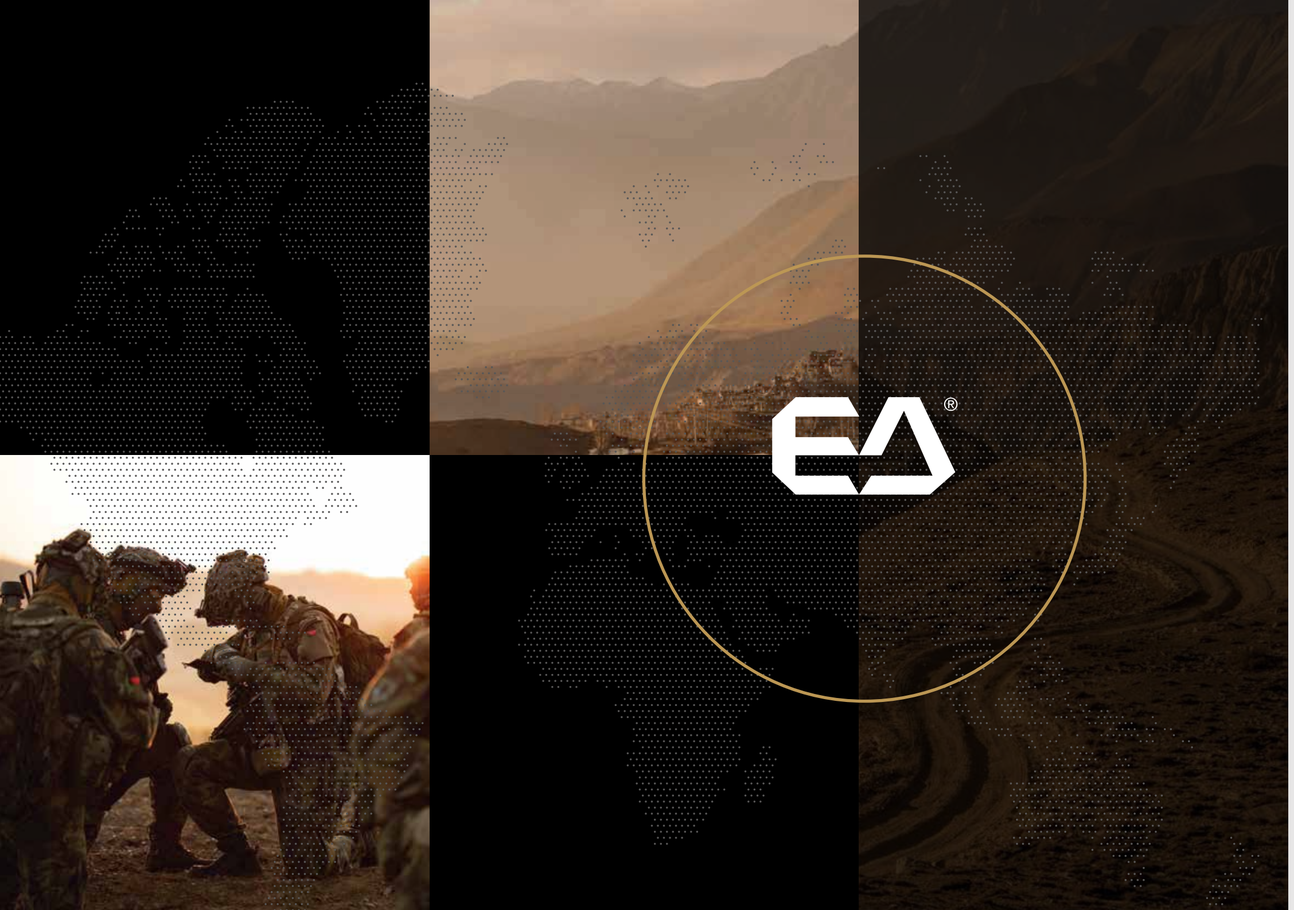
MILITARY
VEHICLES



PROTECT YOUR FUTURE

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.

E23 D. KOPELAKIS 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.

E23 D. KOPELAKIS

MAIN BATTLE TANKS

The main battle tanks delivered by E23 D. KOPELAKIS are all based on former Soviet tank models that were introduced in the second half of 20th century. Our company has just as long tradition in producing, repairing, renovating and modernizing T-55 and T-72 models as we have provided these services for Czechoslovak armed forces and other Warsaw Pact armies including the Soviet Union ever since after the World War II. Our MBTs can fulfill the tasks required at the battlefield of today. Despite the existence of advanced modern battle tanks, assymetric conflicts are still unfortunately an every day reality in many parts of the world and E23 D. KOPELAKIS tanks are an economic solution for peace keeping in these troubled areas.

T-72 SCARAB

A LEGEND, REINFORCED AND ENHANCED TO WITHSTAND THE MODERN BATTLEFIELD

3 | **60**KM/H | **5,000**M

The T-72 SCARAB is EA's modernized version of well known and still widely used T-72 medium battle tank.

SCARAB is designed for contemporary and assymetric conflicts and also missions against enemy equipped with portable anti-tank weapons such as RPGs or TOWs. Its enhanced crew protection, engine output and observation systems offer wider operational capabilities and longer life cycle.

SCARAB presents a great affordable solution both for government procurement and army maintenance agenda with excellent value for money ratio.

We can also offer other modernization aspects per the customer's preference, including i.e. new engine type, new tracks, modern aiming devices, more areas covered with a reactive armour, meteo sensors, new fire-suppression system and more.

BALLISTIC REINFORCMENT

Crew protection greatly enhanced with minimal negative effects on vehicle mobility.

REACTIVE ARMOUR

Original Czech-made DYNA explosive armour segments.

STRONGER ENGINE

New V-84 engine has 45 kW higher output than original V-46-6 model.

BETTER OPTICS

Upgraded optical and observation systems.

REMOTELY CONTROLLED AA MG

Original manual operated mount replaced with remote control manipulator.

PARAMETERS		
weight		43 t
dimensions	L	9,530 mm
	W	3,590 mm
	H	2,190 mm
engine	type	V-84
	output	618 kW
mobility	top speed - on road	60 km/h
	top speed - off road	45 km/h
	cruising range	500 km
	fording depth (instant)	1.2 m
	gradient	30°
	side slope	25°
	vertical obstacle	0.85 m
	trench crossing	2.8 m

V-84

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

SPECIFIC PARAMETERS			
armament	main	2A46 / 125 mm	39 rounds
	secondary	PKT / 7.62 mm	2,000 rounds
		NSVT / 12.7 mm	300 rounds

T-72/T-72 M1

SOLID AND PROVEN BATTLE TANK FOR STANDARD MISSION SUPPORT

PROVEN ARMAMENT

Widely used, proven and reliable guns.

STANDARD T-72 PLATFORM

Well available support thanks to standartization as more than 25,000 units were produced.

MOBILITY

Swift acceleration and good maneuvering in tough terrain.

UPGRADES AVAILABILITY

Many upgrades available - including reactive armour, night vision or laser warning.

3 | 60 KM/H | 5,000 M

Renowned classic tank with extensive logistic support availability due to its decades long history of production and successful use by over 40 countries.

Apart from the standard armament consisting of a main gun, coaxial anti-infantry machine gun, secondary anti-aircraft gun and smoke grenade launchers the tank can be fitted with a selection of fire control, passive protection, communication and observation systems.

Its economical availability and logistical advantages make a T-72 a very good choice for security and armed conflict mission support.

CUSTOMIZABLE EQUIPMENT

The T-72 tanks are available in several variants.

DECISIVE FIREPOWER

The 125 mm smoothbore gun 2A46 can fire armour-piercing fin-stabilised discarding sabot (APFSDS), high-explosive anti-tank (HEAT) and high-explosive fragmentation (HEF) projectiles.

SPECIFIC PARAMETERS

armament	main	2A46 / 125 mm	39 rounds
	secondary	PKT / 7.62 mm	2,000 rounds
		NSVT / 12.7 mm	300 rounds

PARAMETERS		T-72	T-72 M1
weight		41 t	43 t
dimensions	L	9,530 mm	9,530 mm
	W	3,460 mm	3,590 mm
	H	2,190 mm	2,190 mm
engine	type	V-46	V-46-6
	output	573 kW	573 kW
mobility	top speed - on road	60 km/h	60 km/h
	top speed - off road	45 km/h	45 km/h
	cruising range	460 km	460 km
	fording depth (instant)	1.2 m	1.2 m
	gradient	30°	30°
	side slope	25°	25°
	vertical obstacle	0.85 m	0.85 m
	trench crossing	2.8 m	2.8 m

V-46

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

T-55

MAIN BATTLE TANK WITH GREAT ECONOMY OF USE

4 | **50** KM/H | **4,000** M

The T-55 tank with a long production history is still available for specific mission support.

As other earlier generation vehicles in our portfolio it presents a very economical choice for armed forces that need to extend its operability against an enemy with less advanced technological means and weaponry.

Good crew protection, maneuverability, reliable engine and arms of a standard T-55 tank can be improved with a set of enhancements coming with model T-55 AM2 – e.g. laser sights, infrared rangefinder and KLADIVO fire control system.

ARMAMENT

Main gun, anti aircraft and 2 light machine guns.

T-55 PLATFORM

Excellent technical support availability and spare parts supply.

MOBILITY

Good performance in sloped terrain.

AM2 VERSION UPGRADE

Many upgrades available - including reactive armour, night vision or laser warning.

PARAMETERS		
weight		38 t
dimensions	L	9,000 mm
	W	3,270 mm
	H	2,350 mm
engine	type	V-55
	output	427 kW
mobility	top speed - on road	50 km/h
	top speed - off road	20 km/h
	cruising range	500 km
	fording depth (instant)	1.4 m
	gradient	32°
	side slope	30°
	vertical obstacle	0.8 m
	trench crossing	2.7 m

V-55 AM2 ENGINE - AVAILABLE UPGRADE

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

SPECIFIC PARAMETERS			
armament	main	D10-T2SA/SK / 100 mm	45 rounds
	secondary	2× PKT / 7.62 mm	2,000 rounds
	optional	1× DShKM / 12.7 mm	300 rounds

SELF-PROPELLED HOWITZERS

E23 D. KOPELAKIS 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.

DITA

NEW NATO STANDARD 155 MM AUTOMATED SELF PROPELLED HOWITZER

★ NEW PRODUCT | 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.

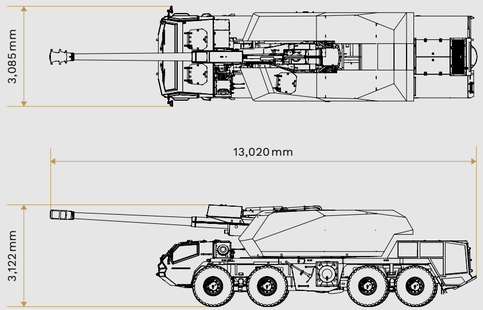
AUTOMATIC GUN AIMING

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

DANA M2

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

★ NEW PRODUCT | 1+4 | 90 KM/H | 25.5 KM

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.

DANA M2 SYSTEM

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

SPECIFIC PARAMETERS

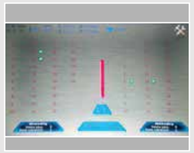
armament	main	152.4 mm howitzer
	firing range	20,000 m (25,500 m with DN1CZ ammunition)
	elevation	-4° / 70°
	traverse	±225°
		± 45° a full range elevation
		± 220° with elevation to 10° (except DN1CZ)
	rate of fire – 1st minute	5/min.
	rate of fire – sustained	4/min.
	carried ammunition	40
	secondary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

SHKH VZ. 77 DANA

THE ORIGINAL DANA SELF-PROPELLED GUN HOWITZER
MODEL 77

1+4 | 80 KM/H | 20 KM | TATRA

TATRA CHASSIS

Great negotiation of rough terrain - typical advantage of the unique TATRA concept.

AUTOMATIC RELOADING

Primary reloading system is fully automatic.

GOOD FIREPOWER

Very long range, outstanding accuracy and firing rate. Large number of additional carried ammo.

The 152 mm wheeled self-propelled gun howitzer designated „vz. 77 DANA“ is a wheeled combat vehicle armed with the 152 mm gun.

The howitzer has been designed to provide fire support, neutralize enemy firing positions and destroy enemy positions by indirect fire. It is ranked amongst the most traditional and well-proven artillery systems due to the extensive in-service history and production that commenced in the 1970's.

The number of howitzers produced is around 800 and thanks to the compatibility with its successors it is still in service as one of the leading active and effective battle-proven military system.

The DANA has a crew of five with the driver position on the left side in front crew cab with the commander to his right each are equipped with a single hatch on the roof that opens forward. There is two small windows at the front of the vehicle which can be covered by shutters. The other three members of the crew are located in the turret with the gunner and loader on the left and ammunition handler on the right. There is one single door on each side of the turret. The DANA is fully protected against firing of small arms and shell splinters.

VERSATILE AUTOLOADER

DANA's unique feature is that its autoloader is able to load a shell and a cartridge in any elevation of the barrel.

PARAMETERS		
weight		29.3 t
dimensions	L	11,156 mm
	W	3,000 mm
	H	3,500 mm
engine	type	Tatra 3-930.52, V12
	output	265 kW
mobility	top speed - on road	80 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	1.4 m

SPECIFIC PARAMETERS		
armament	main	152.4 mm howitzer
	firing range	20,000 m (25,500 m with DN1CZ ammunition)
	elevation	-4° / 70°
	traverse	±225°
	rate of fire – 1st minute	5/min
	rate of fire – sustained	5/min (2/min with manual loading)
	carried ammunition	40-60
	secondary weapon	DShK 1938 12.7 mm Heavy Anti-Aircraft Machine Gun

MULTIPLE LAUNCH ROCKET SYSTEMS

E23 D. KOPELAKIS 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.

RM-70 VAMPIRE 4D

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

1+3 | UP TO 40 KM | TATRA

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.

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.

NEW CONTROL BOXES

fitted with the latest electronic components

AREA OF EFFECT

single round: 3,000 m²
volley (40 rockets): up to 30,000 m²

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.

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

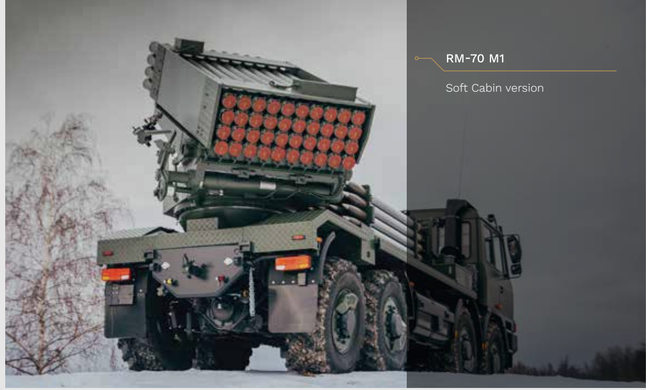
NEW CONTROL BOXES

fitted with the latest electronic components

AREA OF EFFECT

single round: 3,000 m²
volley (40 rockets): up to 30,000 m²

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.

BM-21 MT

4×4 WHEELED MLRS MOUNTED ON TATRA CHASSIS
FOR HEAVY TERRAIN DEPLOYMENT

1+2 | UP TO 40KM | TATRA

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.
It is an upgraded variant of the Russian BM-21 Multiple Rocket Launcher.

The rocket launcher can fire both single rounds and volleys 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.

EQUIPMENT

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

NEW TATRA CHASSIS

The vehicle chassis is the newest generation of TATRA military vehicles with exceptional terrain handling.

NEW CONTROL BOXES

fitted with the latest electronic components

AREA OF EFFECT

single round: 3,000 m²
volley (40 rockets): up to 30,000 m²

PARAMETERS		
combat weight		16.3 t
dimensions	L	7,370 mm
	W	2,550 mm
	H	2,730 mm
chassis		T815-7T3R21 4x4.1R with low cab
engine	type	Tatra T3C-928.81, V8
	output	270 kW
mobility	top speed - on road	90 km/h
	top speed - off road	30 km/h
	cruising range	1,200 km
	fording depth	1.2 m
	gradient	45°
	side slope	20°
	vertical obstacle	0.6 m
	trench crossing	0.9 m

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

ZIP 1:1

The logistic 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.

BM-21 MU

UPGRADED VERSION OF THE URAL CHASSIS MLRS

1+2 | UP TO 40 KM | URAL

The BM-21 MU 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.

It is an upgraded variant of the Russian BM-21 Multiple Rocket Launcher.

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

Modernization preserves tactical and technical features of BM-21 chassis. The principal mode of fire is indirect fire, direct fire can be performed only within the range determined by traverse and elevation sensors.

FULFILLING NATO STANAG REQUIREMENTS

The life cycle of the equipment is at the same level as in the original BM-21. All electronic parts has resistance -20°C to +55°C and humidity 95%.

DIFFERENCES OLD BM-21 AND NEW BM-21 MU

Old system allowed firing only from prepared combat position. Procedure of preparing that position, reaching it, getting into fire direction and leaving combat position was quite time-consuming. Goal of a new system is fully automatic mode of aiming and firing, which reduce time needed for assuming combat position and increase fire effectivity and accuracy in the target area.

EASY SERVICE

Secures maintaining of the URAL platform and its logistic system.

COMPLEX LOGISTIC SUPPORT

For our MLRS systems we also offer munition vehicles, battery command vehicles, vehicles for forward observers, battalion command vehicle, fuel trucks, mobile workshops and recovery vehicles.

NEW CONTROL BOXES

fitted with the latest electronic components

AREA OF EFFECT

single round: 3,000 m²
volley (40 rockets): up to 30,000 m²

PARAMETERS		
combat weight		13.7 t
dimensions	L	7,350 mm
	W	2,490 mm/2,690 mm incl. rear-view mirrors
	H	3,090 mm
undercarriage		URAL-375D, 6x6
engine	type	ZIL 375, V8
	output	134.2 kW
mobility	top speed - on road	75 km/h
	top speed - off road	25 km/h
	cruising range	min. 600 km
	fording depth	1.2 m incl. fording wave
	gradient	40°
	side slope	18°
	vertical obstacle	0.5 m
	trench crossing	0.6 m

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

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.

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-55/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.

PROLONGED VERSION

PATRIOT II 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 II

MULTI-PURPOSE PLATFORM FEATURING SUPERIOR OFF-ROAD MOBILITY

★ NEW PRODUCT | 1+1+6 | 110 KM/H | TATRA

The PATRIOT II 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	300 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

ON-ROAD/OFF-ROAD MOBILITY

TATRA FORCE chassis combined with the relatively light superstructure and compact size render PATRIOT a perfect fit for rapid deployment. Very stable even in high speeds and off the well paved roads – on which PATRIOT wouldn't drag behind either.

VERSATILE PLATFORM

Mission kit can be modified as per customer request.

PROTECTION

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, long range of 500 km.

SUITABLE FOR EVERY ENVIRONMENT

Optional engines - air/water cooled, mission kits and other customization as required.

PATRIOT

MULTI-PURPOSE PLATFORM FEATURING SUPERIOR OFF-ROAD MOBILITY

1+1+4 | 110 KM/H | TATRA

The armoured tactical vehicle featuring high maneuverability is intended for deployment with Rapid Reaction Forces to carry out reconnaissance and patrol duties, as well as direct combat, especially during asymmetric missions, and further serving as a carrier platform for light motorized units.

The vehicle, as a unified platform of vehicle family for defence and civil safety applications, can be fitted with a wide range of mission kits - recon, communication and information, command and staff, chemical, medevac and other.

BALLISTIC PROTECTION

3 - STANAG 4569

ANTI-MINE PROTECTION

2a/2b - STANAG 4569

PARAMETERS		
weight		12.0 t
dimensions	L	6,100 mm
	W	2,225 mm
	H	2,700 mm
	wheelbase	3,500 mm
engine	type A	Cummins ISBe / water-cooled
	type B	Tatra T3C-928 / air-cooled
	output A	210 kW
	output B	230 kW
mobility	top speed - on road	110 km/h
	top speed - off road	45 km/h
	cruising range	500 km
	fording depth (instant)	1.2 m
	gradient	45°
	side slope	33°
	vertical obstacle	0.5 m
	trench crossing	0.9 m

TATRA CHASSIS

Outstanding mobility and obstacle crossing capabilities - high speed in rough terrain conditions. Variable ground clearance thanks to air suspension system.

SOFT-TOP (CABRIO VEHICLE VERSION)

Special operations varaint is available - an example of the PATRIOT's modularity.

SPECIFIC PARAMETERS		
armament	main	14,5 mm RCWS (Nexter)
	options available	7.62 mm / 12.7 mm / 14.5 mm manned gun turret
		mortar (pick-up vehicle version)
		AG/SG launchers

TRITON

CZS 15

SPECIAL EMERGENCY SERVICES SUPPORTING VEHICLE

★ NEW PRODUCT | 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

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.

PANDUR II

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.

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/

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.

MEXCA

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

3+6 | 65 KM/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.

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.

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

OT-64

RUGGED AND EASY-TO-HANDLE VEHICLE, USED IN 15 COUNTRIES OF EUROPE, AMERICA, ASIA AND AFRICA AS WELL AS FOR UNITED NATIONS MISSIONS

3+8 | **6-15MM ARMOUR** | **95KM/H** | **9KM/H**

The OT-64 SKOT /"medium wheeled armoured carrier"/ is an amphibious armoured personnel carrier, developed jointly by Czechoslovakia and Poland.

The 8×8 buoyant four-axle platform featuring armoured and watertight hull has been designed to transport the infantry to the battlefield.

The SKOT 2A variant also provides direct fire support /fitted with the armoured movable gun turret from the BTR-60 PB armed with the 14.5 mm KPVT heavy machine gun and the 7.62 mm PKT coax machine gun/.

SPACE FOR TROOPS

Enabling transport of greater number of troops/crew members.

EASY TO HANDLE

Easily maneuverable.

AMPHIBIOUS CAPABILITY

Vehicle is suitable for immediate fording and water obstacle crossing.

GOOD MOBILITY

Superior floating capabilities. High road and off-road speed.

LARGE CAPACITY

This armoured personnel carrier has a crew of 2-3 and accommodates up to 18 fully-equipped troops (non-turreted version) - amount depending on the version of the vehicle.

LAYOUT

The troop compartment is located at the hull rear. Soldiers dismount via rear doors or roof hatches. Commander and driver dismount via their individual side or roof hatches. There are firing ports provided for the troops.

PARAMETERS		
weight		12.2t
dimensions	L	7,440mm
	W	2,500mm
	H	2,060mm / 2,780mm with turret
engine	type	TATRA 928-14
	output	132.5kW
mobility	top speed - on road	95km/h
	top speed - swimming	9km/h
	cruising range	700km
	fording depth (instant)	swimming ability
	gradient	35°
	side slope	43°
	vertical obstacle	0.4m
	trench crossing	2.0m

SPECIFIC PARAMETERS		
armament	main	14.5 mm KPVT heavy machine gun
	secondary	7.62 mm PKT coaxial machine gun

BRDM-2

LIGHTWEIGHT, HIGH-MOBILITY AND AFFORDABLE SUPPORT VEHICLE

4 | **105** KM/H | **10** KM/H

GREAT TERRAIN PERFORMANCE

Very agile in rural lands and various off-road terrain. Wider trench crossing capability.

EASY ROAD DEPLOYMENT

High road speed and cruising range.

EASY TO PROCURE

Affordable vehicle and armament.

AMPHIBIOUS CAPABILITY

Vehicle suitable for immediate fording and water obstacle crossing.

The BRDM-2 is an amphibious armoured patrol vehicle featuring the 4x4 all-wheel drive conception. It has two pairs of belly wheels lowered by the driver to allow trench crossing.

The vehicle has been designed as light reconnaissance and command vehicle. The BRDM-2 well-proven platform was further deployed as a carrier of special mission kits intended mostly for combat reconnaissance and radiation and chemical reconnaissance and also as a carrier of fire support to combat arms, the 9P133 (9K11 Maljutka), 9P148 (9K113 Konkurs and 9K111 Fagot) ATGM and the 9P31M (9K31 Strela-1M) AAGM launching platform, artillery observation and other.

LAYOUT

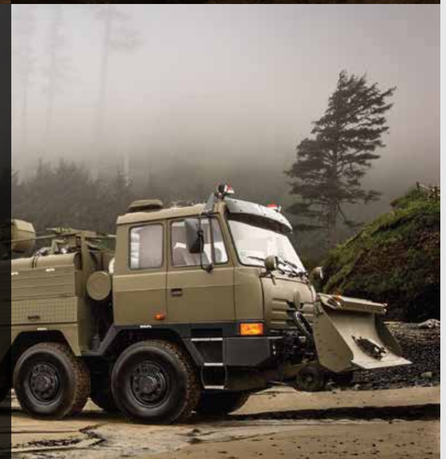
The driver's and commander's stations are in the front of the vehicle, with the driver positioned on the left and commander on the right. Both of them sit in front of a bulletproof windscreen, which provides them with their primary view of the battlefield. When in combat, the windscreen can be additionally protected by twin shutters. armoured shutters.

HIGHLY MOBILE VEHICLE

It has two pairs of chain-driven belly wheels lowered by the driver, which allow trench crossing, and a centralized tire pressure regulation system, which can be used to adjust the tire pressure of all four tires or individual tires while the vehicle is in motion to suit to the ground conditions.

PARAMETERS		
weight		7 t
dimensions	L	5,750 mm
	W	3,415 mm
	H	2,310 mm
engine	type	Gaz-41 V8
	output	103 kW
mobility	top speed - on road	95 km/h
	top speed - off road	30 km/h
	cruising range	750 km
	fording depth (instant)	swimming ability
	gradient	60°
	side slope	30°
	vertical obstacle	0.4 m
	trench crossing	1.25 m

SPECIFIC PARAMETERS		
armament	main	14.5 mm KPVT heavy machine gun
	secondary	7.62 mm PKT coaxial machine gun



MILITARY ENGINEERING VEHICLES

E23 D. KOPELAKIS 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.

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.

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 | EA

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.

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.

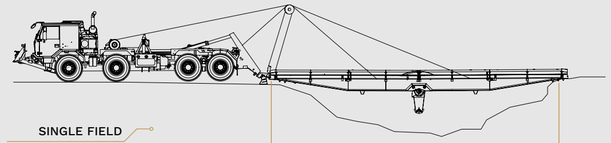
NEW PRODUCT

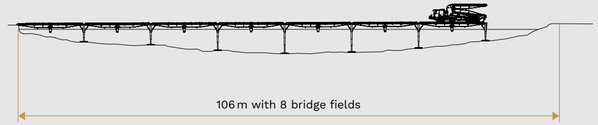
SPECIFIC PARAMETERS

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.





2 AND MORE FIELDS

6 m depth maximum.

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

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

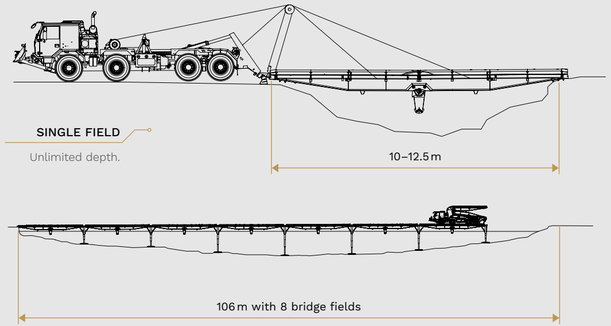
Optional dozer blade for earth moving.

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

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

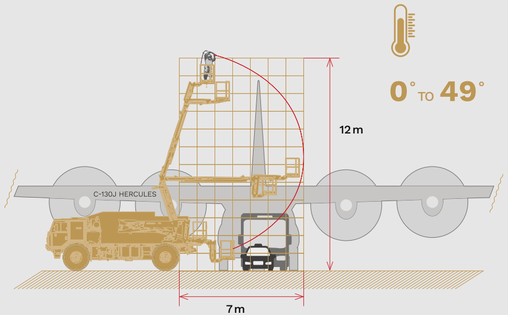
DECONTAMINATION VEHICLE

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

★ NEW PRODUCT | 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

DECON ER

DECONTAMINATION VEHICLE

CIVILIAN RESCUE VERSION OF THE DECON VEHICLE
FOR DISINFECTION AND DECONTAMINATION

★ NEW PRODUCT | 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

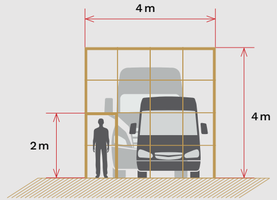
A platform for 1-2 operators is fitted to a telescopic boom. The platform can be lifted, rotated and tilted. Controls are easy and mounted inside the cage and on the vehicle.

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

EVACUATION CAPACITY

The TREVA-15 vehicle has higher capacity for evacuation of semi-hung vehicles and enables transportation of 4 members of the evacuated vehicle's crew.

WELL-PROVEN SOLUTION

Extensively used and well-proven system thanks to the direct link to the original AV-15.

ECONOMICS OF OPERATION

Minimum requirements for service, high serviceability and non-demanding maintenance.

HIGH CROSSABILITY IN HARD TERRAIN

Unmatched solution of the TATRA chassis of the 8x8 military series.

VARIABILITY

A possibility to adapt the vehicle to the engineering means used by a customer, a possibility to select equipment and additional accessories, an armour cabin or an automated gear-box.

TREVA-15

TACTICAL RECOVERY AND EVACUATION VEHICLE

2(+4) | 80 KM/H | TATRA

TREVA-15 (Tactical Recovery and Evacuation Vehicle) is a new recovery vehicle based on the well-known and well-proven AV-15 recovery vehicle. The vehicle is based on the TATRA FORCE T 815-7 8x8 chassis with a prolonged 4-door cabin designed for the transportation of the evacuated vehicle crew. The superstructure derives from the well-proven recovery vehicle AV-15 and retains the simplicity of servicing and operation robustness. Additionally there is an increase of the evacuating capacities for the evacuation of vehicles, armoured personnel carriers and other semi-hung wheeled vehicles with a weight up to 30 t. To ensure it, hanging, tracking and binding appliances were developed, adapted, among others, to the evacuation of PANDUR II wheeled armoured personnel carriers.

The new vehicle is equipped with an electric power unit with a welding machine and with a possibility of connection of electric tools, which are included in its equipment. The vehicle is also equipped with workshop equipment, a safety overload switch and protection against contact with a high-voltage line.

440 KN | 30 TONS | 40 TONS | 65 TONS | 15 TONS

STANDARD EQUIPMENT

GENERATOR

WELDING AND CUTTING EQUIPMENT

MOBILE WORKSHOP

PARAMETERS

weight		31.5 t
dimensions	L	11,600 mm
	W	2,550 mm
	H	3,380 mm
motor	type	TATRA T3C-928.90
	power	300 kW at 1,800 rpm
mobility	top speed – on road	80 km/h
	top speed – off road	25 km/h
	cruising range (w/o jerry cans)	800 km
	fording (instant/preparation)	1.2 m / 1.5 m
	gradient	30°
	side slope	30°
	vertical obstacle	0.4 m
	trench crossing	2 m

SPECIFIC PARAMETERS

crane capacity	15.0 t
max. crane outreach	7.7 m basic / 11.4 m with extension
crane capacity with the extension	4.0 t
winch - traction force	14.7 / 29.4 / 44.1 t depending on a number of pulleys *
rope length	150 m
auxiliary winch	0.6 t
rope length	320 m
evacuation capacity	up to 30 t (semi-hung evacuated vehicle)
	up to 40 t (vehicle evacuated on a towing rod)
towed vehicle weight	65 t

* 29.4 t with one pulley and 44.1 t with 2 pulleys

AV-15

RECOVERY VEHICLE

A GREAT TOOL FOR RESCUE, EVACUATION AND REAR OPERATIONS

65 TONS | 1+1 | 80 KM/H | TATRA

LONG SERVICE

Extensively used and action proved system.

UNDEMANDING OPERABILITY

Minimal crew requirements.

EFFICIENT LOAD CONTROL

360° crane operational range.

LIFE-CYCLE ADVANTAGES

Economical procurement, operation and maintenance.

Designed to help in both military and civil rescue and recovery purposes, the AV-15 is a highly mobile system for a range of operations, including recovery and towing of wrecked or damaged vehicles, clearing and handling collapsed buildings and structures as well as moving various objects and cargo.

AV-15 is easy to use and it provides great support in post-conflict and post-disaster relief and reconstruction and is also used by firefighting squads for various manipulation related tasks.

AVAILABLE EQUIPMENT

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

PARAMETERS		
weight		30.4 t
dimensions	L	12,300 mm
	W	2,570 mm
	H	3,360 mm
engine	type	Tatra T3-930-50
	output	265 kW
mobility	top speed - on road	80 km/h
	top speed - off road	25 km/h
	cruising range	1,000 km
	fording depth (instant)	1.3 m
	gradient	30°
	side slope	20°
	vertical obstacle	0.36 m
	trench crossing	1.6 m

WELL PROVEN AND RELIABLE VEHICLE

The AV-15 is a well-proven reliable design featuring optional modernized elements and great economy of use.

SPECIFIC PARAMETERS	
crane lift capacity	15.0 t
crane outreach	7.7 / 11.4 m
outreach lifting capacity	4.0 t
main winch constant pull	14.7 / 29.4 / 44.1 t
main winch rope length	150 m
secondary winch constant pull	0.6 t
secondary winch rope length	320 m

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.

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.

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.

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)

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

T 815-7 PLATFORM

TATRA CHASSIS UTILIZED FOR VARIOUS PURPOSES

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.

GUNS AND AMMUNITION

E23 D. KOPELAKIS 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.

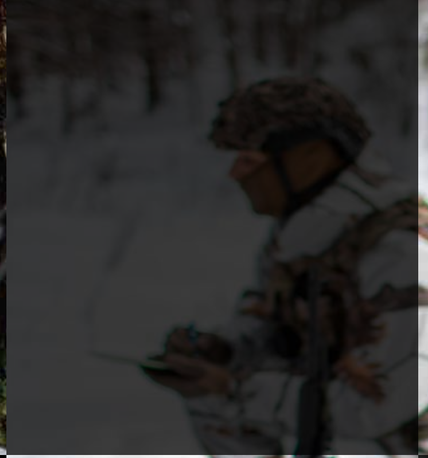
ASSAULT RIFLES

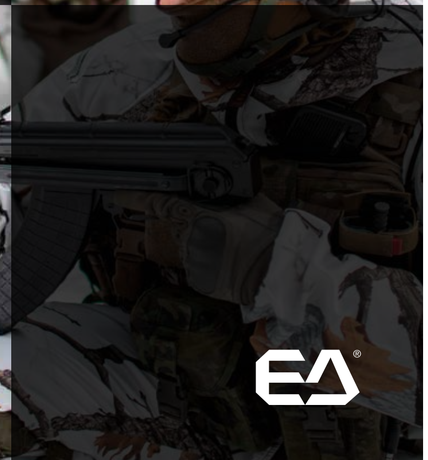
AKM FAMILY

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





AKM FAMILY

AKM

OPTIONAL ACCESSORIES

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

PARAMETERS	**AKM** (wooden series)	**AKMS** (wooden series)	**AKM** (polymer series)	**AKMS** (polymer series)
calibre	7.62	7.62	7.62	7.62
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
sighting range	1,000 m	1,000 m	100 – 1000 m	100 – 1000 m
weight of the gun	3.15 kg	3.35 kg	3.1 kg	3.3 kg

AKM

polymer grips

AKMS

wooden grips

AKMS

polymer grips

AKMS

KeyMod rail

AKM/AKMS

CUSTOMIZABLE CONFIGURATION

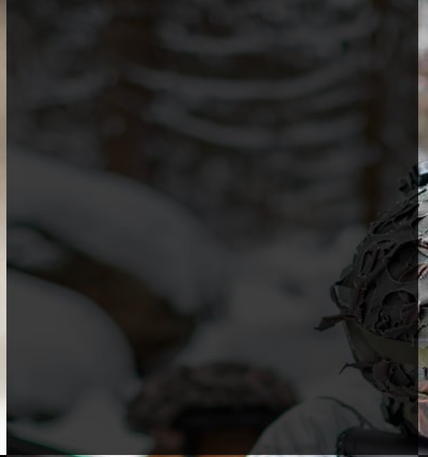
We deliver the AKM/AKMS rifles with a selection of modifications and accessories to meet special customer requirements.

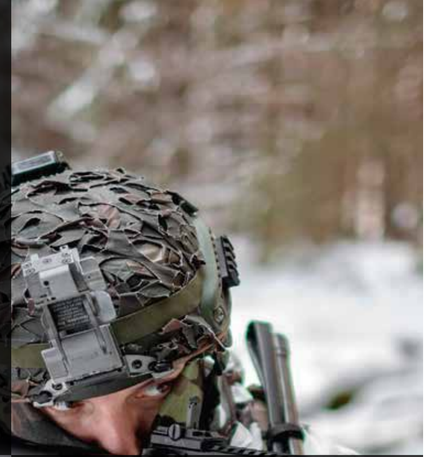
ASSAULT RIFLES

AR FAMILY

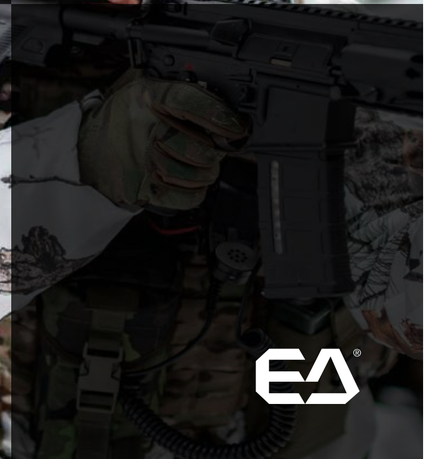
We offer a range of rifles based on AR-15 platform related with MIL-STD with full interchangeability of spare parts.

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-10.5
- AR-14.5
- AR-16
- AR-18
- AR-CLASSIC



AR FAMILY

AR-18

AR-10.5

AR-14.5

AR-16

AR-CLASSIC

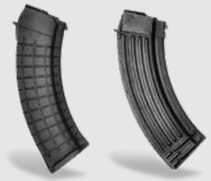
OPTIONAL ACCESSORIES

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

ACCESSORIES

WE offer a range of accessories for both AKM and AR assault rifle models.



AK MAGAZINE	
calibre	7.62 × 39 mm
capacity	30 rounds
weight	180 g / 360 g
material	polymer / steel

AK M-LOK HANDGUARD	
system	M-LOK
fits	AKM, Sporter S/M, Hellpup S/M
weight	~ 100 g
material	aluminium 6061

AK BAYONET 6H4	
fits	AK/AKMS
weight	550 g
material	stainless steel
condition	surplus, includes sheath

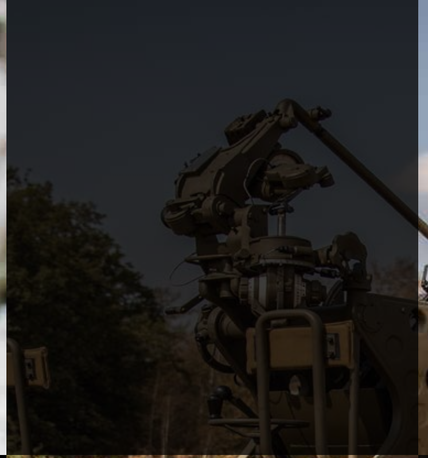
AR15 STEEL MAGAZINE	
calibre	5.56 × 45 mm
capacity	30 rounds
weight	221 g
material	steel

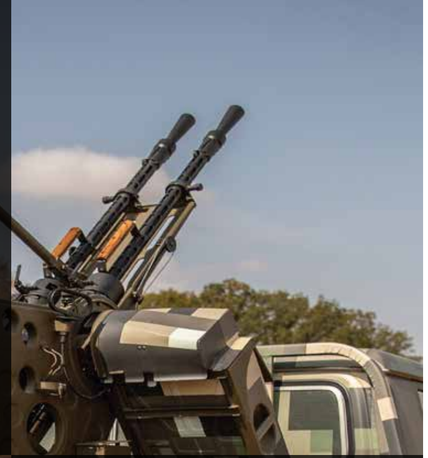
AR15 STOCK (MILSPEC)	
tube	M-LOK
weight	26.5 g
material	polymer, rubber

AR15 HANDGUARD	
system	M-LOK i Picatinny (MilSpec 1913)
length	10“, 13.5“, 15“
weight	~ 300 g
material	aluminium 6061
notes	includes barrel nut

MACHINE GUNS

- PKM
- PKMSN
- PKT
- PKB
- DShK
- KPVT
- ZU 14.5 mm





PKM

PKMSN

PKT

PKB

PARAMETERS	PKM/PKT/PKB/PKS	PKMSN
calibre	7.62 mm	7.62 mm
gun length	1,100 mm	1,173 mm
rate of fire - maximum	700-800 rpm	650 rpm
muzzle velocity	830 m/s	825 m/s
maximum range	3,800 m	3,800 m
effective range against ground targets	1,000 m	1,000 m
weight	7.5 / 10.5 / 9 kg	9 kg

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

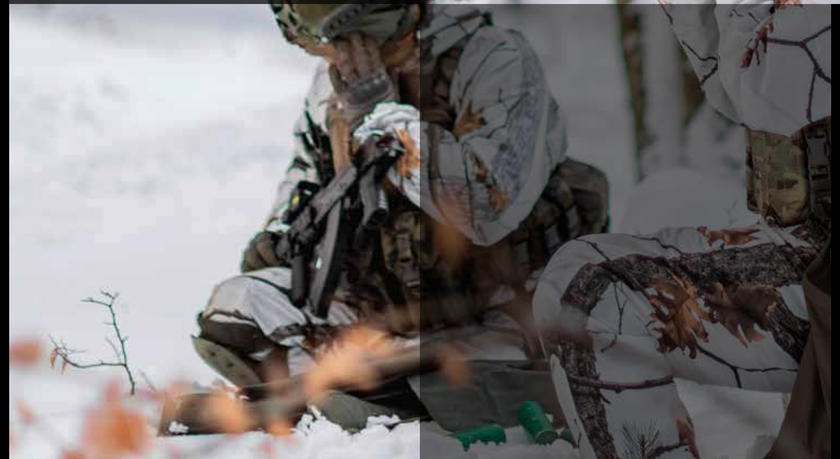
ZU 14.5 mm

HEAVY MACHINE GUN

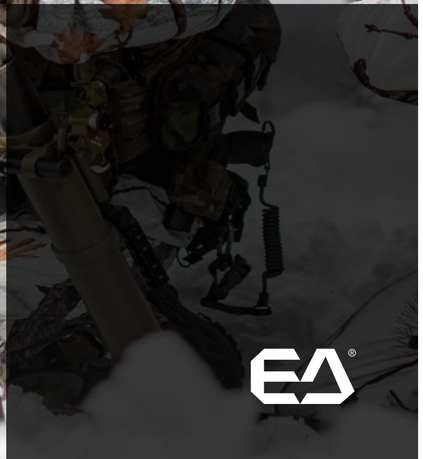
2/4 BARREL CONFIGURATION

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

MEDIUM CALIBRE GUNS



- CZ30 30 mm
- ANTOS 60 mm
- 2A28 73 mm



CZ30 30 mm

30 mm automatic cannon is suitable for infantry fighting vehicles and armoured personnel carriers such as BMP, but it can be fitted on helicopters, too. It is designed to engage lightly armoured targets, PTRS sets, enemy infantry or aircraft operating at low altitudes.

CZ30 is equipped with recoil damping system and is favoured for its reliability and long life cycle.

SPECIFIC PARAMETERS	
gun calibre	30 mm
firing range	10,300 m
effective range – armoured targets	1,500 m
effective range – aircraft targets	2,500 m
effective range – ground targets	4,000 m
rate of fire – standard	550 rpm
rate of fire – low	200-300 rpm
muzzle velocity	960 m/s

PARAMETERS	
weight	116.5 kg
gun length	3,027 mm
ammunition	AP-T
	HE
	HEI
	HE-T
	HETP-T

30×165 mm

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 rounds/min
flight time to self-destruction	4 - 5 s
barrel lenght	950 mm
weight with optical sight	6.3 kg

PARAMETERS	OPTICAL SIGHT PGO-7
magnification	2.7 ×
field of view	13°
diameter of output pupil	4.5 mm
distance of output pupil	27 mm
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
Boresighting range:	
– elevation	±0-08 dc
– azimuth	±0-08 dc
sight length with eyepiece (?)	140 mm
sight height	180 mm
sight width	62 mm
sight weight	0.50 kg
sight weight with accessories and bag	0.95 kg

ANTOS 60 mm

The ultra-light weapon version for commandos and special-ops.

Both available ANTOS 60 mm models are designed for immediate ground units fire power enhancement and special ops missions. Light, portable, with variable charges – ANTOS-LR model allows a single trooper to cover a distance from 120 up to almost 3100 m with a range of NATO standard 60 mm incendiary or fragmantation explosive, smoke or IR illumination bombs.

An ultra-light commando version is available for unprecedented and secured mobility and close combat.

PARAMETERS		ANTOS-LR	ANTOS
weight		15.9 kg	5.3 kg
	with accessories	43 kg	19 kg
dimensions	barrel length	1,000 mm	650 mm
mobility		portable	portable, trigger firing mode available
ammunition	60 mm	HEI - high explosive incendiary	
		HEF - high explosive fragmentation	
		ILL - illuminating	
		ILL-IR - illuminating infrared	
		SMK - smoke effect	
		JUMP - dummy training bomb	

2A28 73 mm / GROM

Compact and effective weapon, the 2A28 73 mm cannon provides a main combat means for BMP vehicles since 1970s.

Designed to fight against armoured vehicles, structures and to eliminate firing posts is open terrain and urban areas.

PARAMETERS	
weight	115 kg
gun length	2,180 mm
ammunition	PG-15V HEAT
	OG-15V HE

SPECIFIC PARAMETERS	
gun calibre	73 mm
firing range	5,000 m
effective range – PG-15V	1,300 m
effective range – OG-15V	4,400 m
rate of fire – standard	5-6 rpm

LARGE CALIBRE GUNS

M-46 130 mm

The M-46 M1954 130 mm is towed artillery field gun that was developped from a M-36 naval gun and has been produced in Russia since 1950s.

The 52 calibre barrel is mounted on a split-trail carriage that provides stability when firing. Shield provides cover against muzzle blast and machine gun and small arms fire. The gun is manually loaded with separate loading charge and projectiles.

The M-46 is still an integral part of artillery in many countries accross Middle East, Africa and Asia.

PARAMETERS		
weight		7,700 kg
dimensions	L	11,730 mm
	W	2,450 mm
	H	2,550 mm
mobility	top speed - on road	50 km/h
ammunition	130 mm	HE - high explosive
		ILL - illuminating
		SMK - smoke

SPECIFIC PARAMETERS	
calibre	130 mm
firing range	27,150 m (38,000 m assisted)
elevation	-2.5°/45°
rate of fire – maximum	8 rpm
rate of fire – sustained	5 rpm

2A46 125 mm

The 125 mm main gun is an integral part of all Soviet and Russian tanks starting with T-72 model. It was designed for destruction of enemy armoured combat vehicles, equipment and structures.

PARAMETERS	
weight	2,400 kg
gun length	6,381 mm
ammunition	HE
	HEAT
	APFSDS

SPECIFIC PARAMETERS	
calibre	125 mm
firing range	5,000 m
effective range – armoured targets	1,000-3,100 m
effective range – ground targets	5,000 m
rate of fire – standard	8 rpm
rate of fire – manual loading	2 rpm
muzzle velocity	900-1,785 m/s

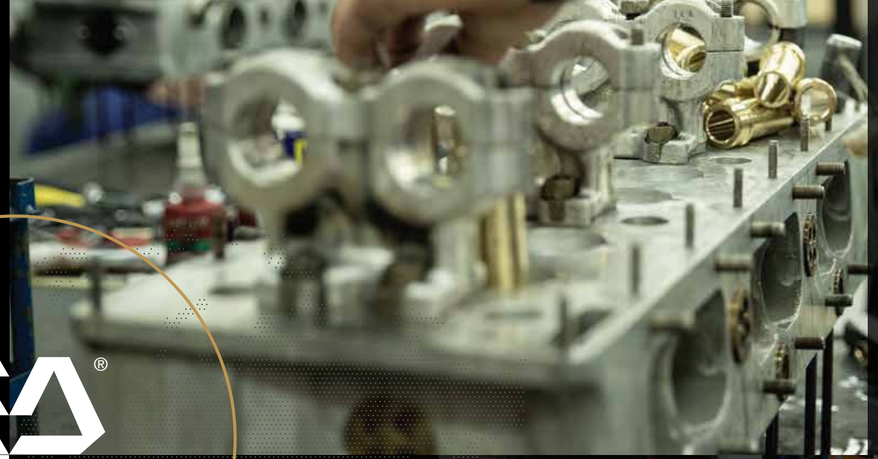
AMMUNITION

SMALL, MEDIUM AND LARGE CALIBRE AMMUNITION

E23 D. KOPELAKIS 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.

LARGE CALIBRE AMMUNITION	TYPE	DESIGNATION	WEAPONS
100 mm	cartridge	HE, HEAT, APFSDS	T-54/55, 100 mm cannon
100 mm MT-12	cartridge	HE, HEAT, APFSDS	MT-12 cannon
122 mm	cartridge	HE, HEAT	D30, ShK 2S1 Gvozdika
122 mm	cartridge	HE	vz. 38/36, vz. 30/78
125 mm	cartridge	HE, HEAT, APFSDS, practice	T-72, T-80
152 mm	cartridge	HE, HEAT	D-20, ShKH vz. 77 DANA, 2S3 AKACIA
155 mm	cartridge	HEAT, practice	NATO 155 mm artillery systems
LARGE CALIBRE AMMUNITION - ROCKETS	**TYPE**	**DESIGNATION**	**WEAPONS**
122 mm	cartridge	HE-F	RM-70, BM-21
SMALL CALIBRE AMMUNITION	**TYPE**	**DESIGNATION**	**WEAPONS**
5.56 × 45 NATO	cartridge	standard	assault rifles
7.62 × 39	cartridge	standard, AP-T, AP, practice	assault rifles (AK-47, SA-58 etc.)
7.62 × 54R	cartridge	standard	machine guns (PKM, PKT, UK-59)
MEDIUM CALIBRE AMMUNITION	**TYPE**	**DESIGNATION**	**WEAPONS**
12.7 × 108 mm	cartridge	API	DShK, NSV
14.5 × 114 mm	cartridge	API, HEI	KPVT
23 × 152 mm	cartridge	API-T, HE-I-T	ZU-23, ZSU-23
30 mm × 165 mm	cartridge	HE-I, AP-T	2A42 (BMP-2)
30 mm VOG-17	grenade	HE	AGS
PG-7	cartridge	HEAT	RPG-7
MEDIUM CALIBRE AMMUNITION - PG	**TYPE**	**DESIGNATION**	**WEAPONS**
73 mm PG-15 V	grenade	HEAT	2A28 (BMP-1)
73 mm OG-15 V	grenade	HE	2A28 (BMP-1)
RPG-75 M	grenade	HE	self
MORTAR MINES	**TYPE**	**DESIGNATION**	**WEAPONS**
82 mm	mortar mine	HE	mortars
120 mm	mortar mine	HE	mortars

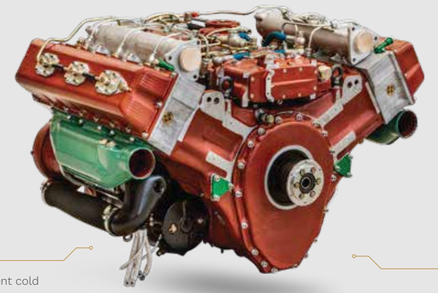


ENGINES AND SPARE PARTS

ENGINES

E23 D. KOPELAKIS 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

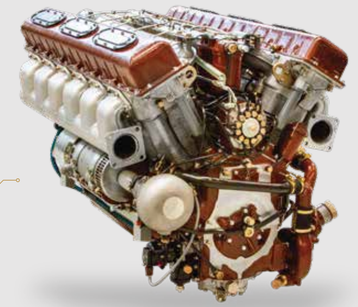
UTD-29

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

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



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

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		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

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

T3C-930-50-600K

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

SPARE PARTS

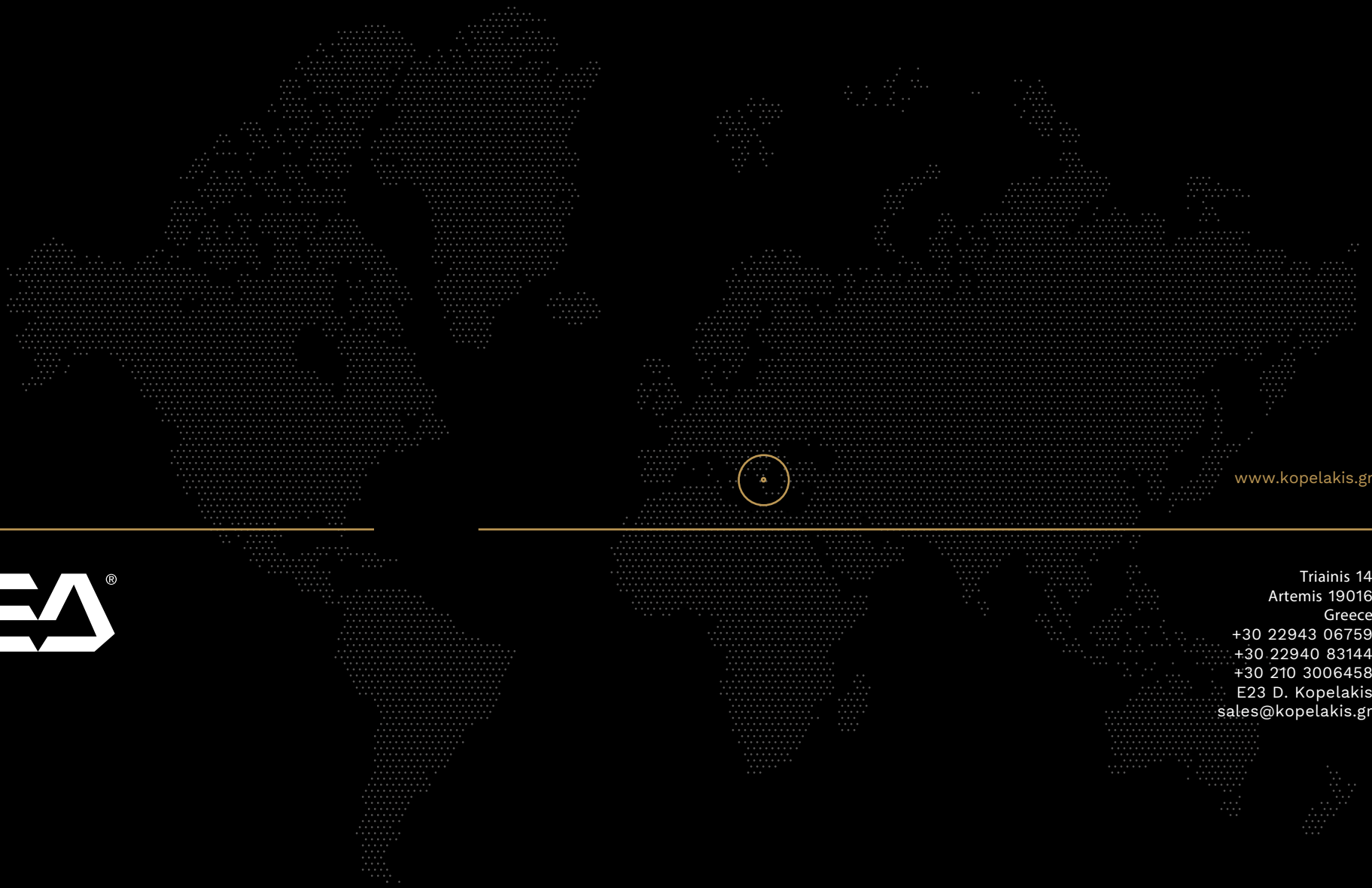
We supply a complete range of electrical, mechanical and structural spare parts for our products. Due to our large stock and production capacities we can also provide fast delivery of many parts for T-55, T-72 and BMP vehicles and secure genuine production of the less available spare parts.

We take great care to provide high quality parts only. We offer also spare parts for the PANDUR APC/IFV, RM-70 MLRS, DANA SPG, OT-64, BRDM-2, AM-50, TATRA T 813, T 815, T 810 and other vehicles, weapons or engines. All assembly components, such as hydraulic pumps or engines, are subject to extensive testing before delivery.

LARGE SPARE PARTS STOCK

PRODUCT TESTING FACILITIES

THOROUGH KNOWLEDGE OF ENGINES AND TRANSMISSIONS



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