

EXCALIBUR ARMY

MILITARY ENGINEERING VEHICLES

www.excaliburarmy.cz









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

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

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



OUR MISSION

MILITARY ENGINEERING VEHICLES

06-19

04-05

AM-70 EX / BRIDGE LAYER
AM-50 EX / BRIDGE LAYER
AV-815-7 MAMMOTH / RECOVERY VEHICLE
AV-15 / RECOVERY VEHICLE
VT-55A / RECOVERY TANK
TMVA DECON-17 EX / DECONTAMINATION VEHICLE
TATRA T 815-7 / UNIVERSAL PLATFORM







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

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

Just as the soldiers of today, we would never wish for history to repeat.

We admire their motivation, we are grateful for their determination and thankful for their service.

Our first mission is to equip and protect those who have decided to protect you, your future, your world, your way of life and your peaceful traditions and values.

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

EXCALIBUR ARMY



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 and M-70 EX 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

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

★ NEW PRODUCT 3 CREV 90_{KM/}

I-I



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 water 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.



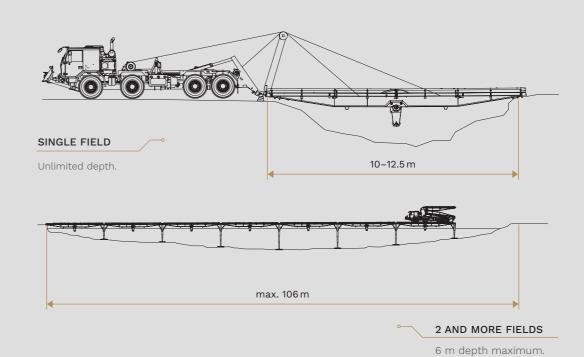
NEW PRODUCT Coming in 2018

SPECIFIC PARAMETERS			
bridge field load-carrying capacity MLC 7			
	length	13,500 mm	
	width	4,300 mm	
	travelling width	3,500 mm	
detachable trestle	height retracted	2,000 mm	
	fully extended	6,000mm	
vehicles per one set	4		



TATRA T3C-928.90

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



PARAMETERS		
weight		33t
dimensions	length	12,000 mm
	width	3,650 mm
	height	3,900 mm
engine	type	TATRA T3C-928.90
	output	300 kW at 1,800 rpm
mobility	max. speed – road	90 km/h
	max. speed – off road	40 km/h
	cruising range (w/o jerry cans)	>500 km
	fording depth (instant/preparation)	1.2/1.5 m
	gradability	25°
	static side slope	20°
	vertical obstacle (no blade)	0.5 m
	trench crossing	2 m



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 realted superstructure damage.

EARTH MOVING

Optional dozer blade for earth moving.

AM-50 EX BRIDGE LAYER

UNIQUE SOLUTION FOR WIDE GAP CROSSING





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 to6 meters deep trenches.

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





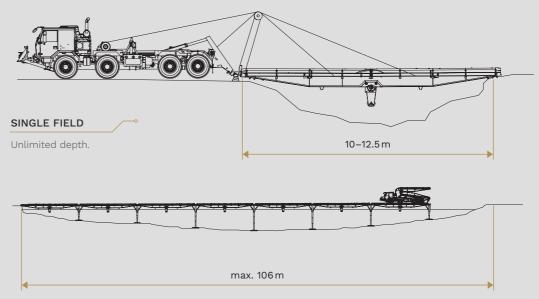




SPECIFIC PARAMETERS		
bridge field	load-carrying capacity	MLC 50
	length	13,500 mm
	width	4,000 mm
	maximum gradient	10°
	maximum crossfall	5°
detachable trestle	height retracted	2,000 mm
	fully extended	6,000 mm
vehicles per one set	4	

TATRA T 815-7 CHASSIS

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



2 AND MORE FIELDS

6 m depth maximum.

PARAMETERS		
weight		26.1t
dimensions	L	11,250 mm
	W	3,415 mm
	н	3,830 mm
engine	type	Tatra T3C-928.90
	output	300 kW
mobility	top speed - on road	85km/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



RECOVERY POWER

Fast crane, rear forklift, 2 winches, trailer hook.

CREW PROTECTION

Level II armoured cabin for crew safety.

MULTI-TASK VEHICLE

Mammoth can be used to handle heavy cargo in the rear and for postdisaster relief service.

EARTH MOVING

Optional dozer blade.

AV-815-7 MAMMOTH

RECOVERY VEHICLE

HIGH MOBILITY HEAVY DUTY RECOVERY VEHICLE

★ NEW PRODUCT

1+3

100_{KM/H}

I-I

The Mammoth vehicle is able to recover damaged armoured vehicles efficiently in a tactical environment and fulfill a wide range of further tasks that the combat engineers may face.

It is designed to lift and tow most types of current and future wheeled systems, overturn crashed vehicles, perform slope recovery and create access to unapprochable places.

Its 77 tm Hiab crane provides unrivalled operating speed, precision and safety while the crew is safely protected inside the armoured cabin.

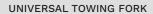






POWERFUL CRANE

The powerful crane can be used to recover vehicles, move objects or load/off-load cargo.



The rear fork can be utilized to tow wheeled vehicles - from trucks to APCs.



PARAMETERS		
weight		35.5t
dimensions	L	11,290 mm
	W	2,500 mm
	н	3,790 mm
engine	type	Deutz TCD 2015 V08 / Cummins ISXe600 30
	output	440kW / 447kW
mobility	top speed - on road	85 km/h
	top speed - off road	35 km/h
	cruising range	500 km
	fording depth (instant)	1.2 m
	gradient	27°
	side slope	20°
	vertical obstacle	0.45 m
	trench crossing	2.1m

12.0t
8,400 mm
5.2t
14.0 t
25t
100 m
0.6t
220 m
automatic, incl. electric and breaking system coupling



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.

AV-15 RECOVERY VEHICLE

A GREAT TOOL FOR RESCUE, EVACUATION AND REAR OPERATIONS





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-distater relief and reconstruction and is also used by firefighting squads for various manipulation related tasks.

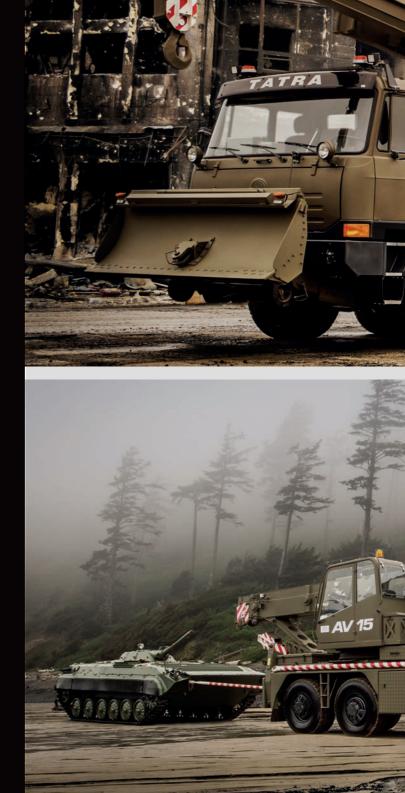
AVAILABLE EQUIPMENT

CRANE

MAIN WINCH + 2 PULLEYS

AUXILIARY WINCH

WELDING SET







PARAMETERS		
weight		30.4t
dimensions	L	12,300 mm
	W	2,570 mm
	н	3,360 mm
engine	type	Tatra T3-930-50
	output	265kW
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	4.0t	
main winch constant pull	14.7 / 29.4 / 44.1t	
main winch rope length	150 m	
secondary winch constant pull	0.6t	
secondary winch rope length	320 m	



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.

VT-55A / RECOVERY VEHICLE

SAFE OPERATION IN DEMANDING CONDITIONS





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







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

PARAMETERS		
weight		35.0t
dimensions	L	7,150 mm
	W	3,280 mm
	Н	2,250 mm
engine	type	V 55A
	output	427kW
mobility	top speed - on road	50 km/h
	top speed - off road	25km/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



COMBAT RECOVERY OPERATIONS

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



GOOD MOBILITY

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

EFFECTIVITY

High capacity of water and chemical substance mixing chambers, high pressure unit, floating pump for fast tactical operation.

OPERATOR PLATFORM

With extensive reach and high load capacity.

FAST DEPLOYMENT

Vehicle can be transported on road or by rail, ship and aircraft.

PLATFORM VARIABILITY

Superstructure can be tailor made for customer and equipped with a range of accessories.

TMVA DECON-17 EX

/ DECONTAMINATION VEHICLE











The TMVA DECON-17 EX decontamination vehicle is assigned to perform the entire decontamination of outside and inside surfaces of military vehicles, armament and material, incl. oversized equipment, decontamination of terrain, aircrafts, buildings and various objects and creating a high-pressure water curtain to stop a ground cloud of dangerous chemical substances.

This vehicle is able to operate individually and also by the way of establishing decontamination workplaces for team-linked decontamination. This vehicle is able of traverse over unpaved roads and through challenging terrain in all seasons and weather conditions. It is tailored to transport by rail, by ship or by air.



4X4 TACTICAL DECONTAMINATION PACKAGE

The highly mobile TATRA T 815-7 4x4 chassis with a decontamination superstructure featuring a powerful SANIJET aggregate.



PARAMETER	S	
weight		19.0 t
dimensions	L	7,560 mm
	W	2,550 mm
	Н	2,980 mm
engine	type	Tatra T3C-928.81, V8
	output	270 kW
mobility	top speed - on road	115 km/h
	top speed - off road	30 km/h
	cruising range	900 km
	fording depth (instant)	1.5 m
	gradient	40°
	side slope	17°
	vertical obstacle	0.6 m
	trench crossing	0.9 m



SPECIFIC PARAMETERS		
overall tank capacity	2,2001	
water chamber capacity	8001	
mixing chambers capacity	2×700l	
operating speed minimum	35 m/min.	
platform height reach	12 m	
platform side reach	7m	
platfrom load capacity	180 kg	
pressure unit operation modes	cold at high pressure	
	warm at low pressure	
	hot at high pressure	
	wet and dry steam	
	auxilliary electrical source	



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.

TAILORED FOR THE CUSTOMER

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

UNIVERSAL USAGE

KARBOX container platform carrier for fast mobile hospital, workshop, command and other special use for quickly deployed.

T 815-7 PLATFORM

TATRA CHASSIS UTILIZED FOR VARIOUS PURPOSES



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 PRODUTION - SINCE 1850!













TATRA

The Koprivnice automotive maker, known under the TATRA brand, ranks among the oldest car and truck factories in the world. More than 116-year of Tatra's continuous activity has significantly influenced the automotive industry in the Czech Republic and abroad.



KARBOX

Karbox company is a leading Czech manufacturer of containers, container and box bodies for high mobility special services.



CSG

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

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





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