

THE TG-MIL SERIES - MILITARISED TRUCK EXCELLENCE





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From military use to humanitarian aid and disaster relief: When it comes to logistics, reliability and efficiency are vital elements in keeping a complex organisation running and thus maintaining operational readiness. With such operations requiring personnel and goods need to be moved swiftly and efficiently, many users around the globe turn to Rheinmetall MAN Military Vehicles' Trucknology Generation series of militarised trucks, 'TG-Mil' for short.

As a primary choice for logistics in both domestic and low-threat mission environments, the TG-Mil truck series embodies a true family of vehicles from two to four axles.

Satisfied customers value exceptional parts commonality within the TG-Mil family and the advantages of MAN's worldwide service network.

Drawing from MAN's vast expertise in commercial truck development and manufacturing, current truck technology is complimented by flexible degrees of militarisation. Designed with attention to detail, the TG-Mil offers the best of both worlds.



## **BEYOND LOGISTICS**ON-BOARD BENEFITS

**Cost efficiency:** Thanks to a proven large-scale production and exceptional MAN quality standards, the TG-Mil offers the highest productivity levels and lowest lifecycle costs for all types of logistic applications.

**Tailored levels of militarisation:** Customer-specific degrees of militarisation meet real-life requirements while complying with the most demanding of military standards.

**State-of-the-art truck technology:** Latest safety features and innovations from commercial truck production can be integrated in the TG-Mil.

**Commonality:** In addition to the expected high levels of commonality across all axle/drive configurations, the TG-Mil also has a high level of parts commonality with RMMV's HX series of military trucks, the result being an

effortless exchange of spare parts and tools, as well as a reduction in training requirements. Fleets combining TG-Mil and HX variants are already in established service with various NATO members and partners.

Worldwide service network: Thanks to the genuinely worldwide network offered by the combination of MAN's commercial dealerships and Rheinmetall's defence footprint, you can expect first class in-service support for your TG-Mil trucks virtually anywhere, including operational environments.

Rheinmetall MAN Military Vehicles (RMMV) systems provider: Leveraging our vast experience with military and militarised truck series, RMMV is capable of offering complete systems solutions, including integration of C4I and other complex components.

























## FITTING THE MISSION VERSATILITY AT YOUR SERVICE

TG-Mil trucks are widely used for various cargo configurations for the transport of troops and materiel. However, the TG-Mil chassis is designed to readily accept various other superstructures, enabling the vehicle family to master a wide range of specialist roles. Be it recovery, heavy equipment transporter, system carrier, command and control, fire fighting, water or fuel tanker – there is probably no task a TG-Mil cannot fulfil. Additionally, the TG-Mil chassis can be used as the base for tactical armoured vehicles such as Rheinmetall's Survivor R.



### ATTENTION TO DETAIL MILITARY FEATURES

The TG-Mil series is qualified as a system for military customers worldwide. Scalable levels of militarisation meet the requirements for various operational scenarios.

### CABIN

- · Central seat which converts to standing gunner's platform
- · Rifle and individual weapon holder options
- Modular mounts for C4I and other equipment

### **ELECTRICAL SYSTEM**

- · Fully integrated blackout lighting according to STANAG
- · Night vision goggle compatible
- · NATO inter-vehicle start and trailer sockets
- · Enhanced EMC capabilities

### **EXTERIOR**

- · NATO shackles at front and rear
- · Military trailer coupling (K4D/KA3)
- · Self-recovery winch option
- · Protective grille for headlights and taillights



**OPTIONAL MILITARY ROOF** 

**PAINTWORK** 

MOBILITY

























### ON THE MOVE

### MILITARISED ENGINES AND DRIVETRAINS

**Hardened components:** TG-Mil aggregates are based on highgrade commercial truck components, adapted as needed and then qualified for military use where required.

#### Worldwide deployability with full power in all situations: All

TG-Mil engines are certified for prolonged operation on poor quality, high sulphur content diesel as well as standardised military single fuels (F34/F63). In contrast to commercial engines, no power reduction will occur when exhaust emission values are exceeded.

**Prepared for fording:** Dedicated sealed transmission components and drive axles, special brake linings, raised brake cylinder vents and purpose-built headlight casings are all standard fording preparations across the range.

**Enhanced EMC:** TG-Mil can if required offer superior levels of EMC protection and compliance conforming to military standards.



#### **MAN Engine**

- 6-cylinder common rail diesel engine
- Based on tried and tested commercial MAN technology
- Qualified for military and low-grade fuel operation
- MAN D08: up to 340 HP (250 kW) / 1,175 Nm
- MAN D20: up to 440 HP (320 kW) / 2,100 Nm
- MAN D26: up to 540 HP (400 kW) / 2,500 Nm
- Euro 3 EGR, Euro 5 SCR, Euro 6 EGR / SCR engines



#### **MAN Axles**

- MAN double reduction axles with planetary drive gear and mechanical differential locks
- Single or twin tyre configuration axle design
- 9t front steer-drive axle
- 13 t rear drive axles (16 t optional)



#### **MAN Transfer Case**

- MAN 2-speed transfer case
- Disengageable front-axle drive
- Options: permanent all-wheel drive / neutral position / disengageable power take-off



#### **Gearbox Options**

- 16-speed manual: the most cost-effective solution
- 12-speed automated: for reduced fuel consumption and driver fatigue, simplified driving for less experienced drivers, reduction in training effort
- 6-speed fully-automatic: for smooth vehicle operation in tough terrain and maximum traction





## GOING OFF-ROAD ADVANCED MOBILITY

Frame & suspension: Excellent driving comfort and safe handling for all vehicle load conditions both on- and off-road thanks to a body-friendly, low-torsion ladder frame. Parabolic leaf springs with heavy-duty shock absorbers and anti-roll bars master uneven terrain. An elevated chassis configuration provides for exceptional ground clearance and torsional twist.

**Tyres:** TG-Mil trucks accept large single tyres up to 14.00 R 20 on all axles to deliver a better ride quality and offer higher payloads. Reduced ground pressure, improved traction and increased ground clearance result in improved mobility especially in difficult terrain such as sand and soft ground. Tyre chains can be fitted. Semi-automatic and central tyre inflation systems are available to further enhance off-road mobility. Run flat inserts are another option.

**Fording:** TG-Mil trucks are able to cross rivers and streams up to 850 mm deep. They are designed for sustained operation in water up to 750 mm according to STANAG 2805. Optional military standard corrosion protection further protects the vehicle when exposed to the wet for longer periods of time.

**Climatic operational range:** With an operating temperature range of + 49°C down to -32°C, TG-Mil trucks can operate reliably in some of the hottest and coldest environments of the planet thanks to additional cooling and preheating devices.

Assistance systems: Electronic helpers such as a hill-holder, MAN's BrakeMatic® electronic anti-lock brake system with off-road logic, and a traction control system all add to the TG-Mil's safety and ease of operation.



### **INSIDE JOB**ERGONOMIC OPERABILITY

**Cabin sizes:** TG-Mil cabins offer state-of-the-art commercial comfort standards and ergonomic design adapted with easy-to-clean materials. They are available in either short or long versions, with room in larger cabs for additional seats, stowage space, military equipment or even a bunk. Uninterrupted, large windows and an additional window behind the B-pillar in combination with optional rear view cameras provide excellent situational awareness.

**Military roof:** The TG-Mil cabin features the option of a purpose-built steel military roof with a large circular hatch. The reinforced structure allows two soldiers to stand and work on the roof and provides outstanding carrying capacity for additional equipment such as weapon mounts, ammunition, antennas or extra batteries.

**Ergonomic design:** No matter the size of your cabin, spacious shelves and stowage compartments provide ample room for personal equipment and military accessories. Focusing on the needs of a military driver, all controls are clearly arranged and easy to access. All cabins are prepared to accept various C4I and similar equipment. Dashboards are available in either sand or grey colour.

**Seating options:** TG-Mil trucks offer a center seat that quickly converts into a stand for use with the optional military roof hatch. Larger TG-Mil cabins accept a bench seat for four persons in the rear of the cab, all equipped with proper backrests, head supports and three point belts. Multiple static and air-suspended seat options are available.

**Enhanced EMC:** Electromagnetic emissions throughout the vehicles comply with military standards.

















## **DESIGNED TO ENDURE**TESTING FOR DURABILITY

**Extensive endurance and off-road tests:** Diligent MAN testing already sets the commercial TG trucks up for a long service life. For militarised TG trucks, additional trials are conducted on top of MAN's commercial baseline testing. The result; a life-cycle of up to 20 years or 300,000 km, whilst complying with EU homologation standards.

**Easy maintenance:** Similar to the HX range of military trucks, the TG-Mil is designed with maintainability in mind. A tiltable cabin, easy access to engine, transmission, radiator, air-cleaner, hydraulic tank and other vital parts makes servicing the trucks easy even under operational conditions.

Functionality and simplicity: All components are engineered for maximum robustness to safeguard the operating time and to ensure high on-road and off-road performance even in worst conditions.

**100-percent performance:** The TG-Mil series is able to fulfil demanding requirements throughout their lifetime. Customers know they can rely on vehicles that meet exceptional design, testing and quality control standards resulting in life-long high mean time between failures.









## **ONE-STOP SHOP**RMMV CAPABILITIES

**More than cabin and chassis:** Leveraging Rheinmetall's vast expertise and product portfolio in active and passive protection, simulation, sensors and systems, RMMV delivers a complete truck system to the market.

**Production:** Vienna, Austria, is home to RMMV's Centre of Excellence for militarised trucks. It is here where a clocked production and flexible processes give birth to our vehicles. Full in-house militarisation ensures the highest quality during the production process.

**System integration:** Facility capabilities range from building chassis, integrating C4I and protection systems and bodies, down to processing of military paints, wax and camouflage patterns. RMMV has a well–established production network with certified long-term partners. From superstructures to mission kits and additional systems the customer has a single point of contact.

**Localisation:** Shifting certain activities to your country depending on local competences and customer needs is feasible in RMMV's global production network. High quality is sustained by an integrated manufacturing, quality control and delivery process.



## **TAILOR-MADE**SERVICE SOLUTIONS

Fleet management services: Tailor-made services improve cost-effectiveness and efficiency allowing you to concentrate on core tasks. From managing servicing and overhaul programs, conducting logistics analysis to improve spares stock management and fleet availability and managing technical upgrades, we are ready to support customers to optimise the support of their fleets.

Through life support: RMMV works as a partner for our customers to provide comprehensive through life support to support the vehicle capabilities from acquisition to disposal. We develop with our customers service networks, utilising existing OEM networks wherever available, to ensure that cost effective logistic solutions such as supply of spare parts, maintenance and engineering upgrades are available through the full product life cycle.







# AT A GLANCE TG-MIL KEY CHARACTERISTICS

Operational temperature range:	+49°C to -32°C (A1 to C1)
2. Gradient:	60%
<b>3.</b> Side slope:	30%
4. Range:	>800 km
<b>5.</b> Speed:	90 km/h, optional: 100 km/h
<b>6.</b> Fording depth:	750 mm according to STANAG 2805; 850 mm according to EN1846
<b>7.</b> EMC:	enhanced
8. Emissions compliance:	up to Euro 6d
9. Engine:	up to 540 hp (400 kW)
<b>10.</b> Transmission:	manual, automated or fully automatic options
<b>11.</b> Transfer case:	2-speed plus neutral
<b>12.</b> Fuel:	Diesel EN590 or F34 with up to 3,000 ppm sulphur content
<b>13.</b> Suspension:	parabolic leaf springs
<b>14.</b> Tyres:	single tyre options including 14.00 R 20, 395/85R 20 or 525/65R 20.5.*
<b>15.</b> Tyre Inflation:	semi-automatic or central tyre inflation system
<b>16.</b> Wheelbase:	multiple options available
17. Vehicle power:	24V up to 2x225Ah (4×12V 100 Ah military batteries optional)
<b>18.</b> Alternator:	up to 120 Amp
<b>19.</b> Winch:	optional
<b>20.</b> GVW:	up to 41 t
<b>21.</b> GTW:	up to 250t







<sup>\*</sup>Twin tyre options available

### Rheinmetall MAN Military Vehicles GmbH

Dachauer Straße 651 80995 Munich, Germany

www.rheinmetall-defence.com