

# ONICELLA

ARMORED PERSONNEL CARRIER



**MISTA**  
Sp. z o.o.

## ***MISTA Sp. z o.o.***

*is a private manufacturer of defence products.*

*Established in 1993, the Company has all the necessary authorizations for development, production, modernization, repair and trade of weapons and military equipment.*

*MISTA's portfolio of products includes:*

- APC 4x4 ONCILLA, other wheeled and tracked military vehicles*
- serially produced remote-controlled weapon stations for 7.62 mm, 12.7 mm, 14.5 mm machine guns and 30 mm automatic cannon.*

*The Company has successfully mastered the overhaul and upgrade of APC BTR-70 up to BTR-70Di level for the needs of the Ministry of Defense of Ukraine.*

*MISTA's engineering and technical specialist teams have mastered repair and modernization of BTR-60 and BRDM-2, MT-LB and MT-LBu armored tracked vehicles, other MT-LB chassis-based vehicles, production of track belts for those vehicles.*



- HQ and facilities located in Stalowa Wola, Poland
- In-house R&D department (25 designers)
- 350 employees
- Developing, design, cutting, welding, machining, hydraulic-electrical/pneumatic assembly and painting



# CERTIFICATE

No. W - 273/4/

*ISO 9001:2015-10  
quality management  
system*

This is to certify that

**MISTA Sp. z o.o.**

ul. W. Grabskiego 36, 37-4

has implemented and maintains

the requirements of the

standard according to

Art. 11(2) of the Act of 29 November 2000 on foreign trade

and technical assistance for national and international

trade (as amended)

in the following scope of activities:

export, intra-EU-transfers, technical assistance, import technologies and services of

The audit carried out by the Polish Centre for Testing and Certification

This Certificate shall remain valid provided that above requirements

This certificate is valid

from 16.04.2021 to 15.04.2024

Issued under the Contract No. 3297/JW/3/2021

Date of certification decision: 23.03.2021

Certificate bears a qualified signature.

Warsaw, 23.03.2021

PCBC is authorized to carry out certification of conformity and verification of conformity under the Regulation of the Minister of Economy of 13 April 2013 on the list of activities for which certification of conformity and verification of compliance of the internal



THE INTERNATIONAL CERTIFICATION

# CERTIFICAT

PCBC has issued an IQNet recognized certificate

**MISTA Sp. z o.o.**

ul. W. Grabskiego 36, 37-450

has implemented and maintains

Quality Management System

for the following scope:

- design, manufacture and repairs of construction machinery (including winches and drive units) and manufacture of products for military or police purposes, as well as sale of the above-mentioned products,
- after-sales services and services in the field of machining and welding of steel structures

which fulfils the requirements of the following

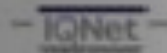
**PN-EN ISO 9001:2015**

Issued on: 16.04.2021

Expires on: 15.04.2024

This attestation is directly linked to the IQNet Partner's certificate and cannot be used as a stand-alone document

Registration Number: PL - J - ;



*Stachurski* *Wojcik*



# CERTIFICATE

No. J - 2388/4/2021

This is to certify that:

**MISTA Sp. z o.o.**

ul. W. Grabskiego 36, 37-450 Stalowa Wola

is in conformance with

**PN-EN ISO 9001:2015-10**

in the following scope of activities:

- design, manufacture and repairs of construction machinery (including winches and drive units) and manufacture of products for military or police purposes, as well as sale of the above-mentioned products,
- after-sales services and services in the field of machining and welding of steel structures

The audit carried out by the Polish Centre for Testing and Certification has afforded evidence of the above.

This Certificate shall remain valid provided that above standard are respected by the Organization.

This certificate is valid:

from 16.04.2021 to 15.04.2024

Issued under the Contract No. 3297/JW/3/2021

Date of certification decision: 23.03.2021

Certificate bears a qualified signature.

Warsaw, 23.03.2021



ONCILLA

- Armored personnel carrier ONCILLA – is a combat proven, adaptable and versatile 4x4 platform designed from the ground up to fulfill complex missions in any terrain and weather conditions.
- **more than 200 units are supplied to the Defense Forces of Ukraine and other foreign costumers**
- 4x4 APC ONCILLA features superior land mobility for transporting troops, payload, survivability and protection
- Complies with NATO standards
- NSN 2355-61-013-9395





ONGILLA

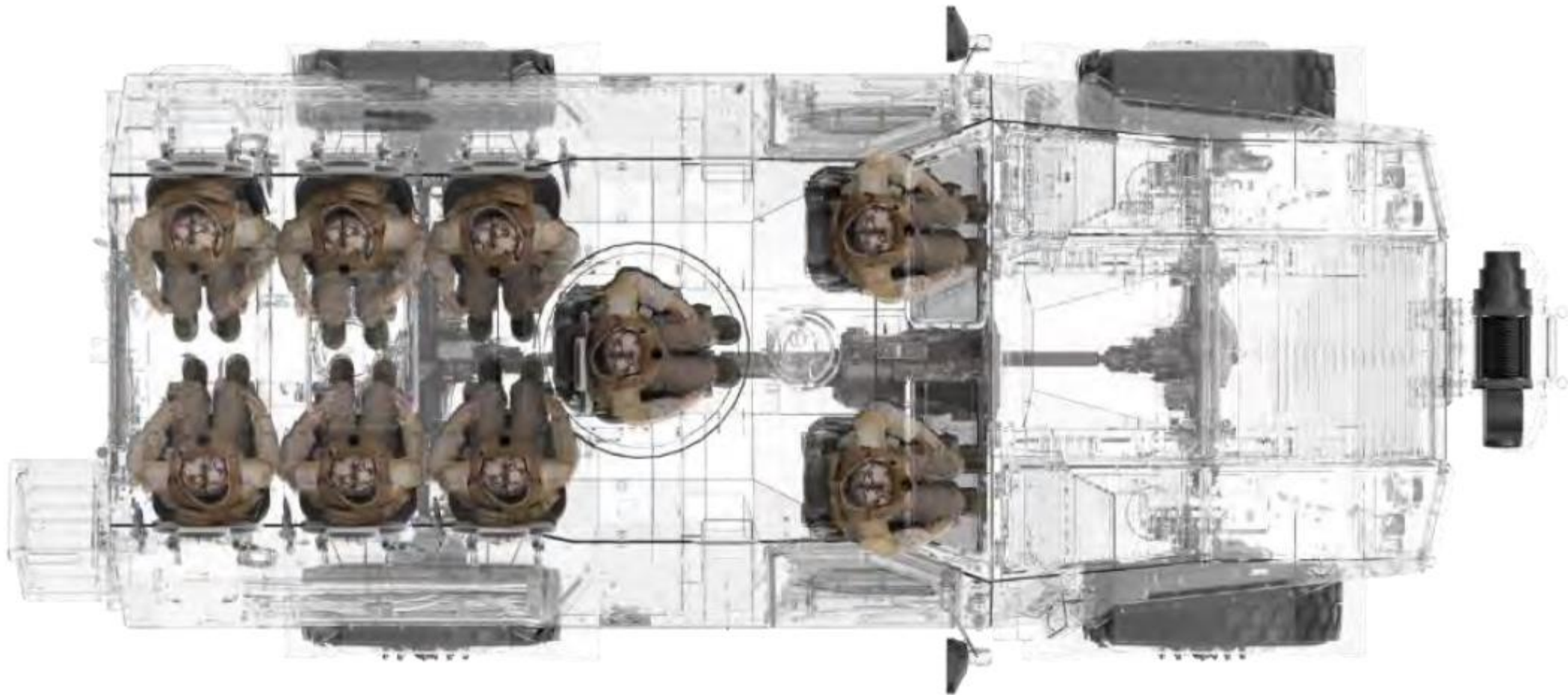
## DIMENSIONS

<b>GWT, kg</b>	10 125
<b>Curb weight, kg</b>	9 425
<b>Payload, kg</b>	2 000
<b>Crew</b>	3 (commander, driver, gunner)
<b>Troops</b>	6 or 8
<b>Length/ with winch, mm</b>	5687/6162
<b>Width, mm</b>	2470
<b>Height (roof level)</b>	2400
<b>Clearance, mm</b>	367
<b>Gradient</b>	30°
<b>Side slope</b>	25°
<b>Trench, m</b>	0,8
<b>Step, m</b>	0,4
<b>Fording, m</b>	1,0
<b>Max. Speed on road, km/h</b>	110
<b>Operation range, km</b>	620





# LAYOUT OF THE VEHICLE



**Commander - 1**

**Driver - 1**

**Gunner - 1**

**Troops - 6**

## DRIVER



## COMMANDER



- PERFECT SITUATIONAL AWARENESS DAY AND NIGHT
- 3 POINTS SEAT BELTS
- HEIGHT AND FORE-AFT ADJUSTMENT
- ADJUSTABLE HEADREST

Troops can use six firing ports – two on each side of the vehicle and two in the rear

- 4 POINTS SEAT BELTS
- FLIP PAN
- HEADREST



**BALLISTIC** protection  
STANAG 4569, Level 2



with **Add-On Armor** –  
STANAG 4569, Level 3  
(against 7,62x54 mm API rounds)

**BLAST** protection  
STANAG 4569, Level 2a/2b



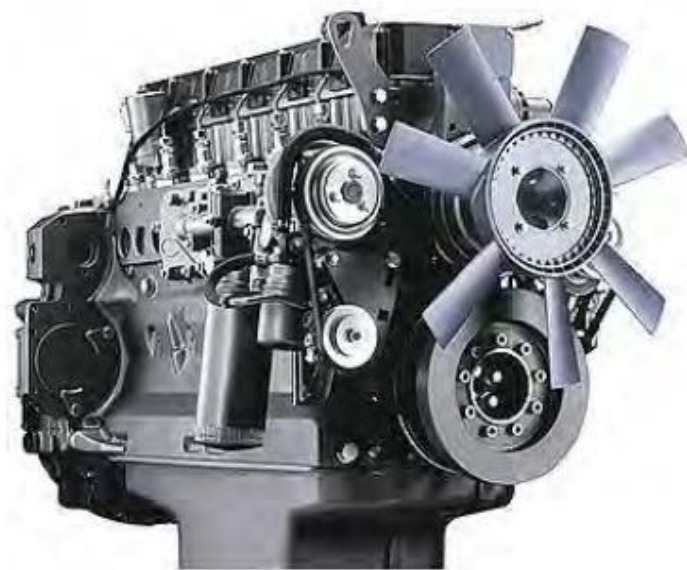
**U-shaped monocoque**  
specifically designed to diffuse  
blast energy



The crews survived on several occasions.



**Kevlar inlaid for better protection  
against secondary fragments**



DEUTZ



IVECO



Allison

<b>Engine</b>	<b>DEUTZ, diesel, water cooled, turbocharged</b>	<b>IVECO, diesel, water cooled, turbocharged</b>
<b>Cylinders</b>	L6	L6
<b>Displacement</b>	4,7 L	3,9 L
<b>Power output</b>	195 HP	209,5 HP
<b>Max. torque</b>	700 Nm @ 1400 RPM	730 Nm @ 1400 RPM

<b>Transmission</b>	Allison, automatic, 6 forward, 1 back	
<b>Transfer case</b>	2 shifts, electropneumatic gear shifting	

## Advanced design of the Engine Cooling System

- effective at high ambient temperature
- fan type with hydraulic drive, automatic switch on, switch off
- does not require increase of engine RPM for better cooling
- significantly saves engine life





### Transfer Case

- electro-pneumatic two-speed shift system
- permanent all-wheel drive
- differential torque distribution
- lockable inter-axle differential



### Front wheels suspension



### Rear wheels suspension

#### Shock absorbers

- 8 pc – 2 for each wheel
- hydraulic type
- two-way action

**Service brake** - hydraulic disc brake with pneumatic booster, ABS

**Parking brake** – mechanically activated, drum type



- ensures effective fire extinguishing
- time to activate the Fire Suppression System:
  - 3 ms – detection
  - 30-120 ms – fire suppression
- modes - Auto and Manual
- light and sound warning
- indicates system malfunctioning



- effectively protects the crew against dust, NBC agents due to the air overpressure inside the vehicle
- ensures comfortable breathing for the crew when the main weapon is used



- 2-zone air conditioning (driver/commander and troops)
- operational Temp Range of AC System:  $-35^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$
- effective at high level dust content in the outside air
- built-in Heating System
- separate control of cooling / heating for driver/commander and for crew
- complies with [NATO - AECTP-230 standard](#)



The 4x4 ONCILLA-SHTURM is based on the 4x4 ONCILLA. The assault version of the armored personnel carrier was created using the accumulated combat experience and operation over the past 7 years - the firepower was increased thanks to the new EUROTAVRIA-14.5 / 7.62 combat module and other technical solutions were implemented that increased the level of crew survivability and equipment protection.





The armored medical vehicle 4x4 "ONCILLA-E" is designed to evacuate the wounded and sick from the combat zone to medical centers and second-tier medical institutions for the purpose of timely and complete provision of medical care and treatment.





12.7 mm BROWNING M2



14.5 mm KPVT / 7.62 mm PKT



12.7 mm NSVT



30 mm 2A72 / 7.62 mm PKT



## 12,7 MM MACHINE GUN

<u>NSVT</u>		<u>BROWNING M2</u>	
▪ Ammunition load	450 rounds	▪ Ammunition load	300 rounds
▪ Weight with ammunition load	300 kg	▪ Weight with ammunition load	451 kg
▪ Drives	electric	▪ Drives	electric
▪ Horizontal aiming angles	360°	▪ Horizontal aiming angles	360°
▪ Elevation aiming angles	-3°...+60°	▪ Elevation aiming angles	-3°...+60°
▪ Mounting ring diameter	730mm	▪ Mounting ring diameter	730mm



## Fire Control System

- control board with “joystick” manipulator
- monitor (10”, color)
- optoelectronic sight (day camera, thermal imager)
- horizontal aiming block
- elevation aiming block



- Customized Integrated Logistic Support
- Ease of maintenance
- Spare parts supply for 20 years
- Training & Simulation





WŁADYSŁAWA GRABSKIEGO 36  
37-450 STALOWA WOLA, POLSKA  
WWW.MISTA.EU  
(15) 844 03 52  
E-MAIL: MISTA@MISTA.EU



*Thank you for attention*

