

ARSYS

ARTILLERY FIRE CONTROL SYSTEM



MINE PROTECTED UN VERSION



TATRAPAN 6x6

MULTI-PURPOSE COMMAND AND STAFF ARMoured TERRAIN VEHICLE



General

TATRAPAN - all armoured vehicle is designed to protect the crew both in the cabin and the superstructure against 7,62 armour piercing bullets and shell splinters. Special construction of the bottom secures increased mine protection. The vehicle is constructed for extreme climatic condition up to 55°C of ambient temperature and has

Basic modification

- Personnel carrier
- Command post
- Patrol vehicle
- Supply truck
- Ammunition vehicle
- Recovery vehicle
- Mobile workshop
- Ambulance
- Police vehicle
- UN version

excellent cross country capability based on permanent all-wheel drive, 1 interaxle and 3 lockable differentials, independent swing semiaxle suspension, lockbone tube chassis with exceptional torsion rigidity, central tyre inflation system.

Advanced features

- Increased mine protection
- Commercial chassis
- Simple maintenance
- Removable superstructure
- Possibility of independent work of superstructure
- Mutual exchangeability of individual superstructures
- Large interior space
- Long drive endurance
- Separate A/C system for the cabin and superstructure

Cabin

All-armoured, two seat, two door with flat safety wind shields and side screens protected by removable safety armour Venetian blinds, provided with semicircle-shaped manhole for adaptation of 7,62 mm machine gun turret, faced by protecting and thermo-insulating materials.

The cabin is equipped with modern day and night vision system, communications, intercom, heating, ventilating and filtration system, air conditioning system. The cabin is tiltable - hydraulically operated and mechanically locked.

Superstructure

The vehicle is generally designed to carry purpose-made different superstructures. Superstructures for transport of personal are equipped with efficient air conditioning system. Independent work of the superstructure is possible due to electric power generator. Large capacity of inner space enables mounting of special radar, fire control, medical, reconnaissance and other system under armour.

The vehicle provides high standard of working and safety conditions for specialists, operators and staff in battlefield which considerably increases their combat efficiency. On the other hand supply and support superstructures are lightened to increase the loading capacity and other performances.

Vehicle parameters

Overall length	8460 mm
Overall width	2500 mm
Ground clearance	390 mm
Turning diameter	23 m
Vertical step	600 mm
Trench width	1100 mm
Maximum permitted speed	120 km/h
Gross vehicle weight	23 000 kg

Wheels and tyres

Disc wheel type	20-10,00 V
Tubeless tyres	MICHELIN 16,00 R 20 XZL
Tyre pressure	regulable from 100 to 525 kPa
Bead lock	HUTCHINSON D5 80

Differentials

1 interaxle differential, 3 axle mounted differentials and torque divider

Fire fighting system

Automatic type which enables double usage. Independent for engine space and for fuel tanks. There are four thermal sensors for engine space and four ones for fuel tanks space

Engine

Engine type	BF 6M 1015C EURO II
Manufacturer	KHD Deutz, Germany
Cooling	water
Maxim. horse - power	450HP/2100 r.p.m. 330kW/2100 r.p.m.
Maxim. torque	2000Nm/1200-1500 r.p.m.
Number of cylinders	6 V
Bore/stroke (mm)	132/145
Total swept volume (ltr)	11,91
Engine weight (kg)	830
Maxim. permitted speed (km/h)	100
Maxim. climbing ability at GVW (%)	100 (adhesion limited)

Gearbox

Torque converter type	8 FLW-1754-1
Manufacturer	Twin Disc, U.S.A.
Cooling flow (ltr/min)	120
Cooling required of max. input power	33,3%
Weight (kg)	277
Transmission type	TD 61-1175
Manufacturer	Twin Disc, U.S.A.
Shifting	automatic
6 forward and 1 reverse gears	*
Weight (kg)	715
Cardan shaft type	1710
Manufacturer	Dana Spicer, U.S.A.

* Gear ratios

1	2	3	4	5	6	R
7,34	4,20	2,89	1,83	1,05	0,72	7,34

Brakes

Service brake	double-circuit, pneumatic, effective on all wheels with ABS
Emergency brake	spring type, effective on 2nd front and rear axle
Parking brake	spring type, effective on 2nd front and rear axle
Exhaust brake	flap type, effective on all wheels, operated by means of electro-pneumatic switch

Axles

Front axles (2nd driven)	- independent swing semiaxle wheel suspension with leaf springs and shock-absorbents
- spring mount	- leaf spring, with telescopic shock absorbers
Rear axle (1)	- swing axles in permanent gear, independent spring-loader
- spring mount	- air-suspension with telescopic shock absorbers monoblock with hydraulic booster

Chassis

The Tatravan Chassis is designed to carry special superstructures. The fastening is done by quick joints with centering pins. Such a construction enables to use several

superstructure modifications on one chassis. Time needed to change superstructures is up to 60 minutes.

Chassis parameters

Vehicle ready to run weight	12850 kg
Weight distribution - front axles	2 x 5900 kg
- rear axle	1050 kg
Load capacity	10150 kg
Load distribution - front axles	2 x 1100 kg
- rear axle	7950 kg
Gross vehicle weight	23000 kg
Weight distribution - front axles	2 x 7000 kg
- rear axle	9000 kg

