW
mobility	top speed - on road	50 km/h
	top speed - off road	25 km/h
	cruising range	400 km
	fording depth (instant)	1.4 m
	gradient	32°/17° (while towing a medium MBT)
	side slope	30°
	vertical obstacle	0.8 m
	trench crossing	2.7 m

SPECIFIC PARAMETERS	
crane lift capacity	1.6-2.0 t
main winch constant pull	25 / 50 / 75 t
main winch rope length	200 m
welding equipment	140-230 A



COMBAT RECOVERY OPERATIONS

The VT-55A is a necessary component of every tank and mechanized battalion.

EXCALIBUR ARMY

UDS-214

MULTI-PURPOSE TELESCOPIC EXCAVATOR

NEWEST GENERATION OF A PROVEN MULTI-FUNCTIONAL WORKER FOR COMBAT ENGINEERS AND CIVILIAN EMERGENCY SERVICES

3 | 100 KM/H | TATRA | 115 M³/H

This universal machine is suited for terrain adjustments, digging, ground and demolition works, debris scattering, cleaning of rivers or ice floe disruption or improvised lifting of loads. It is very suitable also for civilian rescue operations.

The vehicle can be prolonged by one axle and equipped with an armoured cabin and further hardening for military use, thus becoming a ZS-214 special combat engineering machine.

ARMOURED CABIN OPTION

The vehicle can be extended with an additional axle and equipped with an armoured cabin or other upgrades per customer needs.

WIDE SCALE OF ACCESSORIES

The UDS can be used with a basic bucket, but also with special buckets, boulder grapples, breakers, augers and other hydraulic attachments.

WORKING RANGE

The unique construction of the telescopic boom allows (in basic design) a horizontal reach of 14.6 m.

MICROTRAVEL

The possibility of controlling the chassis from the excavator cab increases the work productivity and UDS operability in the workplace.

PARAMETERS

weight		25 t
dimensions	L	9,450 mm
	W	2,550 mm
	H	3,980 mm
engine	type	diesel engine, variable type
	output	230 - 325 kW
mobility	top speed	100 km/h
	cruising range	500 km
	fording depth (inst.)	1,200 mm
	gradient	31°

TURNING HEAD

The possibility of rotating the tool in the full range n x 360 degrees increases the machine variability during excavation works or with additional equipment, e.g. hydraulic hammer, mulcher, nippers etc.

SPECIFIC PARAMETERS

superstructure engine	power	93 - 104 kW
digging speed		115 m³/h
load capacity*	telescope retracted	7,000 kg
	telescope out	2,600 kg
hydraulic system		REXROTH
superstructure revolutions		8 rpm
tool revolutions		20 rpm
tool tilting range		145° + 2-side turning 360°
horizontal range		
	telescope retracted	6.3 m
	telescope out	10.5 m
	with 4.5 m extension	14.6 m
depth reach (elevation 0°, -90° / elevation +30°, -60°)		
	telescope retracted	2.9 m / 2.1 m
	telescope out	7 m / 5.7 m
	with 4.5 m extension	11.2 m / 9.2 m

* load capacity at tilt point of the rapid fastener (without extension attachments)

EXCALIBUR ARMY

MOBILITY

Standard containerized installation provides for fast use as needed by the user - immediate easy transportation available.

HIGH PERFORMANCE

Featuring the unique special developed clarifier, the water treatment unit presents high production capacity of up to 12 m³/h per 20" ISO container.

FULLY AUTOMATIC OPERATION

The only manual operation is refilling chemicals for water treatment.

VARIABLE DESIGN

Modular design of the system enables optimization of solutions based on requested level of performance and on the level of water pollution on the input - handling a range from light to oil water pollution.

COST-EFFECTIVENES

This compact solution bears minimum operating and manipulation costs and at the same time reducing the logistic support costs.

POSEIDON PS4W

WATER TREATMENT CONTAINER UNIT

HIGH-PERFORMANCE VARIABLE SURFACE AND SUBTERRANEAN CONTAINERISED WATER TREATMENT UNIT

UP TO 12 M³/H OPERATION | **ISO CONTAINER** | **AUTOMATIC OPERATION**

POSEIDON PS4W containerised water treatment unit is a highly effective mobile solution for armed forces and life-support system providing potable water supplies based on the very simple automatized production from raw surface or subterranean water.

At the place of use it just requires basic connection – to the raw water source, the treated water distribution system, the waste water drain and to the electric power unit - it may be integrated into the water treatment unit directly.

The water treatment unit is a two-level system, optionally enabling more levels. After filtration, the treated water is disinfected and purified – harmless.

PRIMARY PURPOSE OF WATER TREATMENT CONTAINER

- providing potable water supplies to armed forces
- rescue operations in case of natural disasters
- stationary use, e.g. to provide water supplies to the population, water production for swimming pools, industry, power-plant engineering, agriculture and other

Prior to the water treatment unit use a techno-chemical analysis of the input water needs to be performed.

PARAMETERS		
disposition		20" ISO container, alternative 40" ISO container
dimensions	L	6,058 mm
	W	2,438 mm
	H	2,438 mm
capacity		optional, up to 12 m³/h portable water per 20" container
function		basic is the 2-level water treatment unit, other levels optional
level 1		pre-filters + special developed clarifier
level 2		closed sand filter
waste water		6-8 % of capacity
waste water quality	pH	6-7.5
	HCO_3	1-3 mmol/l
	$CHSK_{Mn}$	< 20 mg/l
	Colour	20-200 mg/l Pt
	Suspended matter	< 2,000 mg/l

* basic treatment mechanism

EXCALIBUR ARMY

T 815-7 PLATFORM

TATRA CHASSIS UTILIZED FOR VARIOUS PURPOSES

TATRA

UNIQUE CONCEPT

Unique TATRA chassis with independent semi-axles and triangle frame protects superstructure from torsion damage and improves crew comfort.

VARIABILITY

Variable configuration from 4x4 to 16x16 wheel drive.

RELIABLE CONSTRUCTION

Heavy duty construction with excellent level of parts protection.

CUSTOMIZABLE

A range of cabins and equipment available for crew safety and comfort.

UNIVERSAL USAGE

Proven container carrier for fast deployment of mobile hospitals, workshops, command centers a other special operations.

The TATRA FORCE chassis – being probably the best solution for wheeled terrain mobility available today – can be utilized for virtually any purpose related to providing tactical support, efficient cargo and personnel transport, post-conflict or disaster relief, firefighting and rescue tasks as well as helping set up special applications using tailor made superstructures, including weapon systems and containers.

GREAT TRADITION OF INDUSTRIAL PRODUCTION – SINCE 1850!

TATRA TRUCKS

The Koprivnice automotive maker, known under the TATRA brand, ranks among the oldest car and truck factories in the world. More than 120 years of TATRA's continuous activity has significantly influenced the automotive industry in the Czech Republic and abroad.

CSG

CSG comprises many companies that work together in order to bring a complex service to government and private sector. EXCALIBUR ARMY combines the tradition and production capabilities of its own with that of a number or partner CSG companies. Together we can offer you every advantage available - from metallurgy processing to final software implementation.

The whole CSG brand is built on the performance driven Czech and Slovak industry, that has always focused on quality, reliability and effectivity.

EXCALIBUR ARMY

GUNS AND AMMUNITION

EXCALIBUR ARMY provides a range of weapons and ammunition for vehicle, craft, portable and handheld use.

Weapons we offer are main tank guns, machine guns, mortars, grenade launchers, rifles and hand guns. Our priority is to supply high quality and reliable arms.

Our ammunition supply features a wide range of cartridges from 5.56 to 155 mm calibre, grenades and mortar mines.

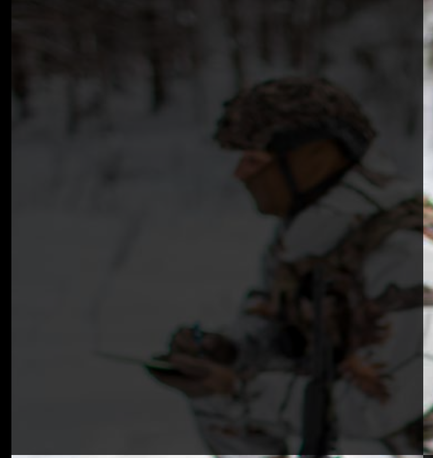
ASSAULT RIFLES

MODERNIZED ASSAULT RIFLES

We offer AKM/AKMS rifles, a modernized version of the renowned AK-47 system.

Our adjustments have prepared the rifles to be used under the most unfavourable conditions, increasing the guns durability and reliability. Integration of Picatinny rails (MIL-STD-1913 compatible) enables mounting of a wide variety of optoelectronic sights and accessories.

- AKM
- AKMS
- AKM/AKMS
- KA-117 P
- KA 17 S
- KA 117
- AR-10.5
- AR-14.5
- AR-16
- AR-18
- AR-CLASSIC



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AKM

polymer grips

AKMS

foldable stock

AKMS

foldable stock

PARAMETERS	**AKM** (wooden series)	**AKMS** (wooden series)	**AKM** (polymer series)	**AKMS** (polymer series)
calibre	7.62 mm	7.62 mm	7.62 mm	7.62 mm
gun length	887 mm	920 / 655 mm	887 mm	920 / 655 mm
rate of fire -maximum	600 rpm	600 rpm	600 rpm	600 rpm
muzzle velocity	715 m/s	715 m/s	715 m/s	715 m/s
effective range	1,000 m	1,000 m	100 – 1,000 m	100 – 1,000 m
weight of the gun	3.15 kg	3.35 kg	3.1 kg	3.3 kg

AKM/AKMS
CUSTOMIZABLE CONFIGURATION

We deliver the AKM/AKMS rifles with a selection of modifications and accessories to meet special customer requirements.

OPTIONAL ACCESSORIES
RED DOT SIGHT
LASER SIGHT
TACTICAL LIGHT
D-BALL ILLUMINATOR
NIGHT VISION SCOPE
SILENCER
FRONT GRIP
MUZZLE BREAK

KA 17 P

KA 117

KA 17 S

ACCESSORIES

Every KA model comes with basic accessories.

STANDARD ZIP 1:1

PARAMETERS	KA-17 P	KA 17 S	KA 117
calibre	7.62 mm	7.62 mm	7.62 mm
barrel length / folded stock	980 mm / 730 mm	980 mm / 730 mm	980 mm / 730 mm
muzzle velocity	715 m/s	715 m/s	715 m/s
effective firing range	800 m	800 m	800 m
weight of the gun	3.75 kg	3.75 kg	3.75 kg

ASSAULT RIFLES

We offer a range of rifles based on AR-15 platform related with MIL-STD with full interchangeability of spare parts.

Apart from reliability and long service life, one of the best benefits for the customer is a huge variety of solutions for weapon customizing.

AR-18

OPTIONAL ACCESSORIES

RED DOT SIGHT
LASER SIGHT
TACTICAL LIGHT
D-BALL ILLUMINATOR
NIGHT VISION SCOPE
SILENCER
FRONT GRIP
MUZZLE BREAK
BUTTSTOCK
BIPOD

PARAMETERS	AR-10.5	AR-14.5	AR-16	AR-18	AR-CLASSIC
calibre	5.56 × 45mm	5.56 × 45mm	5.56 × 45mm	5.56 × 45mm	5.56 × 45mm
gas system	carbine length	mid length	mid length	mid length	rifle length
weight	2.7kg	2.9kg	3.0kg	3.1kg	3.4kg
length	71cm	86cm	88cm	92cm	101cm
barrel	10.5“	14.5“	16“	18“	20“
muzzle device	birdcage	birdcage	birdcage	birdcage	birdcage

AR-10.5

AR-14.5

AR-16

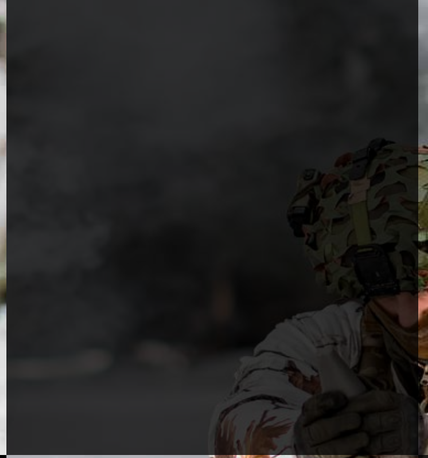
AR-CLASSIC

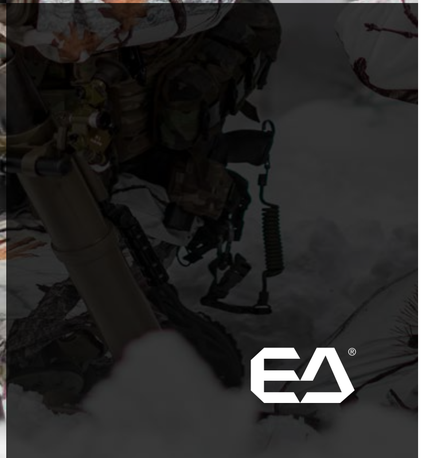
LIGHT & MEDIUM CALIBER MACHINE GUNS

PZD 5.56 mm

M2

2A42 30 mm





PZD 5.56 MM

LIGHT MACHINE GUN

The PZD 5.56 light machine gun is a fully automatic weapon providing critical fire support. Carried and operated by a single operator, it can be mounted on mil-spec cradles when required to perform a limited range of tasks as a universal machine gun. The weapon fires from the open bolt position, the breech is locked by a rotating bolt and unlocked by a screw slide, the slide is moved backwards by the action of the piston carrier, which is pushed by the burnt gases.

OPTIONAL ACCESSORIES

RED DOT

NIGHT VISION DEVICE

RED DOT + MAGNIFIER

SILENCER

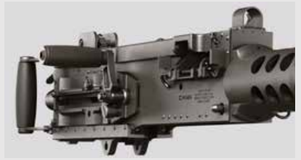
OPTIONAL ACCESSORIES
PZD 5.56 MM LMG
TRANSPORTATION CASE
MAGAZINE FOR BELT 100 RDS 2 PCS
NIGHT VISION DEVICE
MAGNIFIER
SILENCER
RED DOT
CLEANING KIT
FRONT GRIP
SLING

M2

HEAVY MACHINE GUN

One of the most battle-proven heavy machine guns in the world. A .50 calibre heavy machine gun inspired by the famous Browning M2. The M2 QCB (Quick Change Barrel) is the latest addition. The M2 incorporates many improvements over this venerable 12.7 mm (.50 cal) heavy machine gun, which has been widely used on armoured and light vehicles, shipborne mounts and by infantry on tripod mounts in anti-material, anti-vehicle and anti-personnel roles.

Our solution presents presents the world's most durable and lowest dispersion M2 QCB 12.7 mm (.50 cal.) heavy machine gun with +25,000 rounds barrel life and less than 6 MOA dispersion.



RECEIVER
LIFE 100.000+

CAPABLE
OF RIGHT-HAND
OR LEFT-HAND
FEED

MADE OF HIGH
QUALITY STEEL

BARREL LIFE
25.000 ROUNDS

QCB/QUICK
CHANGE
BARREL

TRIGGER
SAFETY SYSTEM

EASY OPERATION

QCB – Quick Change Barrel
Capable of right-hand or left-hand feed

LONG LIFE

Made of high quality steel
Marine grade anti-corrosion coating
Stellite lined barrel life 25,000+
Reciever life 100,000+

GENERAL FEATURES

Quick changed barrel
Barrel handle simplifies hot barrel changing
Side changeable retracting slide assembly
Side changeable belt- holding pawl
Side-shot automatic fire

PARAMETERS M2	
caliber	12×7 mm (.50 cal)
type of ammunition to be used	12.7×99 Standard Ammunition / Standard NATO Cartridges
weight of complete gun (without feed chutes and tripod adaptor)	38.5 kg
weight of barrel assembly	12 kg
length of gun	1,655 mm
length of barrel assembly	1,143 mm
method of operation	short recoil
firing mode	automatic Dual Selective (Single and Automatic)
muzzle velocity	900 m/s
rate of fire	450-650 rpm
max. effective range	1,830 m
max. range	6,800 m
barrel life	25,000 rounds
accuracy	18 cm (∞ 6 MOA) / at 100 m
recoil force	150-250 pounds

2A42

30 mm AUTOMATIC CANNON

The 2A42 is a 30 mm automatic cannon used for a variety of purposes, including anti-aircraft defence, anti-surface target engagement and ground support roles. It can be mounted on armoured vehicles, infantry fighting vehicles, helicopters and selected fixed-wing aircraft.

PARAMETERS 2A42	
calibre	30×165 mm
ammo used	AP(DS), AP-T, HE, HEI, HE-T, HETP-T, TP
length	3,027 mm
weight	115 kg
barrel weight	38.5 kg
firing speed – low cadency	200 – 300 rounds/min.
firing speed – high cadency	550 rounds/min.
muzzle velocity	880 m/s (AP-T) - 1 200 m/s (APDS)
max. range	10,300 m
effective range - ground targets	4,000 m
effective range - aerial targets	2,500 m

RPG-7

ROCKET LAUNCHER

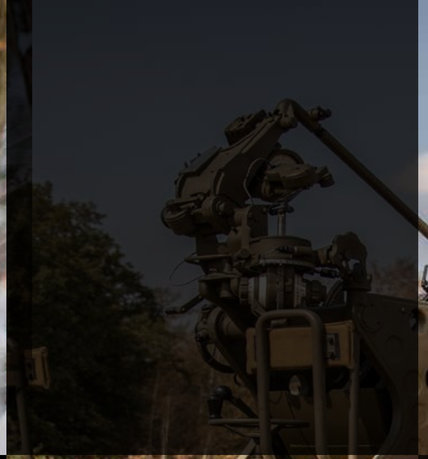
The RPG-7 is a shoulder-fired, man-portable anti-tank rocket launcher designed to engage armoured vehicles and fortified positions. It's primarily used by infantry and irregular forces around the world. A key feature of the RPG-7 is its reloadable design. After firing, the spent rocket tube can be discarded and a new rocket can be loaded, again in a few moments.

PARAMETERS OPTICAL SIGHT PGO-7	
magnification	2.7×
field of view	13°
resolution limit	28" at most
distance scale range	from 200 to 500 m
sighting angle scale graduation value	±0-50 dc
piece value of the lateral correction scale range	10 dc
length with eyepiece	140 mm
height	180 mm
width	62 mm
weight	0.50 kg
weight with accessories and bag	0.95 kg

PARAMETERS RPG-7	
calibre	40 mm
muzzle velocity	85 mm
initial velocity	120 m/s
effective firing range (target up to 2 m)	330 m
maximum firing range	500 m
combat rate of fire	4 – 6 rpm
flight time to self-destruction	4 - 5 s
barrel lenght	950 mm
weight with optical sight	6.3 kg

HEAVY CALIBER MACHINE GUNS

- DShK
- KPVT
- ZU 14.5 mm
- KARANCHO



HEAVY CALIBER MACHINE GUNS

DShK

KPVT

PARAMETERS	DSHK	NSVT	KPVT
calibre	12.7 mm	12.7 mm	14.5 mm
gun length	1,625 mm	1,560 mm	1,980 mm
rate of fire - maximum	600 rpm	700-800 rpm	600 rpm
muzzle velocity	850 m/s	845 m/s	1,005 m/s
maximum range	6,500 m	6,000 m	7,000 m
effective range against ground targets	2,000 m	2,000 m	3,000 m
weight	34 kg	25 kg	49 kg, 39 kg on infantry tripod

KARANCHO

VERSATILE WEAPON MOUNT

The Karancho is a cradle mount for the 14.5 mm KPVT heavy machine gun with variable mounting options - either a single leg adaptor for use on pick-up trucks or boats or a tripod for use by infantry in their defensive positions. Optionally a pintle mount can also be offered.

The Karancho gun mount is equipped with a recoil limiting mechanism and should supports for the shooter which ensure high stability during firing.

ZU 14.5 mm

HEAVY MACHINE GUN

2/4 BARREL CONFIGURATION

PARAMETERS		ZU-2	ZU-4
weight		660 kg	1,360 kg
dimensions	L	3,870 mm	4,300 mm
	W	1,665 mm	1,900 mm
	H	1,100 mm	1,470 mm
mobility	top speed - on road	60 km/h	60 km/h
ammunition		14.5 mm	14.5 mm

AMMUNITION

SMALL, MEDIUM AND LARGE CALIBRE AMMUNITION

EXCALIBUR ARMY delivers a range of original munition for small hand guns, rifles, machine guns, mortars as well as for large arms such as tank guns or artillery systems.

We offer a variety ammo types – standard, armour piercing, high explosive, incendiary, smoke, illuminating and dummy mines or blank cartridges for practice and weapon testing.

SMALL ARMS CALIBER

The ammunition is available in a variety of bullet types, including Full Metal Jacket (FMJ) for target shooting, Hollow Point (HP) for self-defence and specialty bullets for specific purposes such as armour piercing or frangible bullets.

NATO STANDARD

9×19 mm

TYPE	WEIGHT	MUZZLE VELOCITY
NATO BALL FMJ 115	115 g	400 m/s
FMJ 124	124 g	390 m/s
APC 103	103 g	430 m/s
FMJTCSP 100	100 g	415 m/s

5,56×45 mm

TYPE	WEIGHT	MUZZLE VELOCITY
NATO BALL FMJ 62	62 g	900 m/s
NATO TRACER 62	62 g	900 m/s
APC 57	57 g	960 m/s
BALL FMJ 55	55 g	980 m/s
FRG 45	45 g	960 m/s

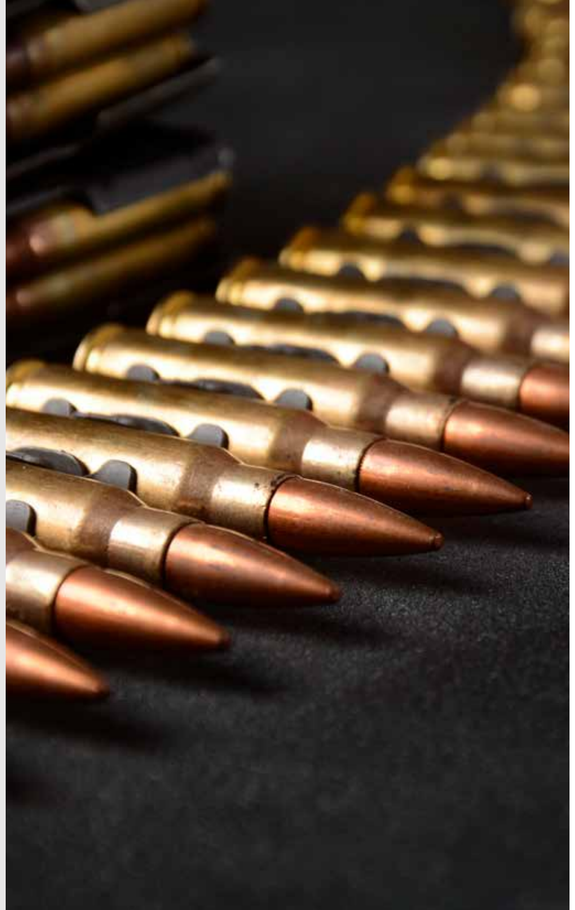
NON-STANDARD

.300 BLACKOUT

TYPE	WEIGHT	MUZZLE VELOCITY
SOLID	110 g	680 m/s
FMC 147	147 g	580 m/s
SUBSONIC HPBT	220 g	315 m/s
FRG	110 g	680 m/s
HP	125 g	980 m/s

7,62×51 mm

TYPE	WEIGHT	MUZZLE VELOCITY
NATO TRACER FMJ	140 g	800 m/s
NATO BALL FMC	147 g	810 m/s
F-AIR	110 g	850 m/s
FRG	110 g	870 m/s



MORTAR ROUNDS

60 mm, 81 mm, 98 mm, 120 mm mortar munitions are designed to be fired by self-produced mortar launcher of mentioned caliber and are used against infantry and lightly armoured targets.

60 mm CALIBRE

81, 98, 120 mm CALIBRE

TANK AMMUNITION

Our tank ammunition, available in 100, 105, 120 and 125 mm calibre options, boasts exceptional strength and unwavering effectiveness.

120 mm CALIBRE

105 mm CALIBRE

ARTILLERY AMMUNITION

Artillery is vital to the effectiveness of modern military operations and the quality of artillery ammunition is paramount for achieving favourable outcomes on the battlefield.

Our range of available artillery ammunition in 105, 122, 152 and 155 mm calibres provide artillery units with superior equipment to effectively support ground troops and accomplish strategic goals.

155 mm CALIBRE

152 mm CALIBRE

105 mm CALIBRE

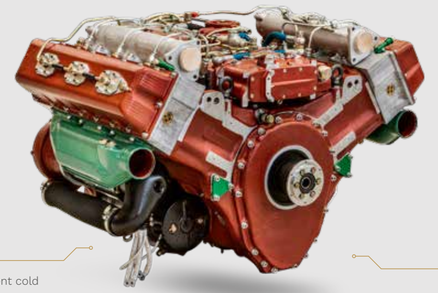
EXCALIBUR ARMY

ENGINES AND SPARE PARTS

ENGINES

EXCALIBUR ARMY sells various engines and performs overhaul and revisions of all mentioned types of engines according to customer needs, including subgroups such as injection pumps, oil and water pumps, fuel and oil filters, turbo compressors, blowers, dynamos, alternators and starters. We also modify selected engines to improve output, fuel consumption and reduce exhaust gas production.

Thanks to our production capacities and large stocks, we also offer a great number of engine spare parts, especially for T-72 and T-55 tanks, BMPs, and also PANDUR APC/IFV, RM-70 MLRS, DANA SPG, OT-64, BRDM-2, AM-50, TATRA T 813, T 815, T 810 and others.



BFP

Modified for efficient cold weather start.

UTD-20 S1

DESCRIPTION
6-CYLINDER
V 120 DEGREES
DIRECT INJECTION
4 STROKE
WATER COOLED

Output		220 kW
Used in		BMP-1, BMP-2 and their variants
Max. fuel consumption		238 g/kWh at 2,600 rpm
Max. oil consumption		8.2 g/kWh at 2,200 rpm
Max. torque (Nm)		1,030 Nm
The oil pressure in the main pipe		0.7–1 MPa
Fuel		Diesel
Weight of the engine		665 kg
Engine dimensions	L	834 mm
	W	1,150 mm
	H	757 mm

Output		338 kW
Used in		BMP-3
Max. fuel consumption		251 g/kWh at 2,600 rpm
Max. oil consumption		6.8 g/kWh at 2,200 rpm
Max. torque (Nm)		1,461 Nm
The oil pressure in the main pipe		0.8-1.2 MPa
Fuel		Diesel
Weight of the engine		850 kg
Engine dimensions	L	997 mm
	W	1,228 mm
	H	598 mm

UTD-29

DESCRIPTION
10-CYLINDER
V 150 DEGREES
DIRECT INJECTION
4 STROKE
WATER COOLED

V-6M

DESCRIPTION
6-CYLINDER
DIRECT INJECTION
4 STROKE
WATER COOLED

Output		206 kW
Used in		GM
Max. fuel consumption		249 g/kWh at 2,000 rpm
Max. oil consumption		8 g/kWh at 1,800 rpm
Max. torque (Nm)		1,176 Nm
The oil pressure in the main pipe		0.7-1 MPa
Fuel		Diesel
Weight of the engine		825 kg
Engine dimensions	L	1,402 mm
	W	873 mm
	H	997 mm

output		250-260 kW at 2,600 rpm
max. fuel consumption		242 g/kWh at 2,600 rpm
max. oil consumption		8.2 g/kWh at 2,200 rpm
max. torque		1,170 Nm at 1,500-1,600 rpm
oil pressure in the main pipe		0.69-1.02 Mpa at 2,200 rpm
fuel		diesel
used in		Modernized BVP-1, BVP-2
weight of the engine		670 kg
engine dimensions	L	800 mm
	W	1,200 mm
	H	700 mm

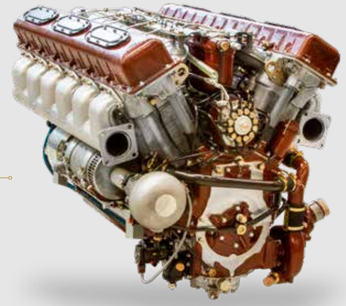
UTD-20 260 S2

DESCRIPTION
MULTIFUEL
6 CYLINDER V 120 DEGREES
DIRECT INJECTION
4 STROKE
WATER COOLED

Output		456 kW
Used in		T-55 AM2
Max. fuel consumption		247.5 k/kWh at 2,000 rpm
Max. oil consumption		8 g/kWh at 1,800 rpm
Max. torque (Nm)		2,404 Nm
The oil pressure in the main pipe		0.7-1 MPa
Fuel		Diesel
Weight of the engine		910 kg
Engine dimensions	L	1,580 mm
	W	905 mm
	H	920 mm

V-55 AM2

DESCRIPTION
12-CYLINDER
V 60 DEGREES
DIRECT INJECTION
4 STROKE
WATER COOLED



TE 2T 1050

DESCRIPTION
12-CYLINDER
V 60 DEGREES
DIRECT FUEL INJECTION
4 STROKE
WATER COOLED

Output		783 kW
Used in		kit available for MBT upgrades
Max. fuel consumption		228 g/kWh at 2,000 rpm
Max. oil consumption		6 g/kWh at 1,800 rpm
Max. torque (Nm)		4,600 Nm
The oil pressure in the main pipe		0.7-1 MPa
Fuel		Diesel
Weight of the engine		1,060 kg
Engine dimensions	L	1,615 mm
	W	1,010 mm
	H	949 mm

V-46.6

DESCRIPTION
12-CYLINDER
V 60 DEGREES
DIRECT INJECTION
4 STROKE
WATER COOLED

Output		573.7 kW
Used in		T-72
Max. fuel consumption		245 g/kWh at 2,000 rpm
Max. oil consumption		9.52 g/kWh at 1,800 rpm
Max. torque (Nm)		3,098 Nm
The oil pressure in the main pipe		0.7-1 MPa
Fuel		Diesel
Weight of the engine		980 kg
Engine dimensions	L	1,480 mm
	W	896 mm
	H	902 mm

V-55A

DESCRIPTION
12-CYLINDER
V 60 DEGREES
DIRECT INJECTION
4 STROKE
WATER COOLED

Output		426 kW
Used in		T-55
Max. fuel consumption		247.5 g/kWh at 2,000 rpm
Max. oil consumption		8 g/kWh at 1,800 rpm
Max. torque (Nm)		2,226 Nm
The oil pressure in the main pipe		0.7-1 MPa
Fuel		Diesel
Weight of the engine		910 kg
Engine dimensions	L	1,580 mm
	W	905 mm
	H	920 mm

Output		191kW
Used in		ZSU-23-4 SHILKA
Max. fuel consumption		245g/kWh at 1,800rpm
Max. oil consumption		8g/kWh at 1,800rpm
Max. torque (Nm)		1,060Nm
The oil pressure in the main pipe		0.7-1MPa
Fuel		Diesel
Weight of the engine		825kg
Engine dimensions	L	1,402mm
	W	873mm
	H	997mm

V-6-P1

DESCRIPTION
6-CYLINDER
DIRECT INJECTION
4 STROKE
WATER COOLED

KAMAZ - 7401

DESCRIPTION
8-CYLINDER
V 90 DEGREES
DIRECT INJECTION
4 STROKE
WATER COOLED

Output		210kW
Used in		Kamaz
Max fuel consumption		242g/kWh at 2600rpm
Max torgue (Nm)		650Nm
The oil pressure in main pipe		0.2-0.6MPa
Fuel		Diesel
Weight of the engine		795g
Engine dimensions	L	1,150mm
	W	7,85mm
	H	1,400mm

Output		220kW
Used in		2 S-1
Max fuel consumption		258g/kWh at 2100rpm
Max torgue (Nm)		1,080Nm
The oil pressure in main pipe		0.4-0.7MPa
Fuel		Diesel
Weight of the engine		1,560kg
Engine dimensions	L	1,338mm
	W	1,045mm
	H	1,100mm

JAMZ-238N

DESCRIPTION
8-CYLINDER
V 60 DEGREES
DIRECT INJECTION
4 STROKE
WATER COOLED

V-6M-K37

DESCRIPTION
10-CYLINDER
V 144 DEGREES
DIRECT INJECTION
4 STROKE
WATER COOLED

Output		260kW
Used in		GM 578
Max fuel consumption		238g/kWh at 2000rpm
Max oil consumption		6.8g/kWh at 1600rpm
Max torgue (Nm)		1,470Nm
The oil pressure in main pipe		0.7-1MPa
Fuel		Diesel
Weight of the engine		875kg
Engine dimensions	L	1,755mm
	W	873mm
	H	997mm

V-84

DESCRIPTION
12-CYLINDER
V 60 DEGREES
DIRECT INJECTION
4 STROKE
WATER COOLED

Output		624 kW
Used in		T-72 B (M)
Max. fuel consumption		259.9 g/kWh at 2,000 rpm
Max. oil consumption		8 g/kWh at 1,800 rpm
Max. torque (Nm)		3,483 Nm
The oil pressure in the main pipe		0.7-1 MPa
Fuel		Diesel
Weight of the engine		980 kg
Engine dimensions	L	1,480 mm
	W	896 mm
	H	902 mm

Output		430 kW
Used in		Multifunctional engine for military and non-military vehicles
Max fuel consumption		265.2 g/kWh at 1800 rpm
Max torgue (Nm)		2,800 Nm
The oil pressure in main pipe		0.1-0.4 MPa
Fuel		Diesel
Weight of the engine		1,450 Kg
Weight of the engine		980 kg
Engine dimensions	L	2,040 mm
	W	1,002 mm
	H	1,225 mm

T3C-930-50-600K

DESCRIPTION
12-CYLINDER
V 60 DEGREES
DIRECT INJECTION
4 STROKE
AIR COOLED

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