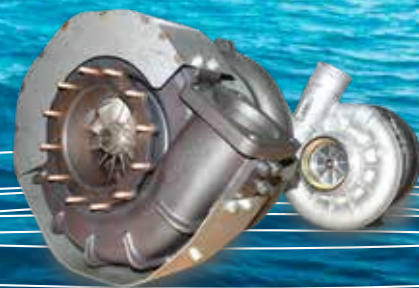




# Unique & Independent

- Unique services combination
- Independent spirit, dedicated to your benefit



Marine Sector



Locomotive Sector



Oil & Gas Field Industry

## Why Choose Turbomed

1. Excellent Services @ state of the art Facilities
2. Worldwide turbocharger service, 24/7, 365 days a year
3. Great stock of turbocharger spare parts
4. Successful Retrofit solutions
5. Total quality services

5 reasons



Power Plant Industry

## Who we are

**TURBOMED S.A.** provides marine turbocharger services since 1976, holding a leading position in the domestic and international market. Experience, high expertise, professionalism, consistency and accountability are some of the principles that permit the company to offer high quality products and value-added services to customers. **TURBOMED's** repair and engineering center, includes a state of the art workshop and a fully equipped warehouse.

State of the art workshop and a fully equipped warehouse







# Excellent Services & state of the art Facilities



## Spare Parts Repair

Our workshop is equipped with the latest technology equipment and tools required to restore and repair any turbocharger spare part or a complete unit of any size, type or maker, to a condition that meets or exceeds the operational requirements of the manufacturer.



## Welding - Reblading

**TURBOMED** has the know-how to use Tungsten Inert gas (TIG) welding in turbine blades and nozzle rings for dimensional restoration to their initial size and crack repair. TIG welding is a low cost and reliable solution and is performed by specially trained and experienced technicians.





# Excellent Services & state of the art Facilities



## **Dynamic Balancing**

Our workshop is equipped with state of the art precision "Schenck" Balancing Machines with a capacity from of 0.5 kg to 3000 kgs and balance grade of 2.5 according to ISO 1940. We are able to find and adjust any unbalanced matter, rotating the rotor shaft at speeds from 5.000 to 50.000 rev/min.

## **Reverse Engineering**

Using sophisticated 3D measuring equipment, a part can be fully modeled to a high degree of accuracy. Then the model is used to generate manufacturing drawings for the new part. Parts may be machined or cast. One of the key advantages of this technology for the end user is the ability to incorporate changes as part of the process.







# Excellent Services & state of the art Facilities



## Production - Manufacturing

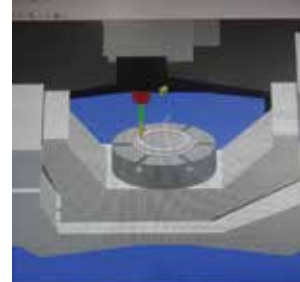
The engineering workshop of our corporation is equipped with an advanced technology mechanical and designing equipment (CAD / CAM Systems, CNC Milling Centers, CNC Lathe works, Conventional Lathe works). We are able to undertake and complete manufacturing projects of high difficulty, offering cost saving solutions of high manufacturing quality.

## Foundry

In our company's foundry, in Amaliada, casting parts are manufactured from 1gr to 1000kg of high precision, for the industrial and maritime sector, and for the chemical-military and aeronautics industry.

Production Methods: Investment Casting (Lost Wax), Green Sand, Croning, Cold Box.







## Worldwide turbocharger services 24/7, 365 days a year

**TURBOMED**  
TURBO • TECHNOLOGY • WORLD CARE

- Inspection-overhauling-maintenance-repairs
- Fast trouble-shooting from a leading turbocharger services provider
- Well trained and experienced turbocharger specialists ready to respond to any turbo-problem





# Tailor-made Solutions to Fit Your Needs

Customized services and contracts according to your needs are among the many advantages available from our company. All services are planned and performed in close cooperation with our customers in order to minimize costs and operational difficulties.



People  
who make  
the difference







# 3

## Great stock of turbocharger spare parts

**TURBOMED** supplies high quality turbocharger units and spare parts, new or reconditioned (on direct sale or on exchange basis), at competitive prices. Our commercial department responds immediately by providing quotes, parts identification, upgrade recommendations and customized parts kits designed to simplify maintenance. All parts are given with at least 12 months warranty. Quality certificates from all classification societies can be provided upon client's request.

**TURBOMED**  
TURBO • TECHNOLOGY • WORLD CARE







# Successful Retrofit solutions

## Retrofit solutions

Our continuous investment in knowledge and use of new technologies was reinforced by the cooperation of our company with the National Technical University for the design of the Turbo-genius<sup>®</sup> software program, which allows us to simulate both turbochargers and diesel engines. **TURBOMED**, exploiting the experience and the know-how, has performed many successful retrofits.

## Turbochargers TM87 and TM180

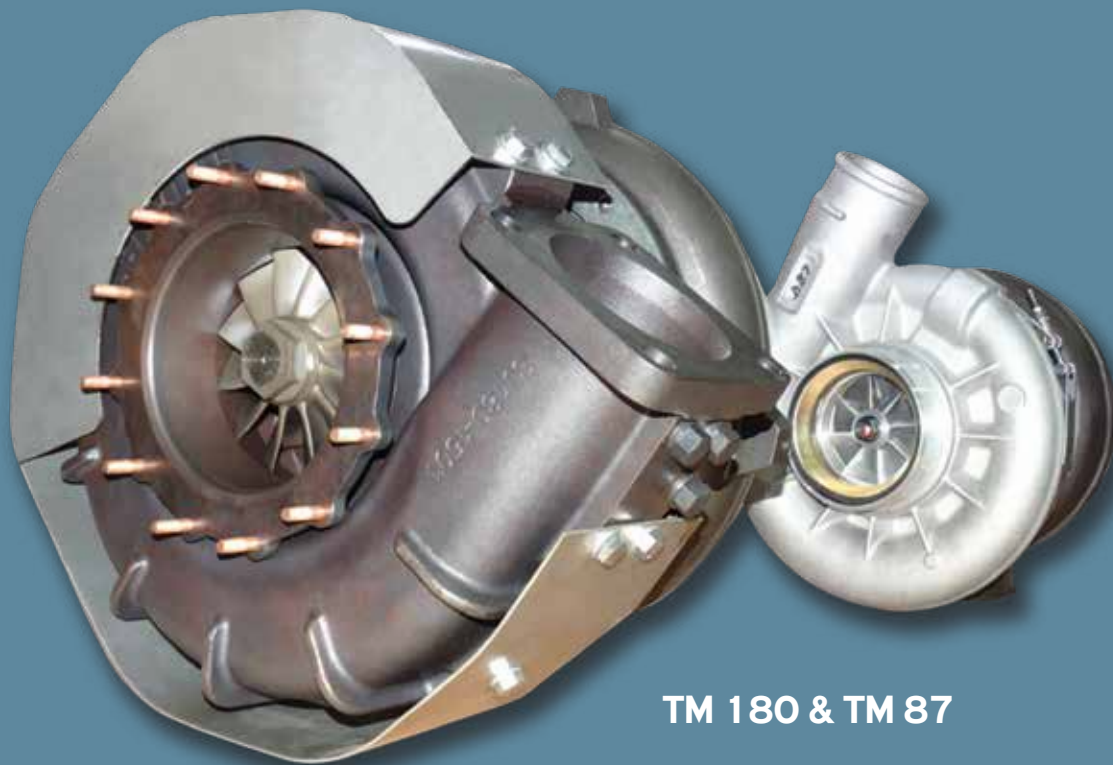
Our new generation turbochargers, TM87 and TM180, are reliable and improved models, with type approval certificates No 15/00096 by Lloyd's Register and No 42697/A0 BV by Bureau Veritas. Properly designed with high strength materials ensure high performance and regular operation of the ships engine. Turbocharger models TM87 and TM180 are matching with Daihatsu, Yanmar, Mitsubishi, Wartsila, MAN-B&W D/Gs.



Type Approval Certificate  
No 42697/A0



Type Approval Certificate  
No 15/00096



**TM 180 & TM 87**

# Successful Retrofit solutions

## Retrofit TM87-X

### TM87-X Features and Advantages

Overall cost efficiency

Water cooled casing

High strength compressor manufactured

Lower maintenance cost due to demand  
of less spare parts

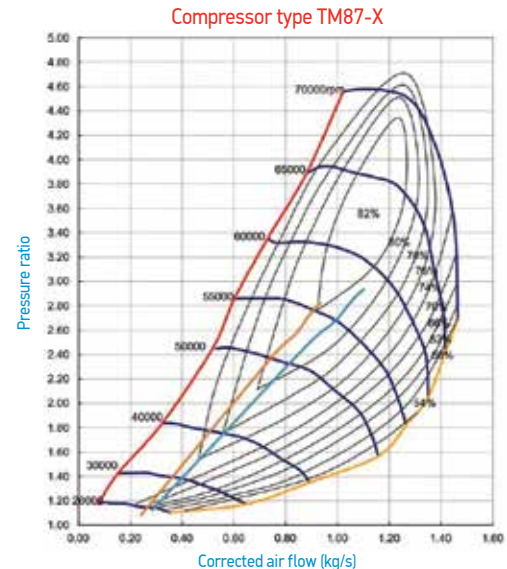
Effortless installation and maintenance  
even by non-specialized crew members

Lower exhaust gas temperatures due to  
the absence of nozzle ring

2 years warranty/10.000 hours of operation

MODEL	Air flow rate (Kg/S)		Matching Power (kW)	Maximum Pressure Ratio	Maximum Efficiency factor $\eta$ [%]
TM87-X	$\Pi=1.2$	$\Pi=4.5$	350 - 600	4.5	82
	0.1 - 0.35	1.0 - 1.35			

### Compressor map and estimated pressures





# Retrofit TM180

## TM180 Features and Advantages

Overall cost efficiency

Lower maintenance cost  
due to demand of less spare parts

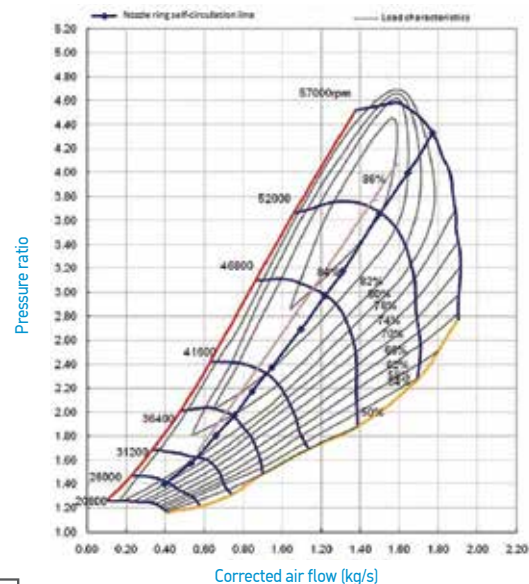
High strength compressor manufactured

Effortless installation and maintenance  
even by non-specialized crew members

2 years warranty/10.000 hours of operation

MODEL	Air flow rate (Kg/S)		Matching Power (kW)	Maximum Pressure Ratio	Maximum Efficiency factor $\eta$ [%]
TM180	$\Pi=1.2$	$\Pi=4.5$	600 -1100	4.5	86
	0.1 - 0.35	1.3 - 1.7			

Compressor type TM180



## Total quality services



**TURBOMED** has been recognized by the General Secretariat of Research and Technology of the Ministry of Development as a company of advanced technology. Our company is certified by:

- Lloyd's Register of Shipping with ISO 9001:2015 certificate
- Russian Maritime Register of Shipping with firm conformity for conversion, modernization and repair of turbocharger
- TUV NORD with ISO 9001:2008 certificate and ISO 14001:2007 certificate.

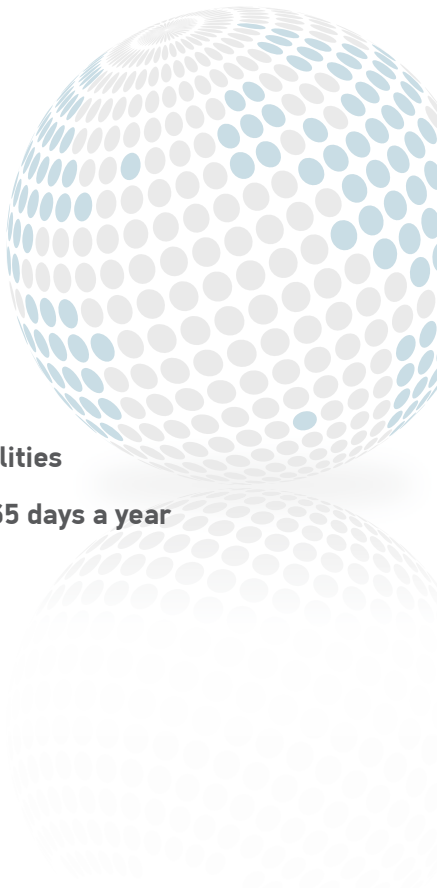
All the spare parts and materials we supply are ASBESTOS-FREE and comply with the regulations of the SOLAS Convention (International Convention for the Safety of Life at Sea).

**CERTIFIED PEOPLE**  
**CERTIFIED PROCEDURES**  
**CERTIFIED PARTS**

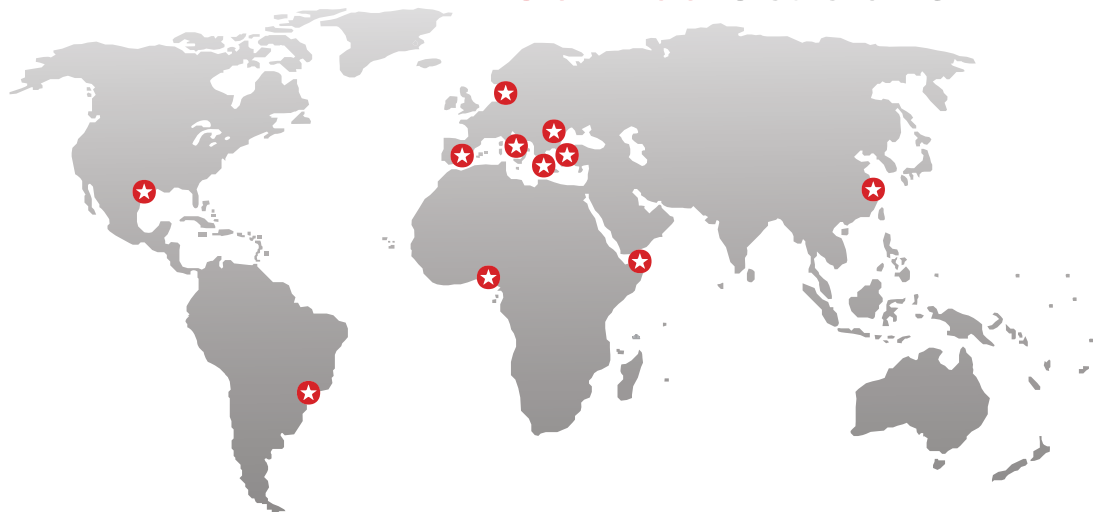




# 5 star turbocharger services

- ★ Excellent Services @ state of the art Facilities
  - ★ Worldwide turbocharger service, 24/7, 365 days a year
  - ★ Great stock of turbocharger spare parts
  - ★ Successful Retrofit solutions
  - ★ Total quality services
- 

# Service Stations



- Piraeus, Greece
- Patras, Greece
- Napoli, Italy
- Algeciras, Spain
- Riga, Latvia
- Izmir, Turkey
- Romania-Bulgaria-Ukraine, Black Sea Area
- Lagos, Nigeria
- Houston, USA
- Santos, Brasil
- Shanghai, China
- Dubai, UAE

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Authorized Service Station **KBB** 

