

Vat Number IT01917770990

SDI code: USAL8PV



## Contacts

+39 0185 72 12 55

[info@energy-solution.it](mailto:info@energy-solution.it)

We collaborate with companies  
operating in alternative energy  
and hydrocarbon sectors

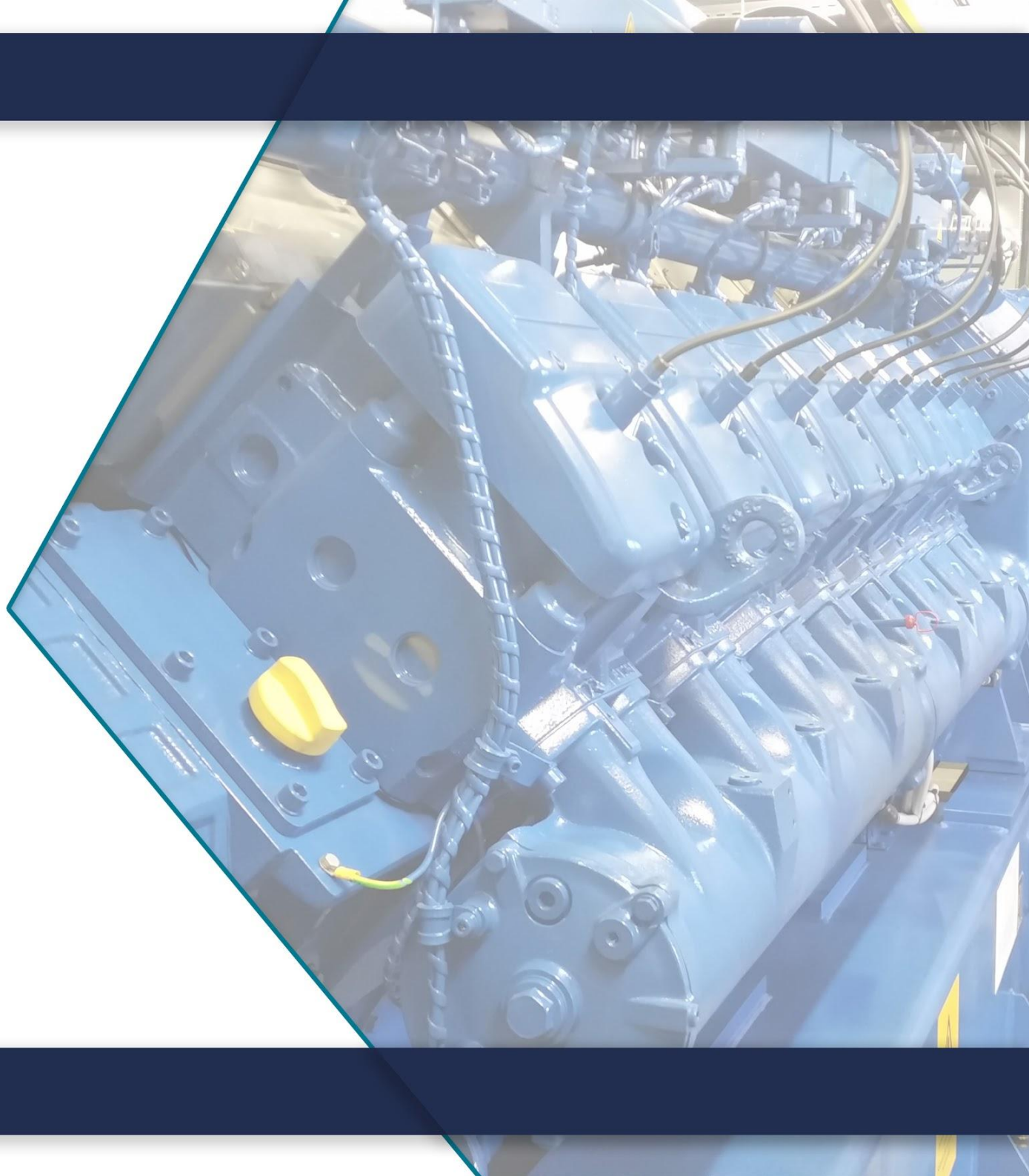


Distributors and retailers of gas-powered  
internal combustion engines, spare  
parts, and services



# Index

- **About Us**
- **We have been selling basic engines or generator sets since 1998.**
- **Ongoing projects in 2022.**
- **Revenue.**
- **Examples of installations and commissioning carried out with plant engineers.**
- **Certifications.**
- **Service.**
- **Examples of our services.**
- **How we handle appraisals.**
- **Processes and procedures.**
- **Spare parts: our brands.**
- **Spare parts.**
- **Sales trends.**



# About Us

## What we do:

We are distributors and retailers of spare parts for gas-powered internal combustion engines, as well as spare parts and services.

## What areas do we work in?

Cogeneration and trigeneration, oil compression, and industrial plants.

**From our experience, spanning over fifteen years, we have realized the importance of providing our customers with**

Service assistance for cogeneration, trigeneration, and compression generator sets, as well as on-site support available 24/7 for on-demand or scheduled maintenance, including regular or full-service maintenance.

## Products:

We are able to offer you a wide range of products to meet all your needs: coils, spark plugs, spark plug wires, ignition and control systems, exhaust systems, gas ramps, and much more.

## Services:

Discover our services and dedicated service hour packages: spare parts supply, technical supervision, telephone assistance, staff training, full-service interventions, maintenance.



## Basic engines or generator sets sold since 1998

### WAUKESHA

- F18GLD Un
- F18GLD C.E.
- H24GLD Sm
- H24GLD TQ
- H24GLD ST
- H24GLD ST
- H24GLD Se
- H24GLD Pr
- H24GLD Ho
- H24GLD Ne
- H24GLD Ag
- H24GLD Fo
- 24GLD Ho
- L36GLD In
- L36GLD Te
- L36GLD En
- L36GLD Mi
- L36GLD Eu
- L36GLD Ta
- P48GLD H.
- P48GLD La
- P48GLD Fi
- L7042GSIU Ed
- L3521GSI Ed
- P9390GSI EN
- L7042GSI Ed
- L7042GSI St
- AT275GL16V St
- APG1000 Bi

*Waukesha*



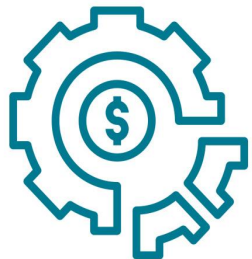
## Basic engines or generator sets sold since 1998

### TEDOM

- TV90G5VNX86 N.25 equipment for various Syngas plants, enterprise ESPE SPA
- TB110G5VNTX86MTM
- TG110VTX86 Berica

### MTU

- 204000L33 Polymer factory Dottor Gallina



**TEDOM**

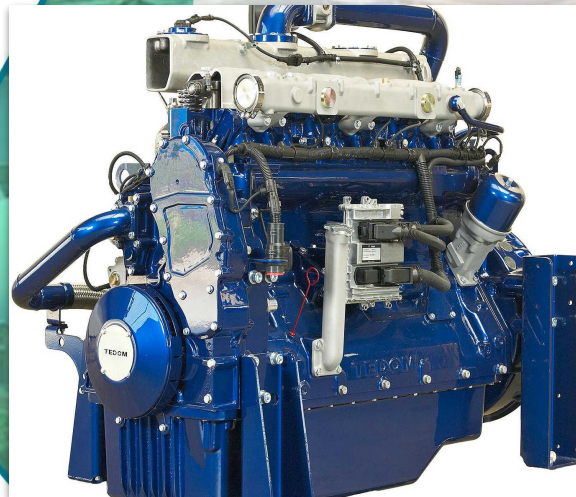


## Ongoing projects in progress in 2022

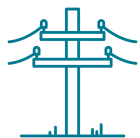
New project at Il Germoglio agricultural company.  
The plant was constructed by Enerblu srl from Lonigo.  
(representative photo).  
Expected completion date of the plant: August 2022.  
TB110G5VTX86 generates 100 KWe. The plant will also be  
used to produce electricity and heat.

M.A.A. Energia (an Austrian installation company) is  
currently developing a project at 60 hertz with 3 machines  
in parallel, using TG200G8VTW86 engines at an altitude of  
2,240 meters above sea level. The plant will have a power  
output of 480 kW and include thermal recovery.

# TEDOM



2022



50  
Kwell



Espe spa



Cogeneration  
- Syngas

## Revenue

Total revenue from engine sales in 2021



€ 4.800.000



# Examples of installation and commissioning at plant engineers

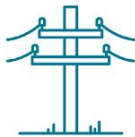
**Energy Solution s.r.l.** was established in 2005, with the first successfully completed project being a 6.6 MWe gas compression plant for storage, commissioned by the client **St**

We inspected the engine construction at the **Waukesha** factory in Wisconsin. Eight months later, it was installed for **Sa**

Waukesha



2005



6,6  
Mwmecc



Sto



Oil  
Compression



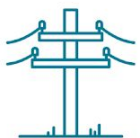
## Examples of installation and commissioning at plant engineers

Our second project was the APG 1,000 for Bi [redacted], which is a biogas-fed cogeneration plant using poultry manure. Again, it involved a 1 MWe Waukesha engine.

*Waukesha*



2006



1 MweII



Bi [redacted]



Biogas  
Cogeneration



# Examples of installation and commissioning at plant engineers

Start-up at the Casa Grande Agricultural Company's 1 MW plant in Pollina, with the APG1000 model, for the installation company Bi

*Waukesha*



2013



Service

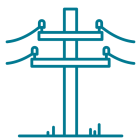
# Examples of installation and commissioning at plant engineers

Rio Marsilia landfill, customer of MTM energia srl, with a TEDOM TB110G5VN7X86 engine for self-generation of energy consumption at the landfill, rated at 100 KWe.

## TEDOM



2015



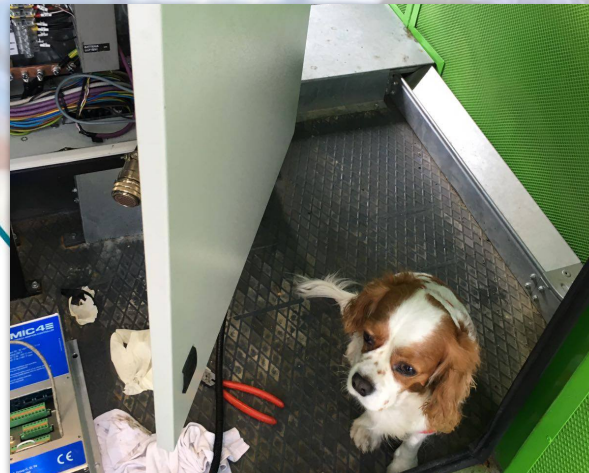
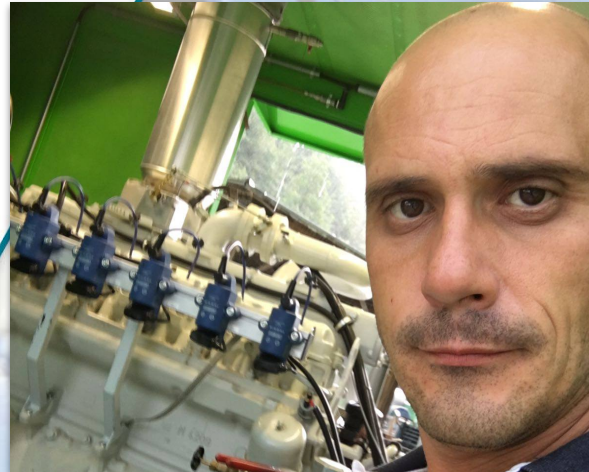
100  
Kwell



MTM  
energia



Cogeneration,  
landfill gas



# Examples of installation and commissioning at plant engineers

Start-up of Waukesha APG1000 at Ri

*Waukesha*



2017



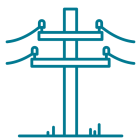
Service

## Examples of installation and commissioning at plant engineers

We sold a TEDOM TG110G5VTZ86 engine, rated at 100 kW, for a nursing home. It is a cogeneration unit used to produce hot water and electricity.



2014



100 Kw



Nursing  
home



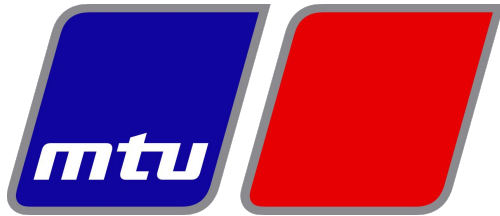
Cogeneration

### Another Engine TEDOM Startup By Energy Solution

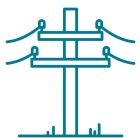


## Examples of installation and commissioning at plant engineers

We installed a complete plant (which was our only exception), as per the explicit request of the customer, to oversee the project from A to Z of a 2 MWe MTU 204000L33 engine, with hot water production.



2017



2 Mwell



Plant



# Certifications

## In collaboration with TEDOM

We are certified for TEDOM service interventions.

# TEDOM



# Certifications

## Waukesha certifications

*Waukesha*

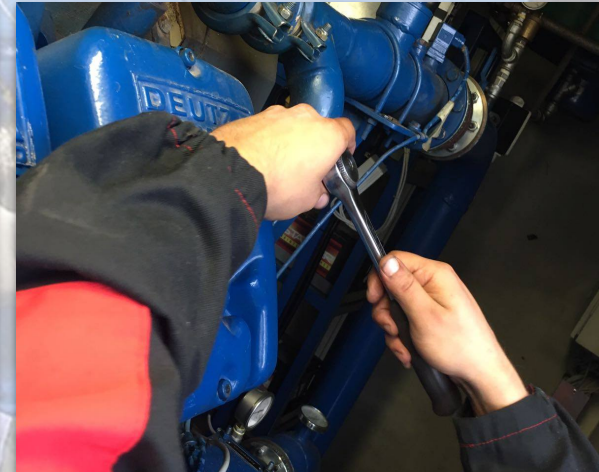


# Service



100% more checks than those required by non-certified regular maintenance providers.  
The operator manages the plant, while the maintenance provider supports the operator with extensive experience that, if listened to, allows them to introduce the phrase 'the more you invest, the less you spend.'  
Our service and startup procedures comply with all current rules and regulations regarding work on construction sites:

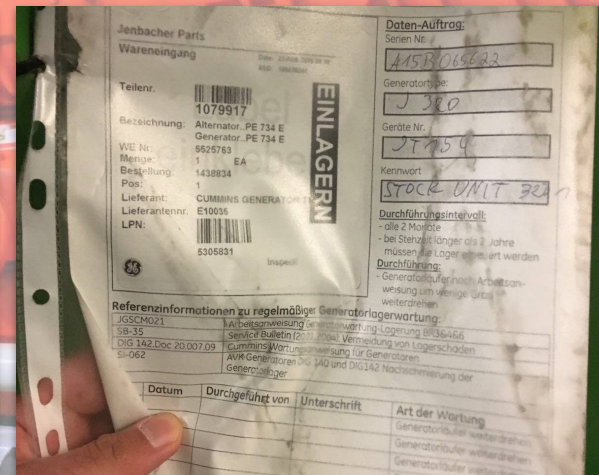
1. Analysis of the work center according to machine specifications
2. Planning of regular maintenance
3. Prompt response for corrective maintenance interventions
4. Inspection/visual analysis of the workplace
5. Site preparation in accordance with the plant safety manager
6. We are always up to date on DVRI and DVR, and always have DURC
7. Loading of additional necessary equipment on vans for the assigned job



Service

+ of 40

Total number of plants maintained  
up until now



## Example of service

### La gas power plant

Complete overhaul of a Waukesha F3521GSID engine.

*Waukesha*



2019



Service



## Example of service

### Lucca Hospital managed by the Astaldi Group

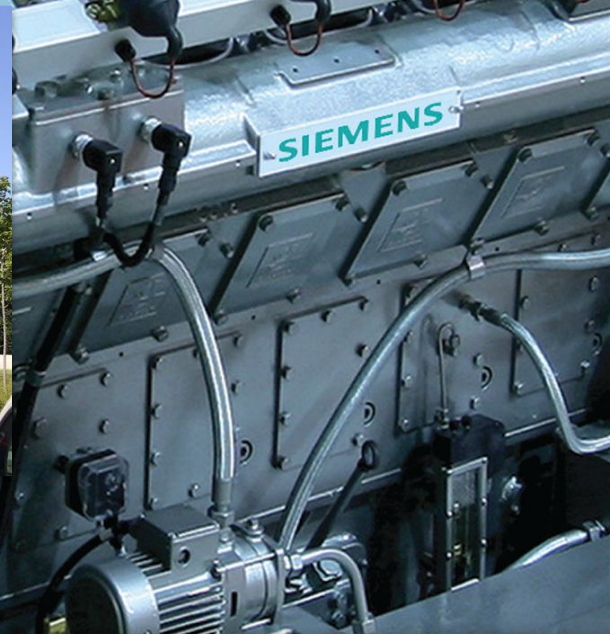
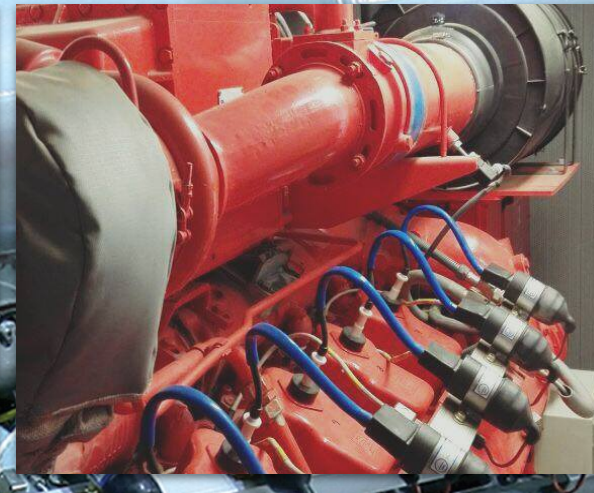
Complete overhaul of a Guascor VSGD SFLGD360 engine.



2017



Service



## Example of service

### Complete maintenance in Vo [REDACTED]

Complete maintenance service for Waukesha APG 2000 at  
Pi [REDACTED] company in Vo [REDACTED]

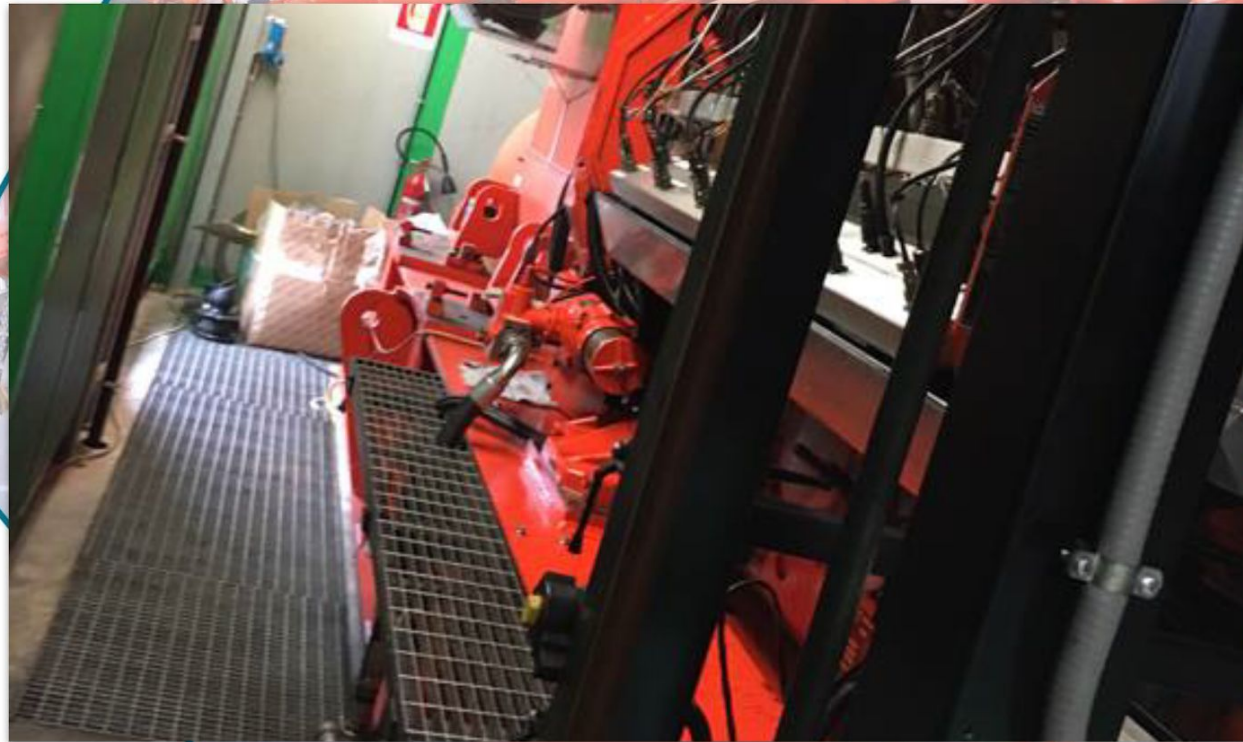
*Waukesha*



2016



Service



## Example of service

### FARE in Aviano

Full service at FARE agricultural company in Aviano, Jenbacher 320 Biogas engine.

# JENBACHER



2016



Service



## Example of service

### Startup at Messina Hospital

Of a TEDOM plant with two MWM 2020V16 engines.



2015



Service



## Example of service

### Startup at Europam

Completely overhauled and restarted engine, MWM 2020V16.



2021



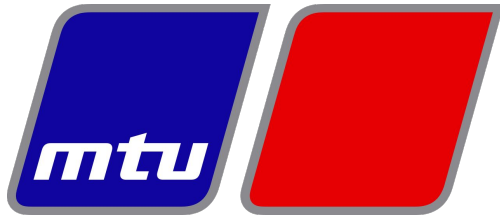
Service



# How we approach appraisals

## Inspection of seized MTU engine

Technical inspection at MTU for seizure damage on a 4000L33 series engine for MAA Energia company.



2020

Service

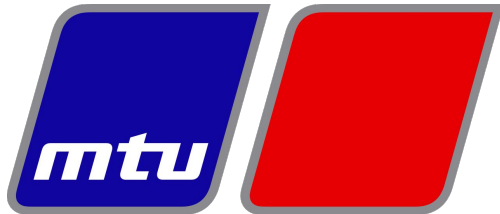


# How we approach appraisals

## MTU Duisburg

Business trip to MTU factory in Duisburg to assess the condition of damage after a cylinder detonation failure, 4000L32 series engine.

Our appraisals take into account all technical, physical, electrical, communication, and electronic interface factors provided by the manufacturer, as well as the working environment where the machine is used.



2020

Service



# Processes and Procedures

## In constant evolution

All departments - *purchasing, administration, logistics, marketing, technical, and sales* - are managed with the best available technologies in the market, and the next investment (which will be the Warehouse 4.0) aims to make the **sales** and **technical support services more accessible, while ensuring timely delivery and quality in all areas of the business.**

While we await complete digitalization, our logistics and warehouse standards include visual inspection of incoming materials, ongoing inventory checks, and continuous maintenance of stored materials using preservative oils, salts for electrical components, and appropriate packaging managed by the logistics department. The warehouse staff is provided with instructions on the proper packaging methods for shipments to all destinations. Currently, the only outsourced operations are the fumigation and marine treatment of packaging for exporting engines abroad.



# Spare parts, Our Brands

## Carburetion

**kromschroder**

**DUNGS®**  
Combustion Controls

**HEINZMANN®**  
thinking in drive and control

**WOODWARD**

## Control and command boards

**WOODWARD**

**ABB**

**HEINZMANN®**  
thinking in drive and control

## Engines

**TEDOM**

*Waukesha*

**Guascor  
SIEMENS**

**JENBACHER**

**IVECO**

## Starting System

**Delco Remy**

**BOSCH**

**TDI**

**IR Ingersoll Rand**

## Ignition

**TENNECO**

**JENBACHER**

**GOETZE®**

**ORCH**  
SINCE 1961

**CHAMPION**

**altronic**  
HOERBIGER Engine Solutions

**BERU®**

**DENSO**  
Crafting the Core

## Measuring and control tools

**MURPHY®**

**KENCO**  
ENGINEERING

## Machine parts

**TEDOM**

**MWM**  
Energy. Efficiency. Environment.

*Waukesha*

**JENBACHER**

**Guascor  
SIEMENS**

**IVECO**

## Exhaust System

**Garrett**  
ADVANCING MOTION

**K  
K&K**

**HOLSET**  
TURBOCHARGERS

**MITSUBISHI**

## Industrial Filtration

**Genuine Part**

**Parker**

**BALDWIN**  
FILTERS®

**WIX**  
FILTERS

**Cummins Filtration**

**HIFI FILTER®**

**Donaldson**  
Filtration Solutions

**Fleetguard®**

# Spare Parts

## Carburation



## Control and command boards



## Engines



## Starting System



## Ignition



## Measuring and control



## Spare Parts



## Exhaust System



## Industrial Filtration



## Sales trends

From 2012 to 2021



---

€ 12.000.000



