



ARMORED PERSONNEL CARRIER



DESIGN AND
MANUFACTURING COMPANY

2016



DESIGN AND MANUFACTURING COMPANY UKRAINIAN ARMOR

Has vast experience in the defence industry, primarily meeting the demands of the Ukrainian Armed Forces along with armies around the world. We manufacture Armoured Personnel Carrier (APC) VARTA for transporting soldiers in combat situations and combine under the same management enterprises on engineering, production, consulting, legal support and sales of defence products both for domestic and foreign markets. We specialize in manufacturing APC, medical ambulances, field kitchens, military units and artillery weapons, as well as modernization and armoring of military vehicles. We offer localization of manufacturing capabilities in your country and help foreign companies and Ukrainian producers in their market expansion.



ARMORED PERSONNEL CARRIER

GENERAL SPECIFICATIONS

ARMORED PERSONNEL CARRIER



VARTA - is an Armored Personnel Carrier (APC). It is ideal for transporting soldiers in combat situations and can also be equipped as a Command-Post Vehicle, or evacuation of troops.

The vehicle compartment is made from specialized 560 steel grade which protects crew from armored piercing incendiary ammo up to 7.62mm.

VARTA uses a V-shape hull structure to accommodate

anti-mine seats, giving crew members protection to withstand detonation of charges up to 6kg of TNT.

VARTA includes a fighting module equipped with either the 7.62 mm or the 12.7 mm machine gun. The vehicle has 10 gun ports around the vehicle with the feasibility of accommodating a UBGL (Under-Barrel Grenade Launcher).

WARTA

ARMORED PERSONNEL
CARRIER

SPECIFICATION

PROTECTION

Level 2 by STANAG 4569, protection against firing of arms 7,62 caliber and mine blast 6 kg TNT.

WHEEL ARRANGEMENT

4x4 (all terrain chassis)

LOAD CAPACITY

3 t

OVERALL LENGTH/WIDTH/HEIGHT

6900/2550/2800 mm

ENGINE

V6 turbo diesel, 270 or 300 HP, 1128 N*m

MAXIMUM SPEED

120 km/h on road

FUEL TANK CAPACITY

350 l

GRADIENT

60%

TIRE SIZE

14,00 R 20 or 16 R 20

CREW MEMBERS

2+8+gunner

TOTAL WEIGHT

16,65 t

WHEELBASE

3950 mm

GROUND CLEARANCE

400 mm

TRANSMISSION

8 Gear Manual Transmission

MAXIMUM RANGE

1 250 km

FORDING

1 m

SIDE-SLOPE

45%

Rubber Runflat will allow continued operation even after a loss of some or all inflation pressure for up to 50 km on off road

SUSPENSION

Modernized by adding special off road absorbers suspension front and rear shock absorbers

WINCH

Waterproof, 10t electric towing capacity, 30 m steel cable or synthetic rope

ACCESSORIES

Radio equipment, front and rear cameras, GPS navigation, 4V-220V power inverter.

FIRE EXTINGUISHING SYSTEM

Automatic systems with Ultraviolet and Infrared detectors

WEAPON

Gunner station with a gunner protection kit on the roof that can support various machine gun systems including 7.62mm (PK) or 12.7mm (NSV). The VARTA can also come equipped with an enclosed cupola supporting dual machine gun systems (14.5mm and 7.62mm). Turret available in manual and powered variants.

ELECTRICAL SYSTEM

24V

LIVING FACILITIES

Air conditioning, heater, flow ventilation, first aid kit, powder gases ventilation system

FILTER VENTILATION SYSTEMS

Provides protection from the effects of natural pollutants from the atmosphere, the use of weapons of mass destruction (WMD)

SEATS

Military blast protection and absorbing seats has five points seat belts

GUN PORTS

10

CHASSIS

The VARTA is built on a 4x4 two-axle truck base with a specialized chassis with a “high-cross” carrying up to 8.15 tons. This chassis with central tire inflation system is proven and reliable even in the most challenging and difficult conditions.

ENGINE

The VARTA boasts a 6-cylinder, V-type, turbo-charged diesel engine dispelling either 270hp or 300hp (depending on the engine chosen) and can run on many types of fuel (including lower quality fuel in combat situations). The VARTA has a maximum road speed of 120 km/hour and a maximum torque of 1128 N*m

TRANSMISSION

The VARTA employs an 8-Gear Manual Transmission to accommodate all terrain situations and to be completely versatile in battle.

SUSPENSION

The VARTA utilizes an energy-intensive dual shock absorber system. It has additional leaf springs on the wheels to provide smooth riding conditions even at high speeds on off-road situations. It is built rugged, long-term usage.



ARMoured CAPSULE CARE

Built with Swedish Armor from 560 Steel, the VARTA can withstand a direct hit from armor-piercing incendiary 7.62mm ammo. The VARTA engages bulletproof glass of the same protection level as the armor and it's external installation method enables quick replacement if damaged. Ballistic plates surround the engine for additional protection.

V-shaped hull of the VARTA armoured crew compartment gives protection to the passengers able to withstand a detonation charge equivalent to 6kg of TNT.



WEAPON

VARTA comes with gunner station with a gunner protection kit on the roof that can support various machine gun systems including 7.62mm(PK) or 12.7mm(NSV). The VARTA can also come equipped with an enclosed cupola supporting dual machine gun systems (14.5mm and 7.62 mm).

Turret available in manual and powered variants. 10 gun ports with the possibility of rifle grenade installation. Gun ports equipped with powder gases ventilation system. The possible installation smoke grenade launching system.



ANTI-MINE SEATS

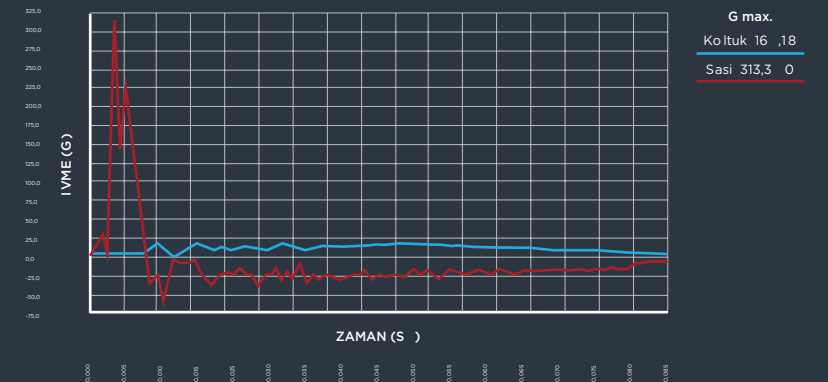
MODERN ANTI-MINE SEATS TESTED AT STANAG 4569 PROTECTION LEVELS BASED AND MEET NATO AEP-55 STANDARD.

EQUIPPED WITH:

- advanced energy damper attenuation system;
- wall mounted;
- 5 point seatbelt system;
- folding seat;
- foldable headrest;
- waterproof external coating.



TEST 6



The diagram shows the acceleration that occurs during the mine explosion. Blue curve with installed Anti-mine seats.

THE VARTA IN EXTREME CONDITIONS

ARMORED
PERSONNEL CARRIER

WHEELS

Special off-road tires 14R20 or 16R20. Tubeless with high floatation and security.



ARMoured RIM PROTECTION

The VARTA is equipped with a central tire inflation system. This system provides:

- required air pressure in the tires of the vehicle depending on road surface;
- automatic maintenance of specified air pressure in the tires in case of damage;
- automatic wheel disconnection from the system in case of significant damage when air leakage exceeds the rated compressor performance.

Rubber Run-flat tire will allow continued operation even after a loss of some or all inflation pressure for up to 50 km on off road. Made of three parts, which allows quick mounting without special equipment.



CLIMATE CONTROL

Independent air conditioning and heating system individually designed to ensure a comfortable climate in the cabin at a -40 to +50 °C. All windows and mirrors are heated.

The ergonomic instrument panel has waterproof and anti shock sensors and switches.

WINCH

The vehicle has an electric shock protection and water proof winch with towing capacity 10 t and synthetic rope or steel cable 30 m. In order to increase traction, a set of pulley blocks can be installed.



FIRE EXTINGUISHING SYSTEM

High speed fire suppression system for:

- crew compartment
- engine compartment

The system protects against “Molotov cocktail” and minimizes risk of RPG attacks.

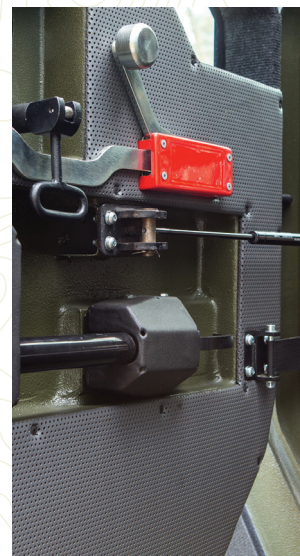
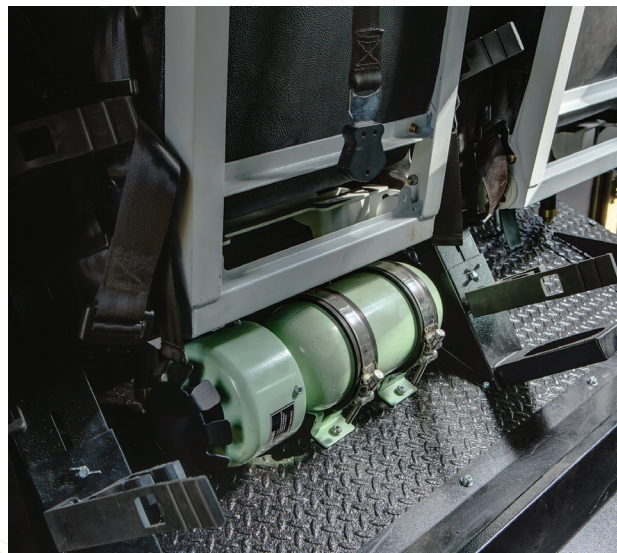
The system with UV IR detectors can indicate combustion in 3 milliseconds and suppress it in 250 milliseconds

FILTERING AND VENTILATION DEVICE

Protection of the usable area of the objects from the effects of natural atmospheric pollution, usage of weapons of mass destruction (WMD) and contaminations by selected toxic industrial substances.

DOORS AND SPECIAL MILITARY HANDLES

The door mechanism from company TriMark is easy to operate and allows power locking of heavy-duty doors up to 300 kg. The doors are compliant to FMVSS 206 strength requirements.



VEHICLE LIGHTINGS

The VARTA includes:

Front headlights, taillights, brake lights, marker lights, direction indicators, fog lights, convoy lights, spotlights and blackout lights.

All lights are made from polycarbonate materials that are 200 times stronger than glass.

All lights are dust, water and chalk-resistant.

Interior lighting with several settings: Full, partial camouflage and specific night lighting.

All military lighting kits meet NATO standards.

Blackout lights are equipped with special lenses that are designed to cast a diffused horizontal beam of light for the driver of the vehicle to navigate and also to be recognizable to other vehicles. Blackout lights are intended for concealed convoy use at night.







