



**MENATEK**  
Defense Technologies

30<sup>th</sup> year

# **CAPABILITY BOOK**

**FOR THE FIELD**

**ON THE FIELD**

[www.menatek.com.tr](http://www.menatek.com.tr)





**MENATEK**  
Defense Technologies

**30<sup>th</sup> year**



**30** *years*

**MICRO ACCURACY, MACRO STRENGTH**

**MENATEK Defense Technologies**  
**CAPABILITY BOOK**

CONTENT



MENATEK CAPABILITY BOOK

# Content

# CONTENT

<b>1. Who we are</b> .....	1
MENATEK Infographic.....	8
MENATEK History.....	9
<b>2. About Us</b> .....	13
Corporate.....	14
Engineering.....	15
Strategic.....	16
Focus Sectors.....	17
<b>3. Capabilities</b> .....	19
MENATEK: The Engineering House.....	21
Design.....	23
Manufacturing.....	25
Manufacturing Subsystem and Components.....	27
Quality & Certificates.....	31
Customized Test Systems.....	33
Supply Chain Management.....	35
After Sales Services.....	37
MRO&U.....	39
Localization.....	43
<b>5. Platforms</b> .....	45
Critical Parts on Platforms.....	47
<b>6. Special Products</b> .....	49
Running Gear.....	57
NAZ Bearings.....	59
Torsion Bar.....	67
Track Shoe.....	71
Menatrack.....	75
Barrel.....	79





WHO WE ARE



MENATEK CAPABILITY BOOK

**WHO WE ARE**

**MENATEK**



**MENATEK**  
Defense Technologies

**30<sup>th</sup> year**



Founded in  
**1995**



Total area  
**3,900 m<sup>2</sup>**



## **Dynamic and proficient**

Team  
100 Employee | 55 Engineer



**30 years**  
of industry experience



Export to  
**45+ countries**  
International presence



**Major clients**  
Turkish Army, US Army, NATO Units & Global OEMs



## **USA Prime Contractor**

The only Turkish company working with the US Government since 2006  
**Cage Code (T1978)**



Operations comply with  
**NATO standards**



**Solution partner**  
with comprehensive capabilities

WHO WE ARE



MENATEK CAPABILITY BOOK

## MENATEK History

### Establishment

1995

Supply to Turkish Army

Supply to US Army

2000

Supply to NSPA

2002

Strategic Support to ARMY MROs

2008

Strategic Supplier of Global OEMs & Vehicle Manufacturers

2015

Establishment of R&D Department

2017

First Product of NAZ Bearings®

2018

Foundation of WOLARF

New MENATEK HQ

2021

New Quality - Test - Metalography Lab

Expanded capabilities to include Former Soviet Equipment systems

2022

Adapting to WOLARF System

2023

Collab with DuPont Trade & License Agreement for NAZ Bearings®

2024

Launching 3-year Strategic Plan (2025-2028)

2025

Received the Award in the "SME Export Champions" category (Small and Medium-sized Enterprises) at the Global Strategies Conference organized by the Presidency of Defense Industries (SSB).

Menatek 30<sup>th</sup> year GALA celebration

Successfully completed AS9100 certification

WHO WE ARE



MENATEK CAPABILITY BOOK

# MENATEK Defense Technologies,

More than a company — a legacy of precision, innovation, and trust.

**CELEBRATING 30 YEARS OF EXCELLENCE**, Menatek — founded in 1995 in Istanbul— has evolved into a global leader in defense engineering, specializing in the **Design, Manufacturing, Quality&Testing, Supply Chain Management**, and **After Sales Support** of critical components for land platforms.

Built on strong family values and a forward-looking vision, Menatek serves the **Turkish Army, NATO Nations, the U.S. Army, NSPA, European Allies, and Key Defense Partners** across the globe—**exporting to over 45 countries worldwide**.

We are proud to supply critical components to the **U.S. Army** and **NSPA**, operating under **Cage Code 1978** as a recognized and trusted supplier. Menatek is also a strategic partner to **Global OEMs and Vehicle Manufacturers**, and provides essential support to **Army MROs** through engineering know-how, responsive logistics, and integrated solutions.

Our ability to localize and nationalize defense technologies not only strengthens Turkey's defense industrial base but also enhances the operational readiness of our international partners.

**Menatek delivers more than components** — we provide fully integrated engineering and manufacturing solutions that meet the highest military and industrial standards. Our strength lies in bridging innovation with real-world application, combining technical excellence with operational reliability.

In **2024**, our strategic collaboration with **DuPont** led to the launch of **NAZ Bearings®**, a breakthrough innovation expanding our reach into **Aerospace, Wind Energy, and other advanced industrial sectors**. This partnership reflects our commitment to pushing technological boundaries and exploring new frontiers.

As part of our continuous improvement and commitment to excellence, **we have successfully completed the AS9100 certification process**. All our processes are managed in accordance with this internationally recognized quality management system, ensuring consistent, high-level performance in every project we undertake.

At Menatek, we are guided by a clear mission:

**To innovate, to localize, and to elevate the defense industry — for Turkey and the world.**

**As we continue to grow, our commitment remains unchanged:**  
**To deliver high-quality, reliable, and future-ready solutions to our partners worldwide.**

WHO WE ARE



MENATEK CAPABILITY BOOK



TİM  
TÜRKİYE  
İHRACATÇILAR  
MECLİSİ



# SAVUNMA & HAVACILIK



ABOUT US



MENATEK CAPABILITY BOOK



30 OCAK - 02 ŞUBAT 2025 - ANTALYA  
**SAVUNMA & HAVACILIK**  
SANAYİNDE KÜRESEL STRATEJİLER  
KONFERANSI

TİM  
TÜRKİYE  
İHRACATÇILAR  
MECLİSİ



KOBİ İHRACAT ŞAMPİYONLARI

MENATEK SAVUNMA TEKNOLOJİLERİ SAN. TİC. A.Ş.



SHIPYARD

Qsr



**MENATEK**  
Defense Technologies

**30<sup>th</sup> year**

2025

***RECEIVED THE AWARD***  
***IN THE***  
***"SME EXPORT CHAMPIONS"***

(Small and Medium-sized Enterprises) at the Global Strategies Conference  
organized by the Presidency of Defense Industries (SSB).

ABOUT US



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ABOUT US



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# About Us



# Corporate



## Establishment

Founded in 1995 in Istanbul, MENATEK operates on a total area of 3,900 m<sup>2</sup>



## Team

A dynamic and competent workforce  
A strong team with a total of 100 employees, including nearly 55 engineers



## International Presence

A broad presence in the global market with exports to over 45+ countries



## Key Customers

Turkish Armed Forces, The U.S. Army, NATO Units, and global OEMs,  
The only Turkish company working with the U.S. Government since 2006



## Compliance with NATO and Western Standards

Our operations are conducted in full compliance with NATO and international standards.

ABOUT US



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# Engineering

ABOUT US



MENATEK CAPABILITY BOOK

## Deep Engineering and Technical Expertise

High-quality production capacity supported by comprehensive engineering knowledge and advanced analytical capabilities.



## Shaping Materials

The ability to process various materials with high precision, achieving the desired form and functionality.



## Strong Supply and Process Management

Efficient process management through reliable supply chain management and process optimization.



## Technical Drawing and Prototyping

Proficiency in reading technical drawings and developing innovative prototypes.



## Mechanical Design Competence

Advanced mechanical design and engineering solutions.



# Strategic



## **Business Development and Strategic Growth**

A strategic approach that supports continuous growth and new business opportunities.



## **Flexibility and Adaptation**

The ability to quickly adapt to changing conditions and maintain operational flexibility.



## **Solution-Oriented Approach and Business Partnership**

Serving as a reliable solution partner for customers with extensive competencies.



## **Rapid Response**

The ability to provide quick and effective solutions to customer demands, ensuring immediate fulfillment of needs.



## **Network**

The capability to build sustainable collaborations and create new opportunities through a broad and strong business network.



ABOUT US



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# Focus Sectors



**LAND**



**NAVY**



**AERO-  
SPACE**



**HEAVY  
DUTY**  
VEHICLES &  
MACHINERY



**RAILWAY**



**ENERGY**

ABOUT US



MENATEK CAPABILITY BOOK

# ***CAPABILITIES & SERVICES***

***THE ENGINEERING HOUSE***

CAPABILITIES



MENATEK CAPABILITY BOOK



**MENATEK** | The Engineering House

At Menatek, we do more than just manufacture—we engineer the future. With our end-to-end capabilities, we provide comprehensive solutions tailored to the needs of the defense industry. From design to after-sales services, every step is guided by precision, innovation and excellence.



CAPABILITIES



MENATEK CAPABILITY BOOK

MENATEK:

# The Engineering House



1

## Design

Every great product starts with an idea and at Menatek, **we turn ideas into reality**. Our engineering expertise enables us to develop cutting-edge designs with advanced analysis, simulations, and modeling. Whether it's designing critical components or optimizing existing systems, our team ensures efficiency, durability, and superior performance in every solution.

4

## Supply Chain Management

**A strong supply chain is the backbone of seamless operations.** At Menatek, we excel in supply chain management, ensuring timely procurement, streamlined logistics, and cost-effective solutions. Our global network and strategic partnerships enable us to source the best materials while maintaining full compliance with international regulations.

2

## Manufacturing Excellence

With high-precision production capabilities, **Menatek transforms raw materials into mission-critical components.** Our manufacturing processes adhere to the highest industry standards, ensuring exceptional quality, consistency, and reliability in every part we produce.

5

## After-Sales Services

**Our commitment doesn't end with production.** Menatek offers **comprehensive after-sales support**, including maintenance, repairs, and technical assistance. Whether it's ensuring long-term performance or providing rapid solutions, we stand by our partners every step of the way. With a holistic approach to engineering, Menatek is more than a manufacturer—it is The Engineering House that drives innovation, excellence, and reliability in the defense industry.

3

## Quality & Testing

**In the defense industry, there is no margin for error.** That's why Menatek implements rigorous quality control measures at every stage. Our in-house testing and validation processes ensure that every component meets NATO and international standards, guaranteeing flawless performance in the most demanding environments.

CAPABILITIES



MENATEK CAPABILITY BOOK

## We turn ideas into reality

Design

Manufacturing

Quality & Test

Supply Chain

After Sales



CAPABILITIES



MENATEK CAPABILITY BOOK

**FOR THE FIELD  
ON THE FIELD**

# 1

# DESIGN

## Our Core Capability

*At Menatek, design is the foundation of innovation. With a deep technical expertise and a solution-driven approach, we create high-performance systems that meet the evolving needs of the defense industry. From product development to localization, our design capabilities ensure efficiency, reliability, and excellence at every stage.*

CAPABILITIES



MENATEK CAPABILITY BOOK

### Product Development

Our product development team designs advanced solutions that meet the most demanding operational requirements, ensuring durability, precision, and superior functionality in every component.

### R&D

With a **forward-thinking mindset**, our R&D efforts focus on continuous improvement and cutting-edge innovation. We integrate the latest engineering methodologies and technological advancements to enhance system capabilities and develop next-generation solutions for modern defense challenges.

### Localization

**Global standards, local expertise.** Menatek specializes in localizing critical defense components, reducing dependency on foreign suppliers while ensuring full compliance with NATO and international standards. Our expertise in localization strengthens domestic production capabilities without compromising quality or performance.

### Technical Data Generation

Through in-depth analysis and precision engineering, we generate detailed technical data that enables the reproduction of essential components with high accuracy. By leveraging advanced measurement, modeling, and validation techniques, we provide seamless integration and operational compatibility for mission-critical systems.

# DESIGN CAPABILITY

CAPABILITIES



MENATEK  
CAPABILITY BOOK

# 2

# MANUFACTURING

## Our Core Capability

*At Menatek, manufacturing is where precision meets performance. Leveraging advanced production technologies and rigorous quality standards, we deliver mission-ready components for the world's most demanding defense platforms. From prototyping to full-scale production, our manufacturing capabilities ensure consistency, durability, and uncompromising excellence every time.*

CAPABILITIES



MENATEK CAPABILITY BOOK

### Subsystem & Components

Engineered with mastery, manufactured with precision—Menatek delivers mission-critical subsystems and components through [over 500 proven processes](#).

More than **500** process

### Build to Print

From data to reality—Menatek turns complex drawings into fully functional parts with unmatched accuracy and speed.

Over **30,000** existing data.  
Anything can be manufactured  
according to data packs.

**CASTING**

**FORGING**

**CNC MACHINING**

**GEAR MANUFACTURING**

**COLD FORMING**

# **MANUFACTURING CAPABILITY**

**Subsystem & Components  
Build to Print**



CAPABILITIES



MENATEK CAPABILITY BOOK

**consistency, durability, and  
uncompromising excellence  
every time.**

CAPABILITIES



MENATEK CAPABILITY BOOK

# Manufacturing Subsystems & Components

# Precision in Every Part, Strength in Every Mission

*At Menatek, we engineer durability, precision and performance for military land platforms. With our advanced manufacturing expertise, we produce critical subsystems and components that ensure operational superiority in the most demanding environments. From suspension to powertrain, braking to lubrication, every component we manufacture is built for uncompromising reliability and endurance.*

- ❖ **Suspension Systems**
- ❖ **Running Gear**
- ❖ **Powertrain Components**
- ❖ **Brake Systems**
- ❖ **Heating & Cooling Systems**
- ❖ **Lubrication Systems**
- ❖ **Chassis Components**
- ❖ **Other Components**

CAPABILITIES



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**MENATEK**  
Defense Technologies  
30<sup>year</sup>

# Subsystems & Components



## Suspension Systems

Menatek's high-performance suspension components are designed to **maximize vehicle stability, maneuverability and durability**. These components ensure optimal shock absorption and load distribution, enhancing mission capability in **extreme conditions**.

Menatek designs and manufactures a wide range of suspension components:



Rotary Damper



Torsion Bar



Support Arm



Support Arm Assembly



Linear Damper



Suspension Housing



## Running Gear

Our running gear solutions provide reliable mobility and extended service life for tracked military vehicles, **ensuring superior traction on any terrain**.

Menatek offers a **broad selection of running gear components**:



Idler Arm



Track Adjuster



Track Shoe Body



Sprocket Assembly



Rim



End Connector

CAPABILITIES



MENATEK CAPABILITY BOOK

# From Critical Parts to



## Powertrain Components

Menatek's **powertrain components** are built to deliver **efficient power transmission and durability**, ensuring seamless performance in high-stress military operations.

We manufacture a comprehensive range of **powertrain components**:



Power Take-Off (PTO)



Cam Stator



Planetary Gears



Lubrication Cover



Engine Cover



Final Drive Assembly



Lamelle



Transmission Cover



## Brake Systems

Our **high-durability braking solutions** provide reliable stopping power, enhancing safety and vehicle control in demanding operational environments.

Menatek develops and supplies various **brake system components**:



Brake Ring Assembly



Brake Linings

# Subsystems & Components



## Heating & Cooling Systems

Menatek's **thermal management solutions** prevent overheating and ensure continuous operational efficiency. We provide a diverse selection of **heating and cooling components**:



Radiator



Dust Blower



NBC Cooler



Fan Housing



Axial Fan



Additional Dust Blower



## Lubrication Systems

Our **lubrication components** are designed to ensure **smooth engine operation and increased longevity**. Menatek manufactures a variety of **lubrication components**:



Engine Oil Pump



Pump



Pump



Liquid Pump Body



Water Pump

CAPABILITIES



MENATEK CAPABILITY BOOK

# Complete Performance



## Chassis Components

Menatek produces **high-strength chassis components** that provide **structural integrity and durability** under extreme mechanical stress. Our **chassis components**:



Control Arm



Roll Bar



Structural Frame



Control Arm



Steering Gear Assembly



Suspension Bracket



## Other Components

Beyond core subsystems, Menatek supplies **customized and high-precision components** to support a variety of military vehicle applications. We offer an extensive range of **additional components**:



Gearbox Body



Cylinder Head



Fuel Tank Fillers



Various Other Components

CAPABILITIES



MENATEK CAPABILITY BOOK

# ***QUALITY & CERTIFICATES***

# 3

## ***OUR QUALITY POLICY***

### **Our Core Capability**

- To prepare the necessary infrastructure for the implementation of the quality system and the participation of employees in the system,
- To provide products and services in accordance with national and international standards and legal requirements with the principle of continuous improvement in a timely and desirable quality in order to meet the changing and developing needs of our customers,
- To continuously improve the Quality System by continuously monitoring technology and using the necessary resources to incorporate innovations into the company structure,
- To adopt continuous improvement of systems as a way of life in order to be innovative and competitive by setting measurable targets at every stage of the processes,
- To provide products and services that will provide the highest benefit to our customers as the best solution partner and to ensure customer satisfaction as an organization that makes significant contributions to the national economy and is aware of its responsibilities towards society and the environment.



## ***QUALITY SYSTEM / CERTIFICATES***



**ISO 9001**



**AS 9100**



**NATO Security Clearance**



**CMMC Level-2** *Cybersecurity Maturity Model Certification granted by the US Department of Defense (DoD)*

CAPABILITIES



MENATEK CAPABILITY BOOK

# ***CUSTOMIZED TEST SYSTEMS***

# 3 CUSTOMIZED TEST SYSTEMS

## Our Core Capability

Validation

Verification

Qualification

Endurance

### Turn-Key Test Systems

Custom Test Unit Design, Manufacture, Installation and Training for;

- Engine,
- Transmission,
- Power-Pack
- Gear Box,
- Damper (Hydro-pneumatic, Rotary and others)
- Pump (Gear, Centrifugal and others)
- Electric Motor,
- Accumulator,
- And many other Mechanical, Electro-Mechanical and Hydraulic Components.

CAPABILITIES



MENATEK CAPABILITY BOOK

### Transmission Testing



### Transfer Case Test Bench



### Torsion Bar Test Bench



### Engine Testing



# 4

# ***SUPPLY CHAIN MANAGEMENT***

## **Our Core Capability**

**Menatek subcontracts its suppliers only on process level. We maintain a broad and diversified network of over 1,500 qualified and approved suppliers,** ensuring maximum flexibility, efficiency, and reliability in all procurement activities.

**With 30 years of strategic supplier collaboration,** Menatek has built a **sustainable and resilient supply chain** that supports long-term operational continuity and responsiveness in complex defense programs.

Menatek successfully manages **approximately 500 concurrent production processes,** ranging from precision machining to advanced assembly, and assumes **full quality responsibility** for every component delivered.

This robust supplier ecosystem—fully integrated with Menatek’s engineering, quality, and logistics infrastructure—enables the seamless execution of high-mix, high-complexity projects with consistency, speed, and confidence.

CAPABILITIES



MENATEK CAPABILITY BOOK

## ***TOTAL 1,500 SUPPLIER***

### **PROCESS**



### **RAW MATERIALS**



### **PARTS**





# ***SUPPLY CHAIN MANAGEMENT***

CAPABILITIES



MENATEK CAPABILITY BOOK

***Total 1.500 Suppliers***  
***Broad and Diversified Network***  
***~500 Production Process***

CAPABILITIES



MENATEK CAPABILITY BOOK

# **AFTER SALES SERVICES**

# 5 **AFTER SALES SERVICES**

## **Beyond Delivery, Committed Always**

*More than production—Menatek stands by its partners with comprehensive after-sales solutions for lasting success.*

**Our commitment doesn't end with production.** Menatek provides **comprehensive after-sales support**, including **maintenance, repairs, and technical assistance**. Whether it's sustaining long-term performance or delivering rapid solutions, **we stand by our partners every step of the way**. With a **holistic engineering approach**, Menatek is more than just a manufacturer—it is The **Engineering House** that drives **performance, precision, and trust** across the defense industry.

CAPABILITIES



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**Beyond support—building trust that lasts**

CAPABILITIES



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# **MRO & U**

**MAINTENANCE**

**REPAIR**

**OVERHAUL**

**UPGRADE**

# MRO & U

## Maximizing Performance, Ensuring Readiness

*From production to operational readiness — we lead the full mission lifecycle. At Menatek, we ensure the longevity, reliability, and peak performance of defense platforms through our Maintenance, Repair, Overhaul, and Upgrade (MRO&U) services.*

Our expertise covers **complete system overhauls**, **performance-enhancing upgrades**, and component-level restorations, guaranteeing that **mission-critical vehicles remain battle-ready and operationally efficient** at all times.

Backed by **30 years of industry experience** and a proven track record in military sustainment programs, Menatek offers **tailored MRO&U solutions** fully aligned with **NATO standards** and **NSPA frameworks**. Our dedicated MRO teams combine deep technical know-how with **rapid deployment capabilities**, responding swiftly to urgent field requirements across a wide range of operational environments.

Some of our MRO capabilities include:

- **Engine**
- **Transmission**
- **Suspension System**
- **Running Gear**
- **Differentials**
- **Chassis**
- **Brake System**
- **Electrical & Electronical System**
- **Armor**
- **Vast Selection of Spare Part**

CAPABILITIES



MENATEK CAPABILITY BOOK



# Ensure Readiness & Enhance Capability

*Thanks to our globally integrated logistics and support network, we provide scalable and reliable service with worldwide reach and mobility — ensuring effective support wherever our partners operate. At Menatek, we don't just extend platform life — we ensure mission success through precision, agility, and total lifecycle support.*

## NATO PLATFORMS

## FORMER SOVIET PLATFORMS

CAPABILITIES



MENATEK CAPABILITY BOOK



M113



M1 ABRAMS



M2 BRADLEY



M60



M109



M110



M88



LEOPARD 1



LEOPARD 2



HMMWV

T-72



T-80



T-64



T-55



SHILKA



TUNGUSKA



BMP 1-2-3



Thanks to our engineering expertise, advanced facilities, and tailored solutions, **we can support a wide variety of tracked and wheeled military vehicles**, ensuring optimal performance and mission readiness in any operational environment.

With state-of-the-art facilities, expert engineers, and a mission-driven approach, Menatek delivers end-to-end MRO&U solutions that extend the life cycle of armored vehicles, ensuring unmatched reliability in the field. **Ready to restore, upgrade and reinforce your fleet? [Menatek is your trusted MRO&U partner.](#)**

# MENATEK: Your trusted MRO&U partner

CAPABILITIES



MENATEK CAPABILITY BOOK

**Maintenance**

**Repair**

**Overhaul**

**Upgrade**

CAPABILITIES



MENTATEK CAPABILITY BOOK

# **LOCALIZATION**

**LOCAL PARTNERSHIP**  
**LOCAL CAPACITY DEVELOPMENT**  
**TALENT DEVELOPMENT**

# LOCALIZATION

## Strengthening Domestic Capabilities

*At Menatek, localization means building sustainable capabilities that deliver long-term value across the defense industry. We focus on developing core competencies in engineering, manufacturing, testing, and lifecycle support—ensuring that these capabilities are scalable, adaptable, and ready for complex mission requirements.*

We believe in the power of **strategic alliances** to multiply impact. The technologies, systems, and know-how we develop are structured to be transferred and integrated into collaborative frameworks. This allows our partners to gain direct access to proven capabilities, accelerating their development timelines and improving interoperability. Through this approach, Menatek enables its partners to strengthen their defense platforms with reliable, high-performance solutions. From **joint programs** to **capability integration and collaborative support**, we create structures that foster shared resilience, technical autonomy, and long-term operational success.



### Local Partnership

**Strong local partnerships** drive innovation and sustainability. **Menatek enhances local expertise while maintaining global standards.** Our commitment to long-term cooperation ensures a robust supply chain and continuous technological advancement.

### Local Capacity Development

Developing domestic production and engineering capabilities is key to **national security and economic growth.** Menatek actively contributes to increasing local manufacturing competencies, **reducing dependency on foreign suppliers, and creating cost-effective, high-quality solutions** that align with NATO and international standards. Menatek is shaping the future of defense by fostering **self-reliance**, innovation, and long-term sustainability within the industry.

### Talent Development

The foundation of a strong defense industry lies in its people. **Menatek invests in training, education and knowledge transfer,** fostering the next generation of engineers, technicians, and specialists. Through strategic skill-building initiatives, we empower **local talent to develop and sustain critical defense technologies.**

**NATO**

**PLATA**



**M113**



**M1 ABRAMS**



**M2 BRADLEY**



**M60**



**M109**



**M118**



**M88**



**LEOPARD 1**



**LEOPARD 2**



**HMMWV**

PLATFORMS



MENATEK CAPABILITY BOOK

# FORMS

## FORMER SOVIET EQUIPMENT

**T-72**



**T-80**



**T-64**



**T-55**



**SHILKA**



**TUNGUSKA**



**BMP 1-2-3**



PLATFORMS



MENATEK CAPABILITY BOOK



PLATFORMS



MENATEK CAPABILITY BOOK

# ***CRITICAL PARTS ON PLATFORMS***

# CRITICAL PARTS ON PLATFORMS



## M113

	NSN	Name
1	12253610	IDLER ARM ASSY
2	2510-01-061-7390	TORSION BAR,SUSPENSION
3	2510-01-061-7391	TORSION BAR,SUSPENSION
4	2510-01-621-2974	SHOCK ABSORBER,DIRECT ACTION
5	2520-01-067-8933	FINAL DRIVE,VEHICULAR
6	2530-01-070-9506	ARM ASSEMBLY,PIVOT,TRACK SUSPENSION
7	2530-01-278-7864	ARM ASSEMBLY,PIVOT,TRACK SUSPENSION
8	2530-01-278-7865	ARM ASSEMBLY,PIVOT,TRACK SUSPENSION
9	2530-01-278-7866	ARM ASSEMBLY,PIVOT,TRACK SUSPENSION
10	2530-12-340-6288	ARM ASSEMBLY,PIVOT,TRACK SUSPENSION
11	2530-12-340-6291	ARM ASSEMBLY,PIVOT,TRACK SUSPENSION
12	2530-12-340-6293	ARM ASSEMBLY,PIVOT,TRACK SUSPENSION
13	3010-01-485-0432	DRIVE UNIT,ANGLE
14	3020-12-337-9759	SPROCKET WHEEL
15	11677988-4	TRACK ASSEMBLY
16	11677988-5	TRACK ASSEMBLY
17	11677988-6	TRACK ASSEMBLY
18	12474844-1	TRACK ASSEMBLY
19	12474844-2	TRACK ASSEMBLY
20	12474844-3	TRACK ASSEMBLY
21	2130-00-767-7881	RADIATOR
22	2510-00-679-7965	TORSION BAR,SUSPENSION
23	2510-00-679-7966	TORSION BAR,SUSPENSION
24	2510-01-028-8573	SHOCK ABSORBER,
25	2510-01-370-8933	TORSION BAR,SUSPENS
26	2510-01-370-8934	TORSION BAR,SUSPENS
27	2520-00-678-8382	WHEEL,SPROCKET
28	2520-00-679-7956	SPROCET WHEEL
29	2520-00-679-7960	WHEEL SPROCET
30	2520-00-711-8382	DRIVE ASSY,FINAL
31	2520-00-895-9164	FINAL DRIVE ASSEMBLY
32	2520-01-061-5766	FINAL DRIVE ASSEMBLY
33	2530-00-004-0761	TRACK SHOE,VEHICULA
34	2530-00-020-2280	TORSION BAR, SUSPENSION

PLATFORMS



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**These are only examples; the complete parts database consists of 45,000 parts.**

**Explore our extended NSN portfolio at  
[www.menatek.com.tr](http://www.menatek.com.tr)**

# CRITICAL PARTS



## M88

#	NSN	Name
1	3715489	ARM ASSEMBLY,SUSPEN RIGHT
2	8335106	ARM ASSEMBLY,PIVOT,
3	8676195	TRACK ASSEMBLY
4	8715488	ARM ASSEMBLY,SUSPEN LEFT
5	10905981	ARM ASSEMBLY,IDLER
6	2510-00-678-4150	ANCHOR,TORSION BAR
7	2510-00-703-5899	TORSION BAR,SUSPENS
8	2510-00-703-5900	TORSION BAR,SUSPENS
9	2520-00-678-7032	FINAL DRIVE ASSEMBL RIGHT
10	2520-00-896-9021	FINAL DRIVE ASSEMBL RIGHT
11	2530-00-091-9705	ARM ASSEMBLY,SUSPEN LEFT
12	2530-00-122-6826	M88A1 (T107) Series (Complete Track Chain)
13	2530-00-619-9713	ARM ASSEMBLY,PIVOT, LEFT
14	2530-00-629-2179	ARM ASSEMBLY,PIVOT, RIGHT
15	2530-00-692-9316	TRACK SHOE,VEHICULA
16	2530-00-782-4265	ARM ASSEMBLY,PIVOT
17	2530-00-832-5258	ARM ASSEMBLY,PIVOT,
18	2530-00-871-2854	ARM ASSEMBLY,IDLER
19	2530-01-161-5336	TRACK ASSEMBLY
20	2533-00-692-9316	TRACK SHOE,VEHICULAR
21	2540-01-031-0132	TOWBAR, MOTOR VEHICL
22	2540-01-181-6429	TOWBAR, MOTOR VEHICL
23	2540-01-267-2912	TOWBAR, MOTOR VEHIC
24	3010-00-832-5813	DRIVE UNIT,ANGLE
25	3020-00-293-5136	SPROCKET WHEEL
26	4310-00-255-0435	ARM ASSEMBLY,SUSPEN RIGHT

PLATFORMS



MENATEK CAPABILITY BOOK

**These are only examples; the complete p**

**Explore our extended NSN por**

# S ON PLATFORMS



## M1 ABRAMS

	NSN	Name
1	1015-01-180-3512	BRAKE ASSEMBLY
2	1240-01-390-4980	PERISCOPE,ARMORED VEHICLE
3	2510-01-063-5838	TORSION BAR
4	2510-01-345-8881	TORSION BAR,SUSPENS
5	2510-01-345-8882	TORSION BAR,SUSPENS
6	2510-01-350-7070	SHOCK ABSORBER,DIRECT ACTION
7	2530-01-179-1416	IDLER ARM
8	2530-01-179-1417	ARM ASSEMBLY,PIVOT,
9	2530-01-345-8887	M1 TRACK TENSION DEVICE
10	2530-01-435-5175	TRACK SHOE ASSEMBLY
11	2530-01-531-9543	ARM ASSY
12	2530-01-533-9159	ARM ASSEMBLY,PIVOT,TRACK SUSPENSION
13	2530-01-588-7023	ARM ASSEMBLY,PIVOT,
14	2530-01-588-7026	ARM ASSEMBLY,PIVOT,
15	3010-01-069-0484	DRIVE UNIT, ANGLE
16	2530-01-345-8888	TRACK ADJUSTER
17	3020-01-518-3215	SPROCKET WHEEL



## M2 BRADLEY

	NSN	Name
1	2510-01-102-3560	Torsion Bar
2	2510-01-102-4722	Torsion Bar
3	2510-01-102-4723	Torsion Bar
4	2510-01-102-4724	Torsion Bar
5	2510-01-108-5304	Torsion Bar
6	2510-01-108-5305	Torsion Bar
7	2520-01-633-2049	Final Drive
8	2530-00-283-4910	LINK,TRACK SHOE,CONNECTING
9	2530-01-102-4540	TRACK ADJUSTER
10	2530-01-214-1114	Idler Arm
11	2530-01-310-2237	Road Wheel
12	2530-01-442-9686	Track Shoe, Vehicular
13	2530-01-587-6762	Link Track Shoe
14	2540-01-312-4730	Suspension
15	2541-01-302-7685	PERISCOPE,TANK
16	2590-01-289-6366	Support Roller
17	3020-01-102-4684	Sprocket Wheel
18	3020-01-589-6739	Sprocket Carrier
19	3040-01-102-4531	Idler Wheel
20	3040-01-102-4532	Idler Wheel
21	6650-01-302-7684	PERISCOPE,TANK

PLATFORMS



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parts database consists of 45,000 parts.

Portfolio at [www.menatek.com.tr](http://www.menatek.com.tr)

# CRITICAL PARTS



## M109

#	NSN	Name
1	11593743	ARM ASSEMBLY,PIVOT
2	12361559-2	ARM ASSEMBLY,PIVOT
3	2510-00-871-2886	Torsion Bar
4	2510-01-300-0224	TORSION BAR,SUSPENS
5	2510-01-300-0225	TORSION BAR,SUSPENSION
6	2510-01-300-0226	TORSION BAR,SUSPENS
7	2510-01-300-0227	TORSION BAR,SUSPENS
8	2510-01-303-2933	SHOCK ABSORBER
9	2520-00-964-9203	FINAL DRIVE
10	2530-00-008-8821	Torsion Bar
11	2530-00-008-8822	Torsion Bar
12	2530-00-083-5619	Torsion Bar
13	2530-00-088-1686	Torsion Bar
14	2530-00-537-0430	Arm Assy
15	2530-00-871-2886	Torsion Bar
16	2530-00-871-2887	Torsion Bar
17	2530-00-939-7113	WHEEL,IDLER
18	2530-01-346-9233	Track Assembly T-154
19	2930-01-038-3666	Radiator, Engine Coolant
20	2930-01-308-9191	RADIATOR,ENGINE COO
21	3010-01-287-0742	Drive unit, Angle
22	3020-00-293-5136	Sprocket Wheel
23	3020-01-339-0564	SPROCKET WHEEL

PLATFORMS



MENATEK CAPABILITY BOOK

**These are only examples; the complete p**

**Explore our extended NSN por**

# S ON PLATFORMS



#	NSN	Name
1	2510-00-040-0858	TORSION BAR, SUSPENS, RIGHT,
2	2510-00-040-0859	TORSION BAR, SUSPENS, LEFT, COUNTER
3	2510-00-179-5526	SHOCK ABSORBER,DIRE
4	2510-00-752-8974	TORSION BAR,SUSPENS
5	2510-00-752-8976	TORSION BAR,SUSPENS
6	2510-00-752-8981	TORSION BAR,SUSPENS
7	2510-00-752-8983	TORSION BAR,SUSPENS
8	2520-01-023-3719	CARRIER,FINAL DRIVE
9	2520-01-058-1161	FINAL DRIVE ASSEMBL
10	2530-00-004-2301	ARM ASSEMBLY,PIVOT,
11	2530-00-150-5897	TRACK SHOE, VEHICULA
12	2530-00-337-6969	M60 (T142) Series (Complete Track Chain)
13	2530-00-678-3147	ARM ASSY, ROAD WHEEL
14	2530-00-800-1241	ARM ASSEMBLY, ROAD W , NO 2, LEFT
15	2530-00-800-1244	ARM ASSEMBLY, PIVOT, NO 2, RIGHT
16	2530-00-871-2855	ARM ASSEMBLY,PIVOT,
17	2530-00-871-2856	ARM ASSEMBLY, PIVOT, LEFT
18	2530-00-871-2859	ARM ASSEMBLY, PIVOT, NO 6, RIGHT
19	2530-00-871-2860	ARM ASSEMBLY, ROAD W , NO 6 LEFT
20	2530-00-908-6342	ARM ASSEMBLY, PIVOT, LEFT
21	2530-00-908-6343	ARM ASSEMBLY, PVOT, RIGHT
22	2530-01-042-4047	ARM ASSEMBLY, PIVOT
23	2530-01-160-8109	TRACK SHOE, VEHICULA
24	3020-00-252-5637	SPROCKET WHEEL LEFT AND RIGHT
25	3020-00-722-3633	SPROCKET WHEEL

PLATFORMS



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parts database consists of 45,000 parts.

portfolio at [www.menatek.com.tr](http://www.menatek.com.tr)

# CRITICAL PARTS



## T-72

	NSN	Name
1	175.20.019	Drive unit
2	2A28	Gun (Barrel Only)
3	175.51.006SB-3	Road arm
4	175.51.007SB-2	Road arm
5	175.51.008SB-3	Road arm
6	175.51.009SB-2	Road arm
7	434.51.120SB	Road arm
8	5903-3003010	Rod
9	2510-61-004-9646 / 4905-2905006	Shock absorber
10	765-33-SB127	Torsion bar
11	2530-61-004-9294 / 434.51.059	Torsion shaft, left
12	765-35-SB123	Track chain (1 vehicle set)
13	613.44.22-D1(G)	Tracks
14	613.44.22SB-2A	Tracks
15	2520-61-013-1629 / 5903-1800005	Transfer assembly

PLATFORMS



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## HMMWV

	NSN	Name
1	2510-01-189-1832	SHOCK ABSORBER
2	2510-01-190-3862	SHOCK ABSORBER,DIRECT ACTION
3	2510-01-251-5316	SHOCK ABSORBER FRT AND RR
4	2510-01-554-1789	SHOCK ABSORBER, DIRECT ACTION
5	2520-01-469-9893	TRANSFER TRANSMISSION
6	2530-01-413-1365	ARM ASSY SUSP CONTROL FRONT UPPER RH (COMP)
7	2530-01-414-7844	ARM ASSY SUSP CONTROL FRONT UPPER LH (COMP)
8	2530-01-420-8634	ARM,CONTROL,VEHICULAR SUSPENSION
9	2530-01-554-8270	ARM,CONTROL,VEHICULAR SUSPENSION
10	3040-01-539-4911	IDLE ARM

**These are only examples; the complete p**

**Explore our extended NSN por**

# S ON PLATFORMS



## LEOPARD 1

#	NSN	Name
1	2530-12-143-0558	TORSION BAR
2	2530-12-143-0559	TORSION BAR
3	2530-12-143-0583	ARM ASSEMBLY,PIVOT,TRACK SUSPENSION
4	2530-12-143-0588	ARM ASSEMBLY,PIVOT,TRACK SUSPENSION
5	2530-12-146-8901	ARM ASSEMBLY,PIVOT,TRACK SUSPENSION
6	2530-12-153-6831	TRACK SHOE
7	2530-12-155-6872	SPROCKET WHEEL SEGMENT,DRIVE UNIT
8	2530-12-167-5887	TRACK SHOE
9	2530-12-199-5428	TRACK SHOE
10	2530-12-315-2023	ARM ASSEMBLY,PIVOT,TRACK SUSPENSION
11	2540-12-156-5169	SHOCK ABSORBER LOCK CONNECTION
12	2930-12-199-4424	RADIATOR ENGINE
13	3020-12-153-7137	SPROCKET WHEEL



## LEOPARD 2

#	NSN	Name
1	2530-12-175-7542	TRACK SHOE,VEHICULAR
2	2530-12-175-8491	TORSION BAR,SUSPENSION
3	2530-12-175-8492	TORSION BAR,SUSPENSION
4	2530-12-175-8495	ARM ASSEMBLY,PIVOT,TRACK SUSPENSION
5	2530-12-175-8497	ARM ASSEMBLY,PIVOT,TRACK SUSPENSION
6	2530-12-175-8498	ARM ASSEMBLY,PIVOT,TRACK SUSPENSION
7	2530-12-178-7177	SPROCKET WHEEL
8	2530-12-193-8879	ARM ASSEMBLY,PIVOT,TRACK SUSPENSION
9	2530-12-312-5487	TRACK SHOE,VEHICULAR
10	2930-12-178-5310	RADIATOR,ENGINE COO
11	2930-12-186-3884	RADIATOR
12	3020-12-182-4284	SPROCKET WHEEL
13	2510-12-353-5152	TORSION BAR,SUSPENSION
14	2510-12-353-5153	TORSION BAR,SUSPENSION

PLATFORMS



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parts database consists of 45,000 parts.

Portfolio at [www.menatek.com.tr](http://www.menatek.com.tr)

SPECIAL PRODUCTS



MENATEK CAPABILITY BOOK

# Special Products

# Engineered for Specific Demands

*At Menatek, our special products are engineered for the heart of performance. From advanced bearing technologies to high-load torsion bars, each product is crafted to meet the mission-critical demands of modern land platforms. Whether it's our proprietary NAZBearings®, running gear or barrels, we deliver custom-engineered solutions that combine durability, precision, and combat-ready reliability.*

B u i l t   f o r   p e r f o r m a n c e .   P r o v e n   i n   t h e   f i e l d .

## ***RUNNING GEAR***

**NAZ  BEARINGS®**  
Powered with  
DuPont™ Engineered Composite

## ***TRACK SHOE***

## ***TORSION BAR***

## ***BARREL***

SPECIAL PRODUCTS



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**MENATEK**  
Defense Technologies

30 year

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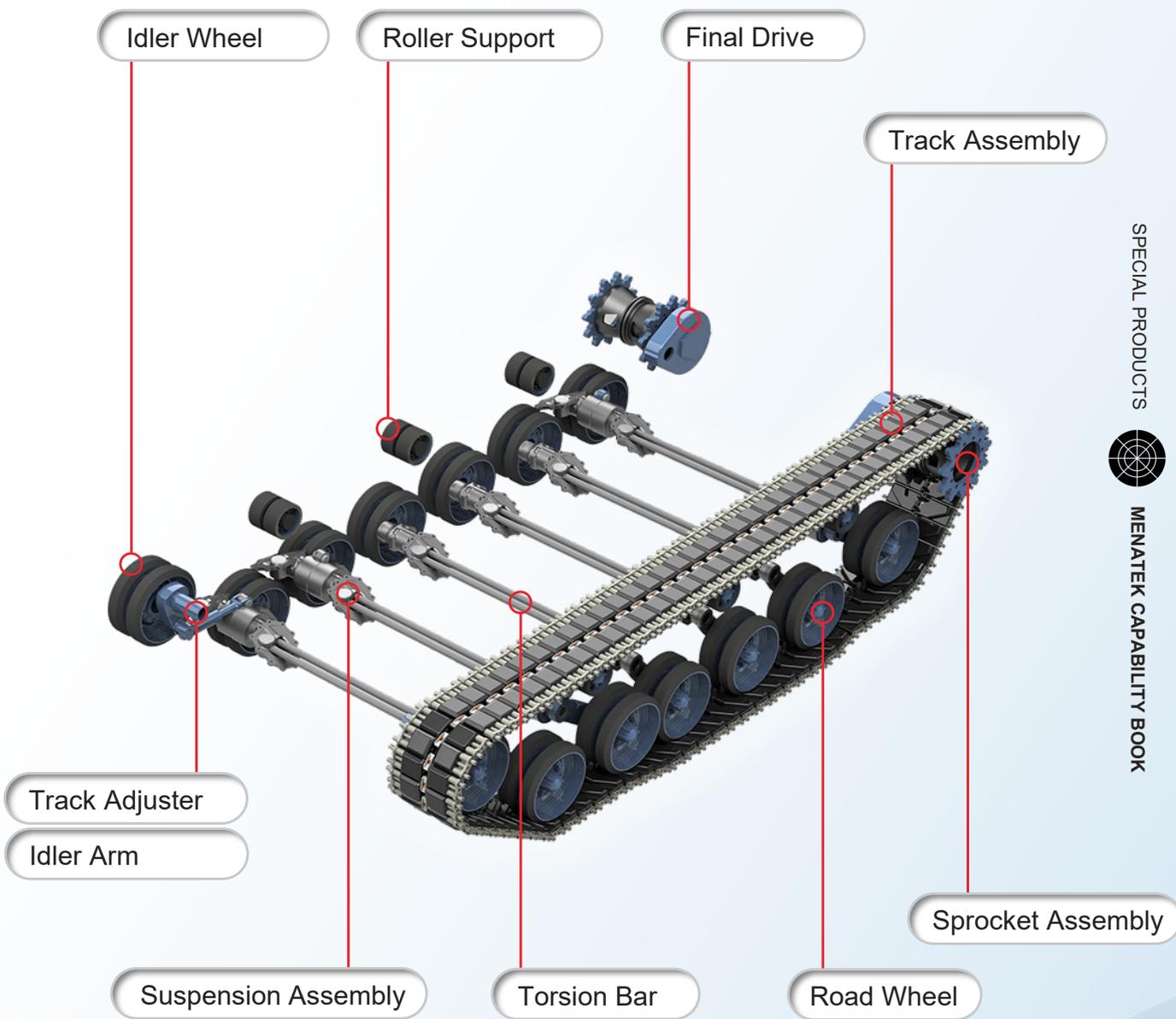
# ***RUNNING GEAR***



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# ***RUNNING GEAR***

## ***WHERE GROUND MEETS POWER***



SPECIAL PRODUCTS



MENATEK CAPABILITY BOOK

# BUILD TO MOVE, ENGINEERED TO ENDURE

*Menatek has the capability to fully design, manufacture, and integrate complete Running Gear systems for tracked vehicles across various weight and mission categories. This includes core components such as final drive gearboxes, sprocket wheels, track assemblies, road arms, and torsion bars—all of which represent Menatek's most frequently manufactured and validated product range.*

With extensive experience in system-level integration and component-level testing, **Menatek offers end-to-end solutions from engineering and prototyping** to serial production and performance validation. Our in-house test infrastructure and proven quality systems ensure durability, reliability, and platform compatibility for every Running Gear solution we deliver.

SPECIAL PRODUCTS



MENATEK CAPABILITY BOOK

**One Source Supply for  
Running Gear**

**Meeting Requirements of  
Tenders and Special  
Requests**

**Several delivered,  
tested & proven  
'Off-the-shelf' solutions  
of MENATEK for  
various platforms**

# ***RUNNING GEAR***

Where Ground Meets Power

**ONE  
SOURCE  
SUPPLY  
FOR  
RUNNING  
GEAR**

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# COMPONENTS

# RUNNING

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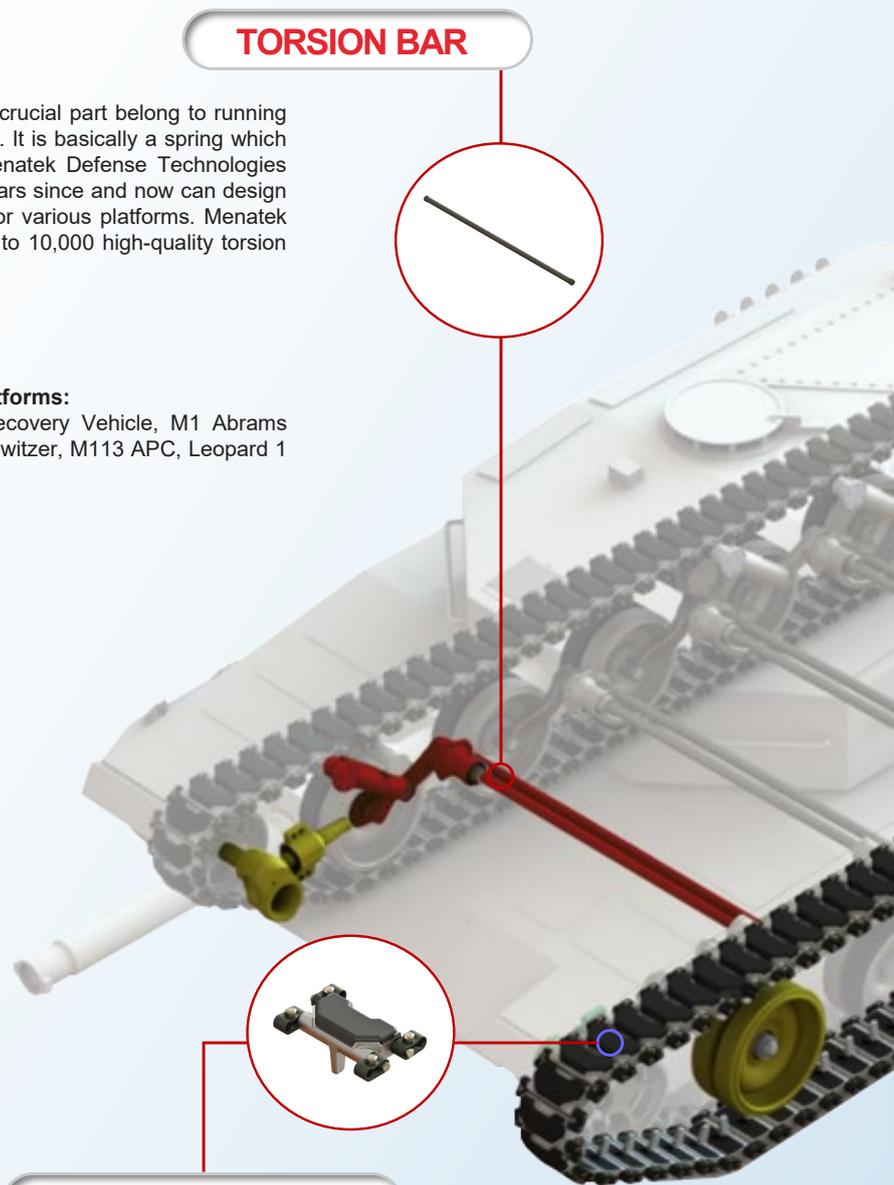
## TORSION BAR

Torsion Bar is one of the most crucial part belong to running gear of military tracked vehicles. It is basically a spring which works under torsional load. Menatek Defense Technologies have been working on torsion bars since and now can design and manufacture torsion bars for various platforms. Menatek is capable of manufacturing up to 10,000 high-quality torsion bars in a year.

**Body diameter** up to 80 mm  
**Length** from 1.300 to 2.800 mm

### Menatek's Capabilities on Platforms:

M48 MBT, M60 MBT, M88 Recovery Vehicle, M1 Abrams MBT, M2 Bradley IFV, M109 Howitzer, M113 APC, Leopard 1 MBT, Leopard 2 MBT and more.



## TRACK ASSEMBLY

Track Assembly is a unique component which provides the vehicle mobility. By transmitting the torque coming from the final drive into directional movement, it enables the tracked platforms to move in almost all types of terrain. Track assembly composes of center guide, track shoe links and each links are connected with end connectors.

### Menatek's Capabilities on Platforms:

M48 MBT, M60 MBT, M88 Recovery Vehicle, M1 Abrams MBT, M2 Bradley IFV, M109 Howitzer, M113 APC and more.

# ING GEAR NEMENTS



## FINAL DRIVE

Final Drive is a crucial component of the running gear, located between the transmission output shaft and sprocket assembly. The purpose of the final drive is to provide the final stage of gear reduction to decrease RPM and increase torque before the power is transmitted to the track shoes.

### Menatek's Capabilities on Platforms:

M48 MBT, M60 MBT, M88 Recovery Vehicle, M2 Bradley IFV, M109 Howitzer, M113 APC and others.



## SPROCKET ASSEMBLY

Sprocket assembly is a component of running gear of military tracked vehicles which takes role in driving the track assembly. It conducts the torque from final drive to track assembly. It consists of two different main parts; (2ea) sprocket gear (wheel) and sprocket carrier.

### Menatek's Capabilities on Platforms:

M48 MBT, M60 MBT, M88 Recovery Vehicle, M1 Abrams MBT, M2 Bradley IFV, M109 Howitzer, M113 APC and more.



# COMPONENTS RUNNING

SPECIAL PRODUCTS



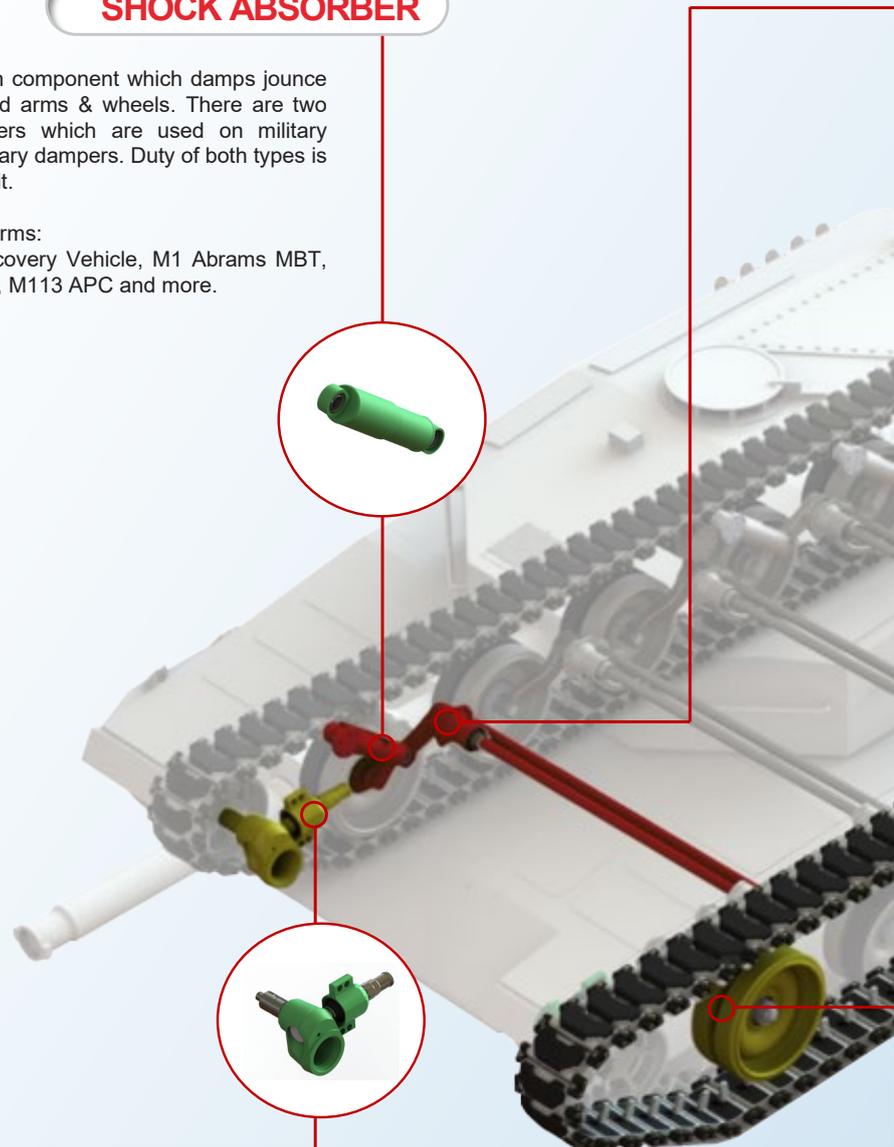
MENATEK CAPABILITY BOOK

## SHOCK ABSORBER

Shock absorber is a suspension component which damps jounce and rebound motion of the road arms & wheels. There are two major types of shock absorbers which are used on military vehicles; linear dampers and rotary dampers. Duty of both types is to absorb energy by dissipating it.

### Menatek's Capabilities on Platforms:

M48 MBT, M60 MBT, M88 Recovery Vehicle, M1 Abrams MBT, M2 Bradley IFV, M109 Howitzer, M113 APC and more.



## TRACK ADJUSTER

Track Adjuster is an important component which adjusts the tension of track assembly by collapsing and extending when needed. Track adjuster works together with the idler assembly to provide the right amount of flexibility for the track assembly.

### Menatek's Capabilities on Platforms:

M48 MBT, M60 MBT, M88 Recovery Vehicle, M1 Abrams MBT, M2 Bradley IFV, M109 Howitzer, M113 APC and more.

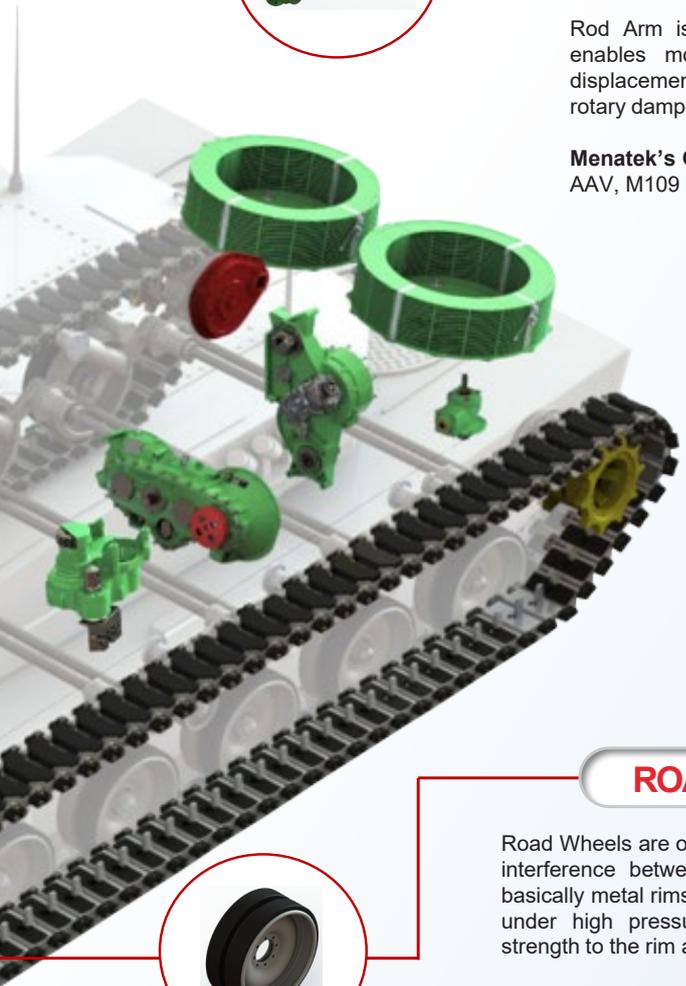
# ING GEAR NEMENTS



## ROD ARM

Rod Arm is the main component of the suspension system which enables movement of wheel and takes role in conducting the displacement of wheel into other suspension components such as rotary damper, shock absorber or torsion bar.

**Menatek's Capabilities on Platforms:**  
AAV, M109 Paladin, M2 Bradley, M88, M113 and more.



## ROAD WHEEL



Road Wheels are other important components of running gear which create the interference between the support arm and the track assembly. They are basically metal rims vulcanized with a tough rubber around. Constantly working under high pressure and friction, the rubber's recipe and adhesion strength to the rim are key points to Road Wheel production.

**Menatek's Capabilities on Platforms:**  
M48 MBT, M60 MBT, M88 Recovery Vehicle, M1 Abrams MBT, M2 Bradley IFV, M109 Howitzer, M113 APC and more.

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# NAZ BEARINGS<sup>®</sup>

Powered with  
DuPont™ Engineered Composite



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# MOST DURABLE SELF LUBRICATING BEARINGS IN THE WORLD

## About NAZ Bearings®

NAZ Bearings® is a leading brand of **self-lubricating, maintenance-free** spherical and straddle bearings, delivering unparalleled performance and reliability across a wide range of applications. With a focus on innovation and quality, NAZ Bearings® sets the standard for excellence in the industry.

## Our Differentiation

Engineering and testing capability in part level and system level. Using high quality materials and quality control in each manufacturing process NAZ Bearings® advanced patented liner technology, developed in collaboration with DuPont, a global leader in materials science.

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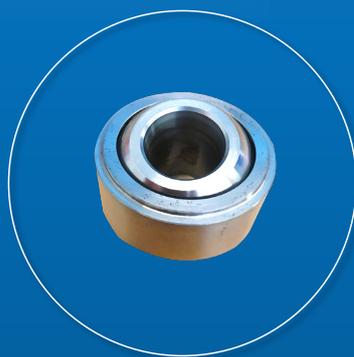
## Collaboration with DuPont

*Trademark & License Agreement*

In 2024, our collaboration with DuPont led to the launch of NAZ Bearings®, a groundbreaking innovation that extends our engineering capabilities beyond defense into aerospace, wind energy and industrial sectors. This partnership reflects Menatek’s commitment to pushing technological boundaries and expanding into new frontiers.



### Spherical Type



**+25%**  
MORE  
DURABLE

**3x Times**  
LONGER  
LIFE

### Straddle Type



**3** as short as  
**Months**  
FASTEST  
DELIVERY

## Why Choose NAZ Bearings®



### Exceptional Quality

Manufactured to the highest standards, using premium materials and advanced manufacturing processes, ensuring superior quality and reliability.



### Customized Solutions

We offer unbeatable lead times to provide our customers with seamless supply and minimize downtime.



### Cost-Effectiveness

We provide cost-effective solutions without compromising on quality or performance. Our competitive pricing ensures that our customers receive the best possible return on investment.



### Customized Solutions

We offer application-specific spherical and straddle bearings in a variety of sizes, tailored to meet the specific needs and requirements of our customers.



### Proven Performance

Field-tested and trusted by leading companies worldwide, NAZ Bearings® deliver unmatched durability and performance in the most demanding applications.



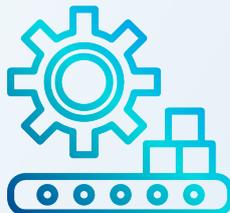
### Rigorous Testing

NAZ Bearings® undergo rigorous testing under quasistatic and dynamic loading conditions to ensure performance and reliability in real-world applications. Our testing capabilities include high-frequency loading, high-temperature testing and testing with mil-spec abrasive dust/debris, allowing us to validate the durability and resilience of our bearings under the most demanding conditions.



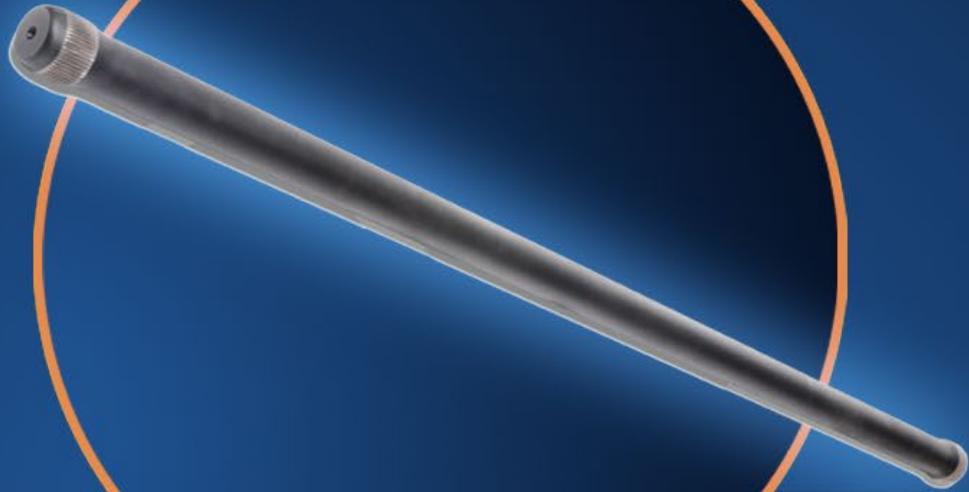
### Expert Support

Our experienced team is dedicated to providing exceptional customer support, helping to find the right solutions for their specific needs and challenges. From product selection to installation and maintenance, we're here to assist every step of the way.



**NAZ Bearings® are manufactured to  
meet any desired dimensions  
and specifications.**

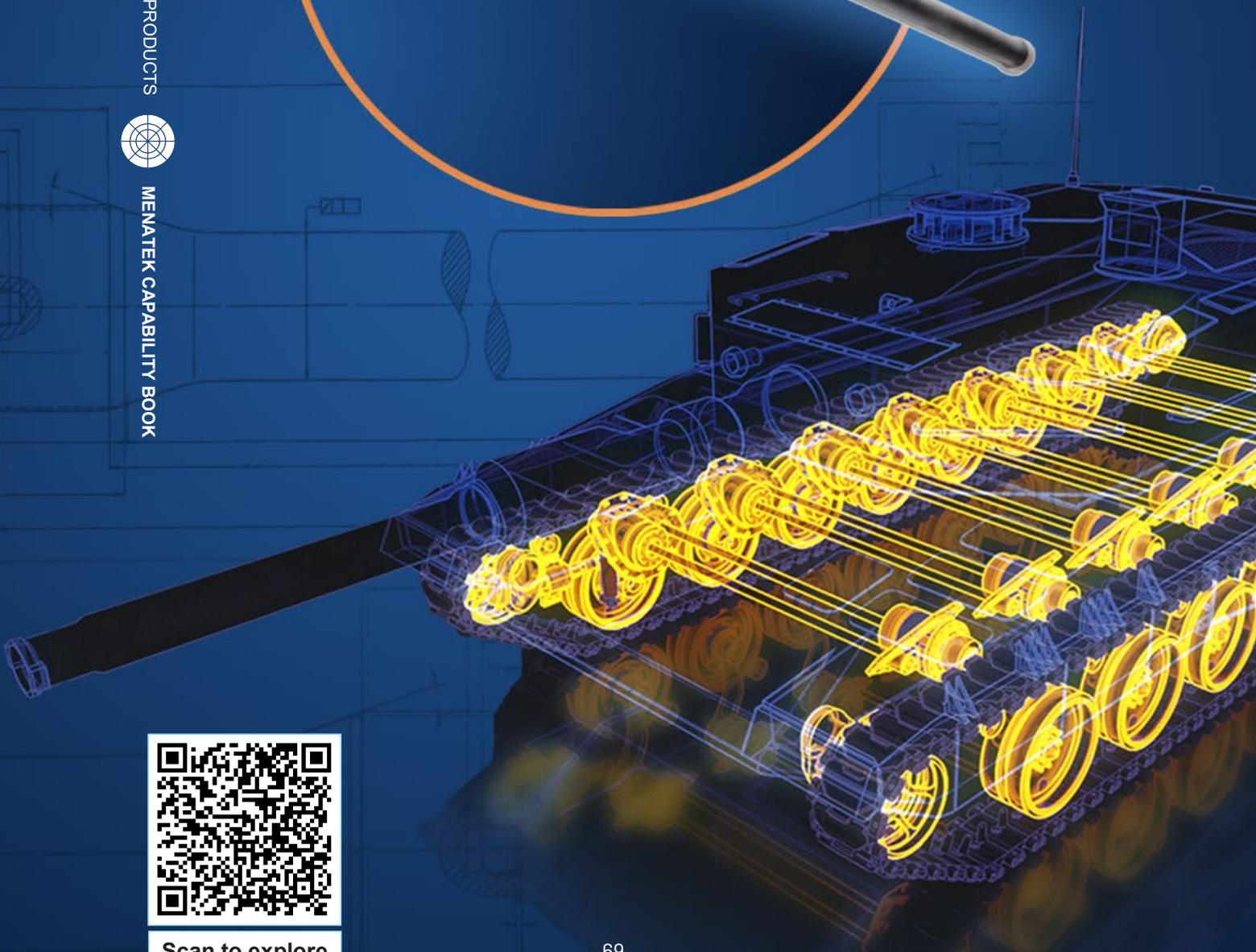
# TORSION BAR



SPECIAL PRODUCTS



MENATEK CAPABILITY BOOK



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# TORSION BAR

## THE BACKBONE OF MOBILITY

About

**TORSION BAR**

Torsion bars are a testament to mechanical ingenuity and engineering excellence. They act as **energy accumulators** for almost all military tracked vehicles, carrying them through the battlefield in every situation for thousands of kilometers. A bar in production may go through 10+ processes including multiple heat treatments, forging, machining, shot peening, and surface treatments.

Our  
**Differentiation**

Different military doctrines require various equipment, leading to variations in tracked vehicle weights. Consequently, specialized suspension springs are required to achieve advanced mobility. **MENATEK excels in delivering customized torsion bars that are meticulously tailored to meet the specific requirements of each vehicle.**

## Why Choose **TORSION BAR**

### Superior Quality

Manufactured with premium materials and advanced production methods, these torsion bars guarantee exceptional durability and performance under the toughest conditions.

### Rapid Delivery

With our efficient production processes and smooth operations, we ensure quick delivery times without compromising quality. Our torsion bars are ready when you need them.

### Budget Friendly

Our torsion bars offer exceptional value, combining high performance with competitive pricing. By optimizing our production methods, we deliver quality without breaking your budget.

### Tailored Solutions

We offer customized torsion bars to meet the unique needs of different military vehicles. Our expertise enables us to design and produce solutions that perfectly match your requirements.

### Reliable Performance

Our torsion bars have undergone field tests and are proven to perform reliably in the toughest conditions. Trusted by armed forces worldwide, they provide consistent and dependable performance.

### Extensive Testing

Torsion bars each heat load go through extensive testing, including assessments on our torsion bar cycle test machine to ensure they meet the highest standards of quality and durability. Our commitment to rigorous testing guarantees reliable performance in every mission.

### Professional Assistance

Our experienced team is dedicated to providing exceptional customer support, helping to find the right solutions for their specific needs and challenges. From material selection to integration, we're here to assist every step of the way.

SPECIAL PRODUCTS



MENATEK CAPABILITY BOOK

# TORSION BAR

SPECIAL PRODUCTS



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## Mechanical Ingenuity

Acts as an energy accumulator for tanks and military vehicles.



## Custom Design

Tailored torsion bars for different vehicle needs.



## Comprehensive Production

Involves multiple heat treatments, forging, machining etc.

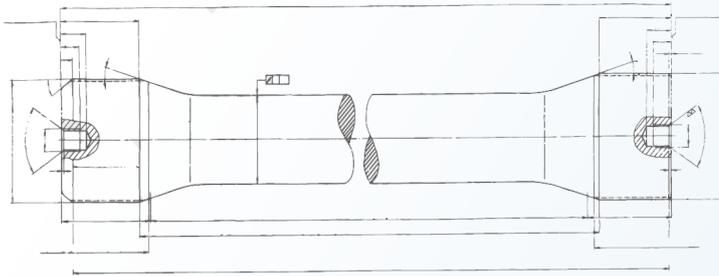


## Tested and Approved

Complete service including fatigue testing and manufacturing.

# TORSION BAR

## PRECISION ENGINEERING ENHANCED PERFORMANCE



### Materials Used

MENATEK uses various types of ESR and VAR steel alloys to manufacture torsion bars, ensuring they meet performance requirements.

### Dimensions

80 mm                      1000-2800 mm  
Diameter                      Length

### Vehicle Types

MENATEK manufactures torsion bars for a variety of vehicles, including

- Main Battle Tanks (MBT),
- Infantry Fighting Vehicles (IFV),
- Armored Personnel Carriers (APC),
- Amphibious Assault Vehicles (AAV),
- Armored Recovery Vehicles (ARV)
- and all other tracked as well as wheeled vehicles.

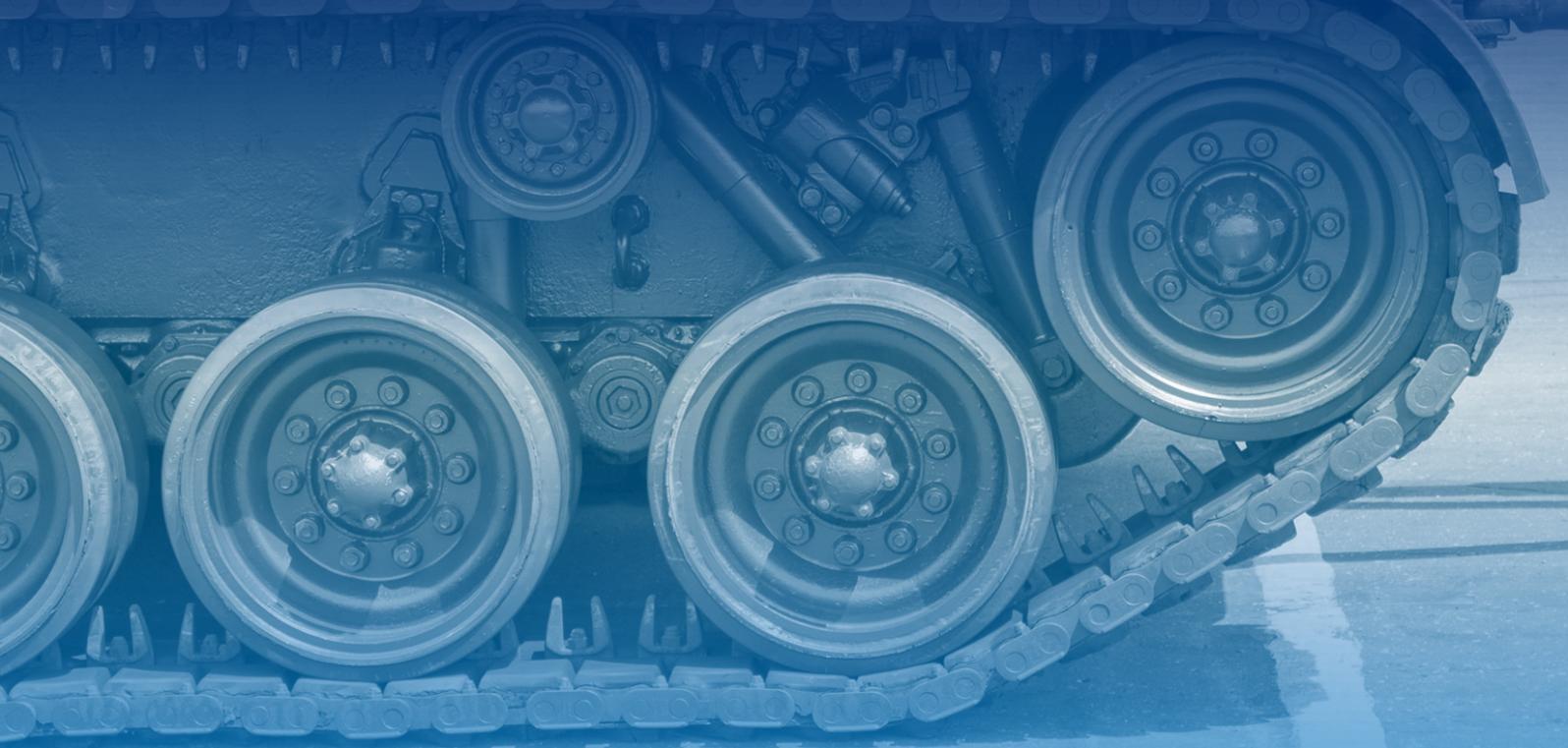
### Endurance

MENATEK's torsion bars undergo precisely controlled manufacturing processes, including shot peening, heat treatment, surface finishing, and presetting. As a result, our high-stiffness torsion bars achieve life cycles of more than 100,000 at full wind-up angle.

### Coating

MENATEK utilizes tape wrapping and PU coating to provide physical protection to the body of each torsion bar. PU coating offers superior protection against physical impacts and corrosion, ensuring long-lasting durability.





SPECIAL PRODUCTS



MENATEK CAPABILITY BOOK

# ***TRACK SHOE & MENATRACK***

***TRACK SHOE MANUFACTURING MACHINE***



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# TRACK SHOE

## SECURE YOUR PATH

### About TRACK SHOE

Our track shoes are manufactured using casting and forging technologies. MENATEK uses its specially developed custom rubber recipe for pads to ensure maximum durability and performance.

They are available in both integral pad and replaceable pad configurations.

### Our Differentiation

What sets our track shoes apart is our ability to produce any type, ensuring superior durability and adaptability. Custom rubber recipes enhance performance and longevity, meeting the specific needs of various military applications.

SUPERIOR  
DURABILITY

HIGH  
PERFORMANCE

FIELD-PROVEN  
RELIABILITY

HARSH CONDITION  
RESISTANCE

Proven in the field and trusted by military forces in countries such as:

- 2007  Turkish Army
- 2010  Pakistan Army
- 2016  Spanish Army
- 2023  Polish Army
- 2024  Ukrainian Army



# SECURE TRACK

SPECIAL PRODUCTS



MENATEK CAPABILITY BOOK



**M113**

T-130



T-150



**M60**

T-142



**T-72**



**M109**

T-154



**M110**

T-107



**T-80**



# SHOE

## OUR PATH



**M88**

T-107



T-142



**T-85**



**T-59**



- T-62
- T-64
- T-55
- BMP-2

Other types of Track Shoes



**T-69**



SPECIAL PRODUCTS



MENATEK CAPABILITY BOOK

# MENATRACK

## TRACK SHOE MANUFACTURING MACHINE

SPECIAL PRODUCTS



MENATEK CAPABILITY BOOK



Scan to explore



# MENATRACK

## TRACK SHOE MANUFACTURING MACHINE



### Robotic Integration

Features single or double robot operation for efficient and error-free production.



### Automation

Fully automated systems with options for camera integration and different feeding mechanisms.



### Precision Machining

Ensures high precision and quality in mass production.



### Versatility

Can handle various raw materials including steel and aluminum.

Capable of manufacturing;

**Cast** and **&** **Forged** Track Shoes

SPECIAL PRODUCTS



MENATEK CAPABILITY BOOK



MILITARY



HEAVY DUTY

Application Areas

SPECIAL PRODUCTS



MENATEK CAPABILITY BOOK

# ***BARREL***

# BARREL

## PRECISION BARREL SOLUTIONS

*Our capabilities up to 105 mm, ensuring that we can meet the most demanding requirements with precision and reliability.*

**We specialize in superior barrels tailored to meet a wide range of specifications and applications**

- **14.5x114** (KPVT)
- **20x102** (M39 A3 Gun)
- **20x102** (M197 and M61 Guns)
- **20x102** (Barrel with Integrated Muzzle Brake for M39A3 Automatic Gun)
- **20x110** (MK2 and Series Automatic Guns)
- **23x152** (2A7 or 2A14 Guns in Zu-23-2 and Zsu-23-4 Systems)
- **25x137** (M811 Cannon)
- **25x137** (KBA Cannon)
- **30x113** (Medium Caliber Auto Cannon Barrel)
- **30x165** (2A38)
- **30x165** (2A42)
- **30x165** (2A72)
- **35x228** (KDA, KDC, KDG-KD Series Cannon)
- **40mm** (GP25)
- **40mm** (UBGL)
- **40mm** (Automatic Grenade Launcher HV)
- **40mm** (L70 BOFORS Navy Gun Barrel)
- **90mm** (M48)
- **100mm** (2A70)
- **100mm** (T-55 Barrel D-10T)
- **105mm** (M48A5, M60)



# BARREL

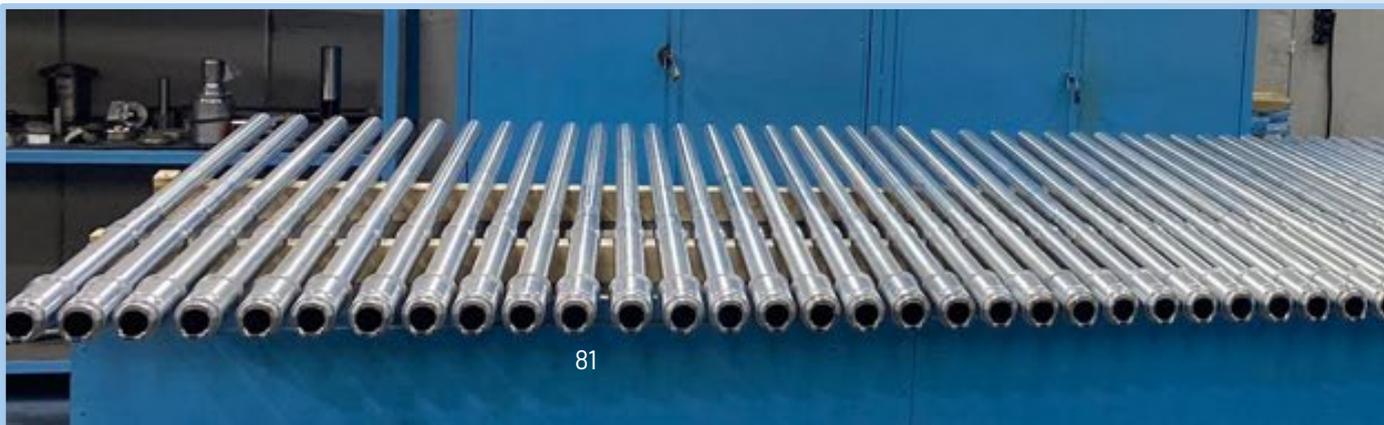
## PRECISION BARREL SOLUTIONS

*At Menatek, our barrel production combines high-grade materials, advanced manufacturing techniques, and rigorous quality control to ensure maximum performance, safety, and durability. Our capabilities cover various calibers up to 105 mm, including rifled and smoothbore options—each designed for precision, consistency, and mission reliability. From concept to production, every Menatek barrel is engineered to withstand extreme conditions and deliver long-lasting accuracy.*

SPECIAL PRODUCTS



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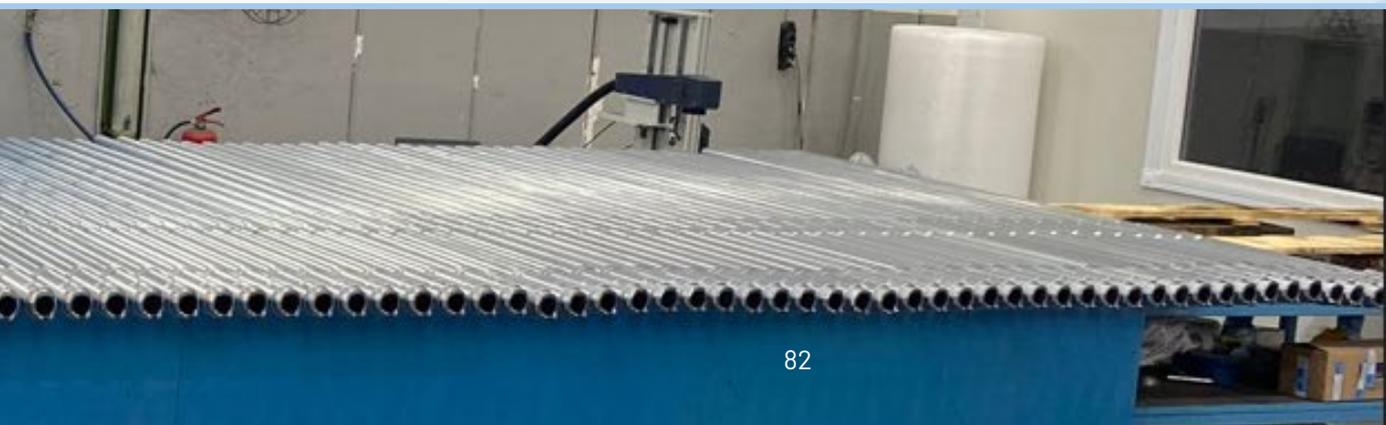


**2A38**

**2A72**

**2A42**

*Whether for armored vehicles, remote weapon systems, or training platforms, we offer both standard and customized barrel solutions to meet the evolving needs of modern land forces.*



SPECIAL PRODUCTS



MENATEK CAPABILITY BOOK

A stylized graphic of a globe in the top left corner, composed of white curved lines on a light blue background, suggesting a global or interconnected theme.

***LET'S BUILD  
THE FUTURE  
TOGETHER***

Visit us to explore how we can create lasting impact—together.

***[www.menatek.com.tr](http://www.menatek.com.tr)***



**MENATEK**  
Defense Technologies

**30<sup>th</sup> year**



**MENATEK**  
Defense Technologies

**30<sup>th</sup> year**

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