

SUPERIOR – TACTICAL WHEELED ARMORED VEHICLES



Nurettin ÇARMIKLI Nurol Holding Chairman of the Board of Directors

efficiency, in accordance with the national goals. Having been founded in 1976 as one of the first companies in the Group, Nurol Makina ve Sanayi A.Ş. [NMS] operates in the defense sector, specifically in the manufacture of Tactical Wheeled Armored Vehicles. Nurol Makina has proven its success in this field with its indigenously designed vehicles, and has made significant sales in both the domestic and export markets.

We are fully aware of the importance and value of defense to our country, as a geostrategic node with a key location in its region. In this context, Nurol Makina manufactures unique tactical wheeled armored vehicle systems for use by the Turkish Armed Forces, the Turkish National Police and Gendarmerie General Command under guidance of the Undersecretariat for Defense Industries.

In this sense, we are taking firm and resolute steps to enhance our success and to strengthen our Group, not only in Turkey, but also on regional and international platforms.

I would like to express my gratitude to all of our employees for their valuable contributions to our achievements.

The Nurol Group of Companies is a global company that has achieved 50 years of success, without compromising on its universal principles that focus on the development of our country, ethical values, humanity and the environment. In addition to its principles related to quality and trust, Nurol also embraces heartily a vision of conventionality and openness to innovation.

Adhering to such principles and values, our Group operates in many sectors, from construction and commerce, to machinery and defense, from banking and finance to tourism and services, and from mining and energy to technology, and continues its investments without compromising on quality or efficiency, in accordance with the national goals.



Engin AYKOL Nurol Makina ve Sanayi A.Ş. General Manager

Nurol Makina ve Sanayi A.Ş was established in 1976 with the critical mission of providing Turkey's defense sector with products and services, and has carried out its operations since then with great success.

What lies behind Nurol Makina's achievements and its confidence in the future is the understanding and objective of developing products, services and solutions according to the expectations and needs of its customers. As Nurol Makina, we are aware that the only way to ensure this is to maintain highlyskilled and experienced personnel in all corporate functions, from design to production, and from business development to product support. Indeed, our well-educated, experienced and innovative employees, and their sense of belonging as part of the Nurol family, are our most essential asset and the foundations of our company.

As a result of its adherence to this understanding and quality assurance, our company has crowned the success of its operations by becoming the main integrator of the Undersecretariat for Defense Industries for land vehicles in 2013, and has proven that it is on the right track. With this development, which is a major milestone in our growth strategy, our sales to export markets have escalated.

Continuous efforts are made to improve our existing products, as well as to maximize the use of domestic components in all our works. Furthermore, the concept of logistic support that starts in the design phase and continues throughout the lifecycle of a product is given utmost importance by Nurol Makina.

With over 40 years of experience in the areas of design, manufacture, installation, maintenance and repair, Nurol Makina will keep playing its role in the maintenance of global security and peace by preserving the quality of the services it provides to our country and the security forces and armies of allied countries.



SINCE 1976 More than 40 years experience in engineering...

Nurol Makina was founded to install turnkey industrial facilities and to meet the demand for steel construction and machinery. Since its establishment, it has undertaken numerous largescale contracts and has successfully delivered its projects.

Nurol Makina started its operations in the defense sector in 1992 with the establishment of facilities in the First Organized Industrial Zone in Sincan, Ankara Turkey. Today, it carries out its operations from its facilities built on 75.000 m² of land with 25.000 m² of indoor space. These facilities today include a test area for the carrying out of performance tests on tactical wheeled armored vehicles to test their capabilities in obstacle climbing, trench crossing, side slope and steep slope climbing, and in offroad and amphibious situations.

Based on the priority it gives to unique design in its products, Nurol Makina was awarded R&D Center status by the Ministry of Science, Industry and Technology under Law no. 5746.

Nurol Makina has an advanced capabilities from design to mechanical operations including stateof- the-art 3D modeling tools to CNC plasma cutters to robotic welding and modern surface treatment and painting chambers.



MAIN ACTIVITY & PRODUCTS

Nurol Makina's main products are 4x4 tactical wheeled armored vehicles multi-wheel drive vehicles and special purpose platforms.



EJDER YALÇIN 4x4 Tactical Wheeled Armored Vehicles



Tactical Wheeled Armored Vehicles



NMS LIGHT 4x4 Light Armored Vehicle



PARS 4x4 Wheeled Armored Combat Vehicle



ILGAZ II 4x4 Internal Security Vehicle

EJDER TOMA Multi-purpose Riot Control Vehicle

EJDER KUNTER Multi-purpose Armored Platform

EJDER YALÇIN 4X4 TACTICAL WHEELED ARMORED VEHICLE

Ejder Yalçın 4X4 Armored Combat Vehicle a unique platform that has high protection and mobility, is developed to meet the operational requirements of military units and security forces in every region including rural and urban areas.

Missions

- UN/NATO Mission
- Armed forces
- Special forces
- Gendarmerie
- Security Forces
- **Payload Capacity** Networked warfare
- Remote Controlled or Manual turret
- Highest payload capacity in its class
- Compliance with NATO General Vehicle Architecture





Survivability



secure in the field.



Mobility

- High stability

- MRAP Level ballistic protection
- MRAP level mine, IED and lateral explosion protection
- Up to 12 personnel carrying capacity
- Self-protection feature

During the development of Ejder Yalçın 4x4, in addition to the superior protection features, user's operational & ergonomic requirements were also considered and a ideal platform was created for the personnel to operate more efficiently and more



High payload capacity ▶ High strategic mobility



The most recent design of Nurol Makina, NMS 4X4, features a V-shaped monocoque body. Its advanced drive-train makes the vehicle fast and highly maneuverable at rural and urban areas.

Missions

- ► UN/NATO Mission
- Armed forces
- Special forces
- Gendarmerie
- Security Forces
- Payload
- Remote Controlled or Manual Turrets
- Network assisted warfare
- High payload capacity
 Compliance with NATO General
- Vehicle Architecture

A NEW ERA IN LIGHT **ARMORED VEHICLES**

Its low weight and high protection features provide for operational superiority and high resilience in the face of the most aggressive and asymmetric threats. A next-generation vehicle, NMS 4X4 represents a perfect combination of scalable composite material armor. Furthermore, thanks to its higher speed and superior protection features compared to other vehicles in his segment, the vehicle is suitable as an escort in VIP convoys.



• Superior ballistic protection Superior protection against mines, IEDs and lateral explosions • Personnel carrying capacity of up to 11 people Self-protection system



Survivability

Mobility

Strategic mobility ► High off-road performance ▶ Fastest in its segment.

NMS-LAXA

NMS-L, a perfect combination of scalable armour and composite material, exhibits the years of experience gained by Nurol Makina.

Nurol Makina designs and manufactures unique and indigenous products in support of security forces by helping to maximize the efficiency against various threats. Latest tactical wheeled vehicle from Nurol Makina, the NMS-L incorporates, unprecedented levels of protection and modularity at its weight class. Incorporating a mechanical hull, the main components of the cabin are assembled to each other using mechanical fasteners only.

LIGHT ARMORED **VEHICLES**

Ready for all missions!

The vehicle is designed for variety of missions, offers combat troops a range of capabilities ranging from carrying weapons systems to reconnaissance missions. Prioritizing safety and modularity, the NMS-L is ready for all missions in all geographies.



General Features

- Superior ballistic, mine and IED protection according to NATO Stanag 4569
- ► Fully Independent Suspension System
- ▶ -32°C and +55°C Operation Temperature
- Tires and Central Tire Inflation System (CTIS)
- ▶ 4 Side doors / 1 Rear door
- ▶ 5-points seat belts
- Up to 5 crew capacity



PARS AXA

The PARS 4x4 is made to perform unique operational tasks such sophisticated observation, anti-tank defense, and command and control.

The PARS 4x4 features an amphibious design and a low profile. Without any prior preparation, the vehicle and its crew of four may operate in deep and swiftly moving waters. The vehicle's improved propulsion and maneuverability in the water are provided by two propellers situated in the rear.







The PARS 4x4's low center of gravity, completely independent suspension system, ABSassisted hydraulic disc brakes, low ground pressure, and enhanced approach and departure angles allow it to run on any rocky terrain. The PARS 4x4 can hold on 40% side slopes and ascend 70% vertical slopes. Additionally, it can easily handle vertical impediments that are 0.4 meters high. The vehicle has the capacity to perform self-recovery when necessary thanks to the hydraulic recovery winch, which is situated at the front of the vehicle.

General Features

- Modern and robust design suitabl various operational environments
- High level of protection
- Different weapon systems based on mission requirements

Protection and Life Support

- Ballistic Protection: STANAG 4569 (Level Classified)
- Mine Protection: STANAG 4569 (Level Classified)

| le | for | |
|----|-----|--|
| 6 | | |
| | | |

- Modular design that allows for different configurations
- Exceptional mobility in diverse terrains
- Enhanced safety for the occupants
- Adapted to evolving mission needs

- Smoke Grenade Dischargers: 8
- Automatic Fire Suppression System: Standard
- CBRN Protection System: Standard

ILGAZ – II AXA INTERNAL SECURITY VEHICLE

ILGAZ-II 4x4 was developed in order to meet the requirements of special operation forces, military units and security forces to intervene illegal demonstrations, restoring public order and for rapid response in residential and rural areas.

Into the design phase of ILGAZ-II 4x4, Nurol Makina paid particular attention to the crews protection while ensuring that the crew can carry out their tasks safely and effectively. ILGAZ-II 4X4; offers special solutions for the different requirements of users with Ambulance, Anti-Tank Vehicle, Combat Vehicle, Command & Control Vehicle, Recce & Surveillance Vehicle, Counter Terrorism Vehicle, Internal Security Vehicle, Crime Scene Investigation Vehicle.

Survivability

- Personnel carrying capacity of up to 9
- Self-protection feature

Mobility

- Strategic mobility
- High off-road performance

Payload

• Remote controlled or manual turrets





Configurations

- Internal Security Vehicle
- Combat Vehicle
- Command and Control Vehicle
- Reconnaissance and Surveillance Vehicle
- Anti-Terrorism Vehicle
- Crime Scene Investigation Vehicle
- Armored Ambulance Vehicle
- Anti-Tank Vehicle





URBAN OPERATIONS HIGH MOBILITY

EJDER TOMA® RIOT CONTROL VEHICLE

EJDER TOMA®, which has 4x4 mobility, indigenous military chassis and fully independent suspension system, is manufactured for the security forces to interfere quickly and effectively against the civil disobedience. EJDER TOMA® which was uniquely designed by Nurol Makina, has been developed to maintain public order and security in rural and urban areas as well as border regions with its highoff-road performance.



IN THE CITY & ON THE FIELD

Missions

Responding to riots

- Maintaining public order
- Border Protection
- TOMA[®] abbreviation is a registered trademark of Nurol Makina







All the tools, equipment, hardware electronics and software used in Ejder TOMA 4x4, is originally developed by Nurol Makina, Thus any configuration change or additional requirement can be implemented at minimum cost ϑ time even to the vehicles in service.

Control System

- Combinations of water spray mixed with tear gas, dye or foam
- Self-cleaning system to prevent corrosion and clogging
- ▶ Real-time water cannon guidance system
- Local Control system design
- Water tank
- ▶ Gas, dye and foam tank

Protection

- Armored cabin
- Self-protection feature

EJDER KUNTER AXA SPECIAL PURPOSE PLATFORM

EJDER KUNTER which was uniquely designed by Nurol Makina is a platform that has fully independent suspension system. With performance, EJDER KUNTER can operate effectively in rural areas as well as urban areas in all terrain condition.

The system design of EJDER KUNTER can be configured according to user requirements and offers special platform solution including the integration of special mission equipments.







Ergonomic cabin design with high ballistic protection enables users to operate with high performance & confidence. The system design of EJDER KUNTER can be configured according to user requirements and can offer special platform solutions including the integration of turrets. EJDER KUNTER which has a unique chassis can be customized for military, internal security and civil areas.

General Features

- Indigeneous chasis
- Fully independent suspension system
- High Approach and Departure Angles
 - ► High Ballistic Protection Cabin
 - Personnel Capacity up to 14

Mobility

- ▶ Full independent suspension system
- Lockable latitudinal and longitudinal differential locks
- > Large diameter tires with wide tread area Anti-lock braking system



- Hydraulic Power assisted steering
- Operational between -32°C and +55°C
- Adjustable ergonomic driver and operator seat



Located in 1st Ankara Organize Industrial Area and has 75.000 m² open area and 25.000 m² closed area.

The Quality Principle of Nurol Makina ve Sanayi A.Ş is to maintain all sorts of needs and customer requirements at highest extent for all her products developed and manufactured. In the frame of this basic principle, by applying the requirements of our current Quality Management System open to development meticulously, our fundamental goal is to create the perfect and trustworthy product, to verify its' compatibility and to introduce it to the customer.



MINISTRY OF NATIONAL DEFENSE FACILITY SECURITY CLEARANCE CERTIFICATE











TS EN ISO 3834-2







(f) 💿 🕑 🗩 / nurolmakina

| Q | Organize Sanayi Bölgesi Avrupa Hun Cad. No:6 06935, Sincan / Ankara |
|-----------|--|
| C | +90 312 470 30 00-05 |
| - | +90 312 470 30 06-07 |
| \bowtie | marketing@nurolmakina.com.tr |
| | nurolmakina.com.tr |



-

Nurol Makina ve Sanayi A.Ş. is a Nurol Holding Company