

MATRA

Since 1958



HISTORY



WORKSHOP SERVICES



BEARING SERVICES



PLATING SERVICES



**RECONDITIONING OF 2 & 4
STROKE ENGINE PARTS**



ON - SITE SERVICES

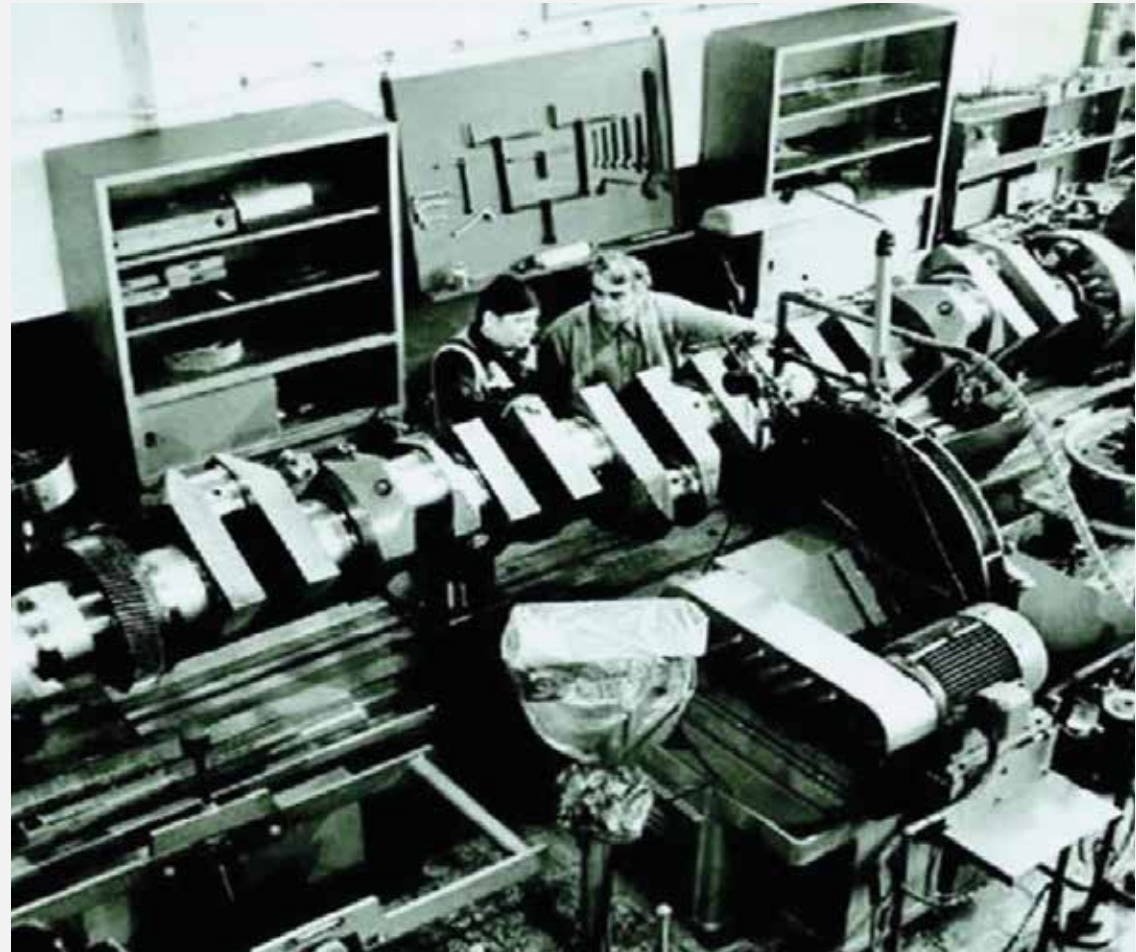
Year 1970

Line boring of 6700mm long and 2500 hp Ruston Paxman bedplate in our workshop.



Year 1971

Crankshaft grinding of 4700mm long,
8 cylinder Deutz 545 in our workshop







WORKSHOP SERVICES

- Crankshaft grinding with capacity of 1 – 10.5 meters
- Shaft repairs by laser cladding and machining/grinding
- CNC vertical lathe with capacity of 2 meters in diameter
 - Propulsion system parts repairs
- Sterntube and generator babbitt (white metal) bearing repair & manufacturing
- Thermal spraying, laser cladding, hard chrome plating
- All kinds of 2 & 4 stroke engine parts reconditioning
 - *Piston crowns & piston skirts*
 - *Connecting rods & piston rods*
 - *Cylinder heads*
 - *Exhaust valves and seats*

ON-SITE SERVICES

- On-site crankpin or any OD machining from 150 to 900mm diameter
 - Laser or optical alignment measurement for bores or flat surfaces
- On-site in-line boring of main bearing journals or any ID 50-1000mm
 - On-site surface milling or machining of any surfaces
 - On-site laser cladding and Machining (coming in August 2022)
 - On-site drilling and tapping
- Liner Diameter Measurement without removal of cylinder head (500-900mm)
 - On-site inspections

WORKSHOP SERVICES

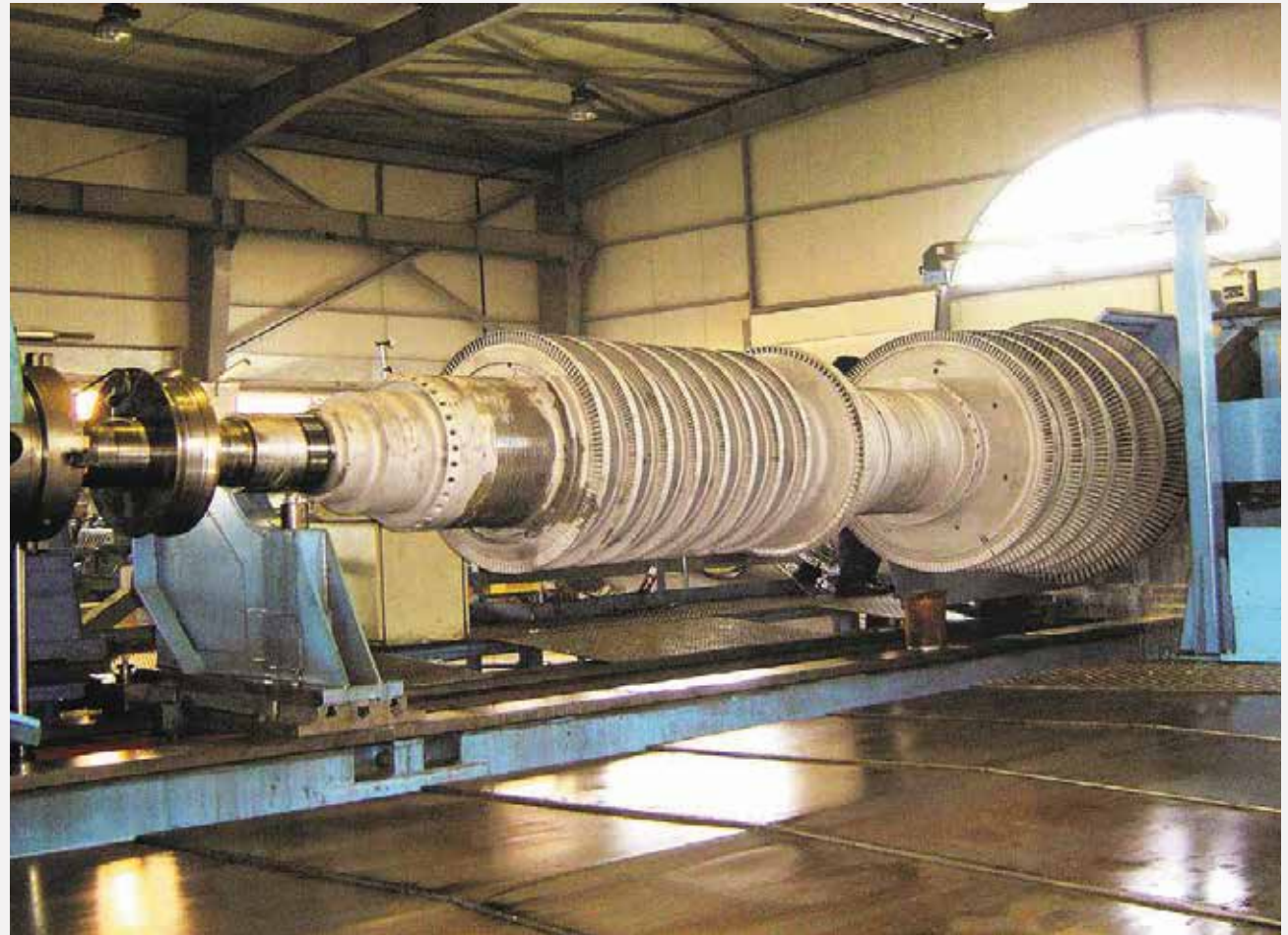
Crankshaft Grinding of Wartsila
46 - 6500mm long & weighs 10 tons



Crankshaft Grinding of Wartsila
46 - 6500mm long &
weighs 10 tons



Grinding of 23 tons Ansaldo LP turbine



Propeller Shaft Grinding of
Karadeniz Powership Osman Khan





Propeller Shaft Grinding of Karadeniz Powership Osman Khan

Grinding of DG Alternator



Hanshin LUS 58
Crankshaft



Machining of Propeller Hub and Blade Carrier



Machining of Blade
Carrier Pin and Yoke



BEARING SERVICES

BEARING SERVICES

- Centrifugal casting of all sorts of white metal (babbitt) bearings
- Sterntube bearings (AFT & FWD), Intermediate shaft bearings
 - Alternator bearings (axial and radial)
- Bonding test of bearings (AFT & FWB Sterntube, Intermediate, etc.)
 - Shaft way alignment measurement services





Bonding Test of Bearings



Repaired Alternator Shaft Bearings

PLATING SERVICES

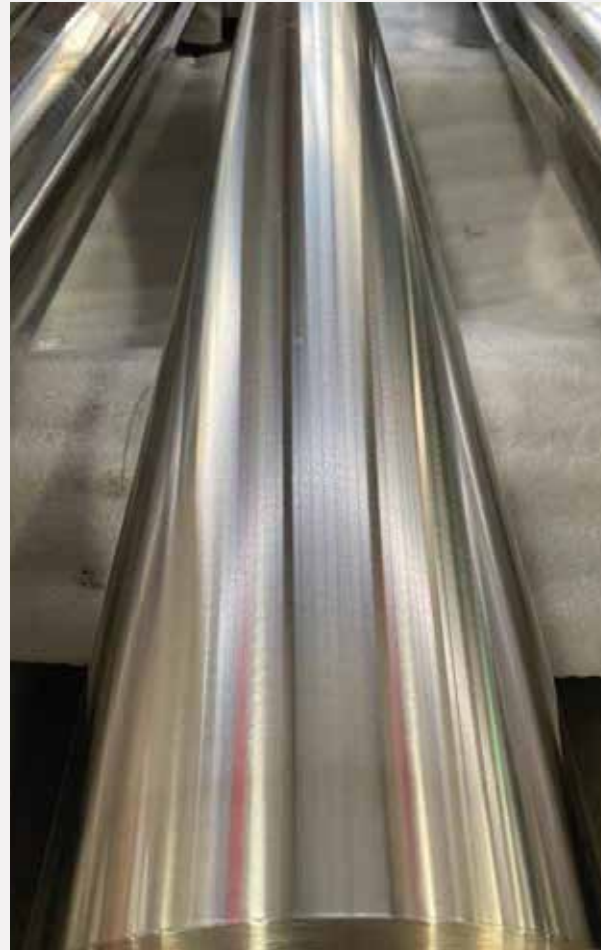
PLATING SERVICES

- Thermal Spraying
- Laser Cladding (in workshop and on-site)
 - Hard Chrome Plating
 - Electroplating

Thermal Spraying of:
Exhaust Valve Spindle
Stems, Chrome Liners,
Various Shafts



Stable Station and On-Site
Laser Cladding Services



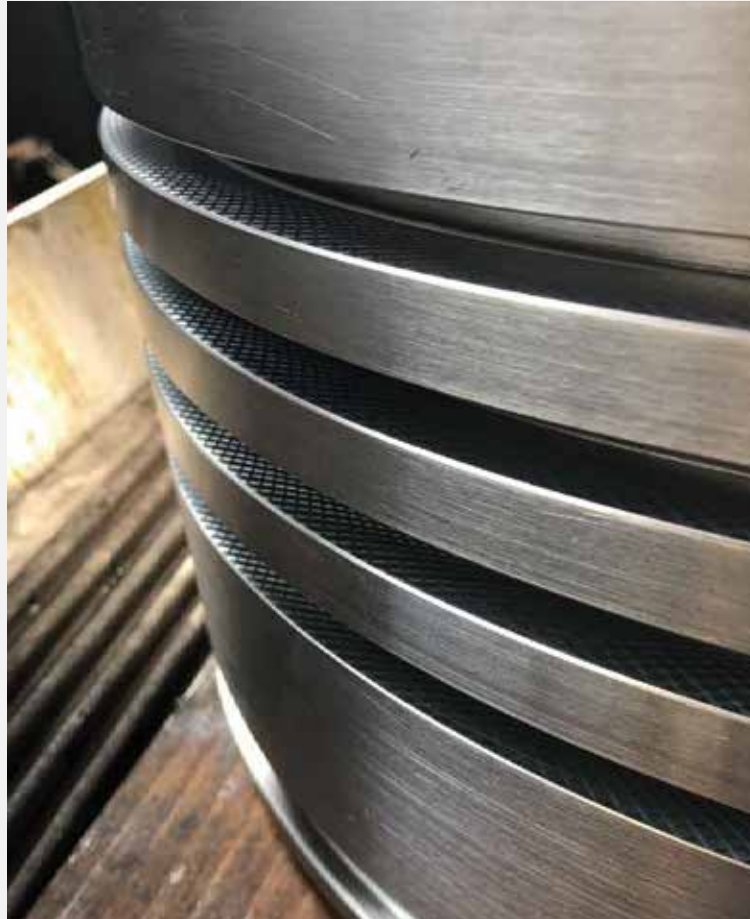
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**RECONDITIONING OF
2 & 4 STROKE ENGINE PARTS**

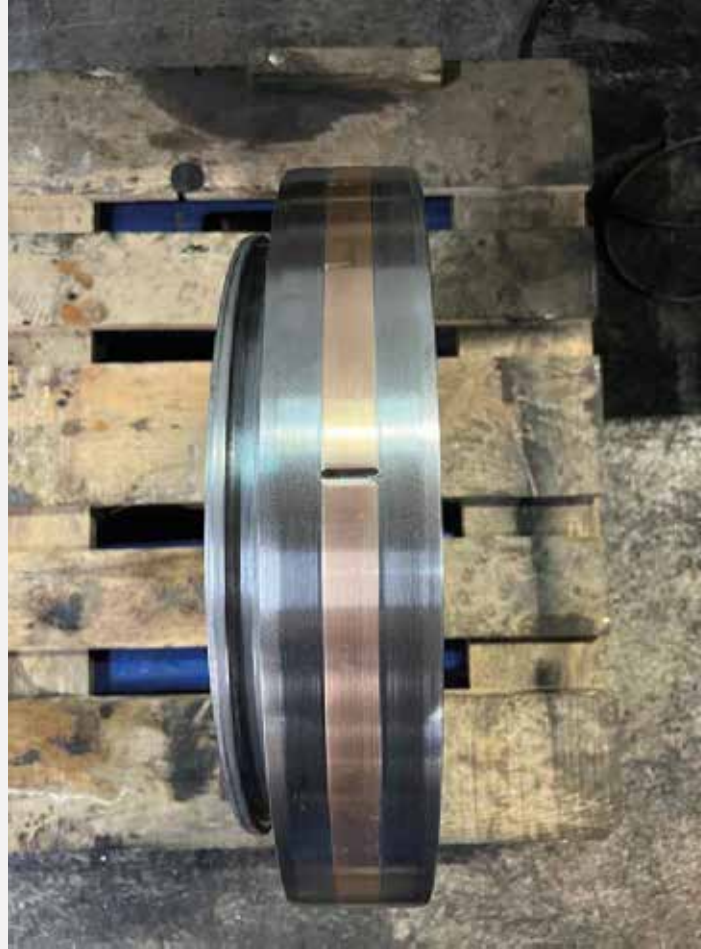
RECONDITIONING OF 2-STROKE ENGINE PARTS

- Piston crowns by hard chroming
 - Piston skirts
 - Piston rods
 - Cylinder heads
- Water jackets (Liner & Cylinder head)
 - Exhaust valve spindles
- Exhaust valve spindle stems by thermal sparing
 - Exhaust valve seats
 - Liners

Piston crown ring groove reconditioning by hard chrome plating and CNC grinding with maker standards quality and 20.000 working hours guarantee



Piston Skirt Reconditioning
For All Types



Exhaust valve spindle
reconditioning
by Inconel welding application

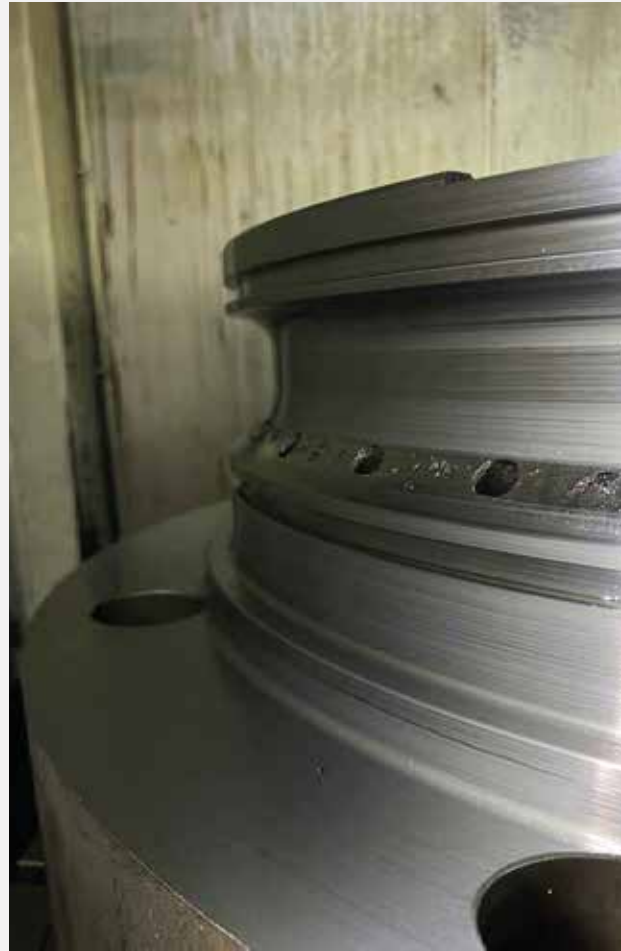
Exhaust valve spindle stem
reconditioning by thermal
spraying





Reconditioning of Cylinder Heads
by SAW and CNC Machining

Reconditioning of
Cylinder Heads
by SAW and CNC Machining



Reconditioning of Cylinder Heads
by SAW and CNC Machining



Water Jacket
Reconditioning by
Thermal Spraying or
Laser Cladding





Inconel 625 Welding
Around Injector Holes



Reconditioning
of Water Jackets



Welding of 90MC
Cylinder Head



Piston Rod Reconditioning
by SAW or by Laser Cladding



Grinding for Superfinishing



RECONDITIONING OF 4-STROKE ENGINE PARTS

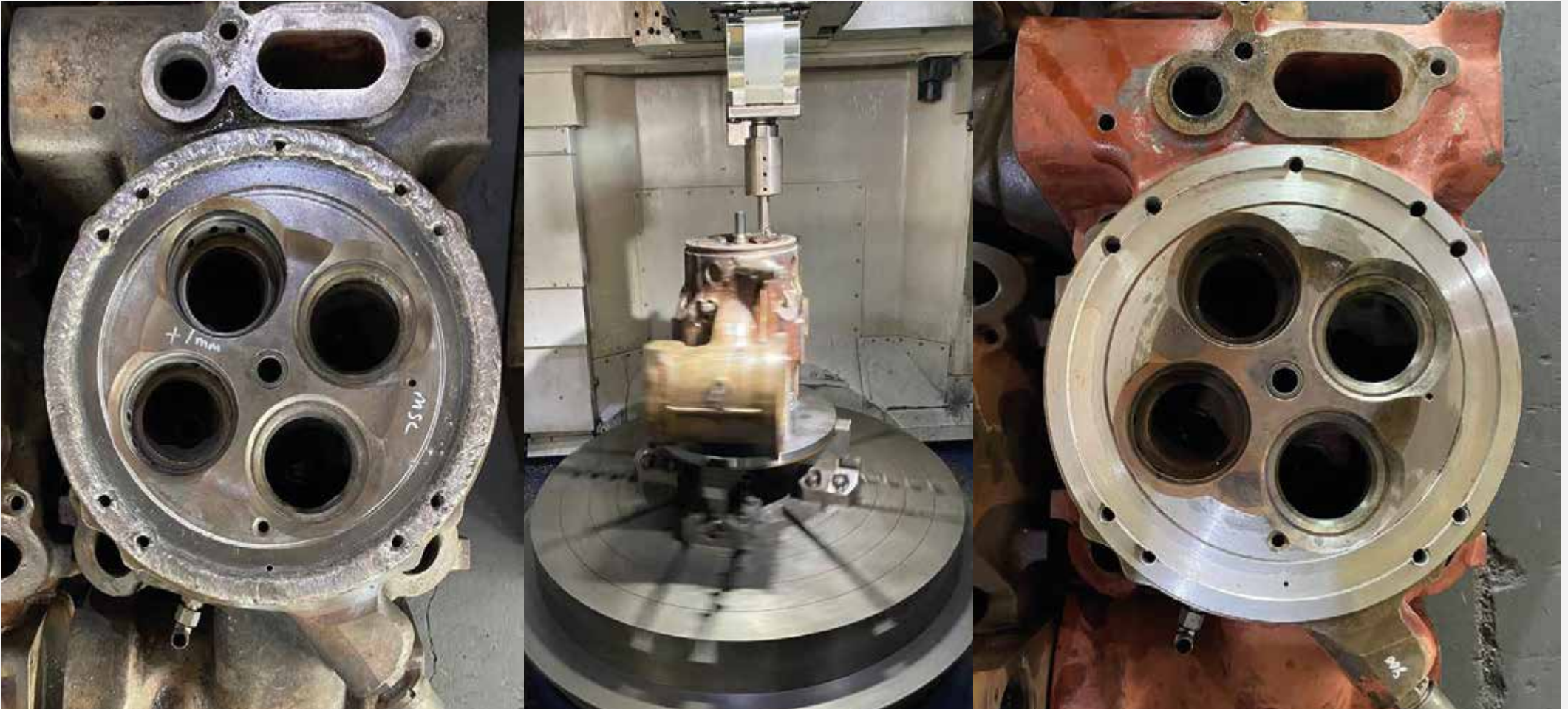
- Piston crowns & piston skirts
 - Connecting rods
 - Cylinder heads
 - Water jackets
 - Liners
 - Crankshafts
- Engine blocks

All kinds of engine reconditioning jobs can be handled in our workshops



Crankshaft Grinding Services
From 1-10.5 Meters





CNC Machining of
Cylinder
Head Sealing Surfaces



All kinds of cylinder head reconditioning jobs can be done in our workshop



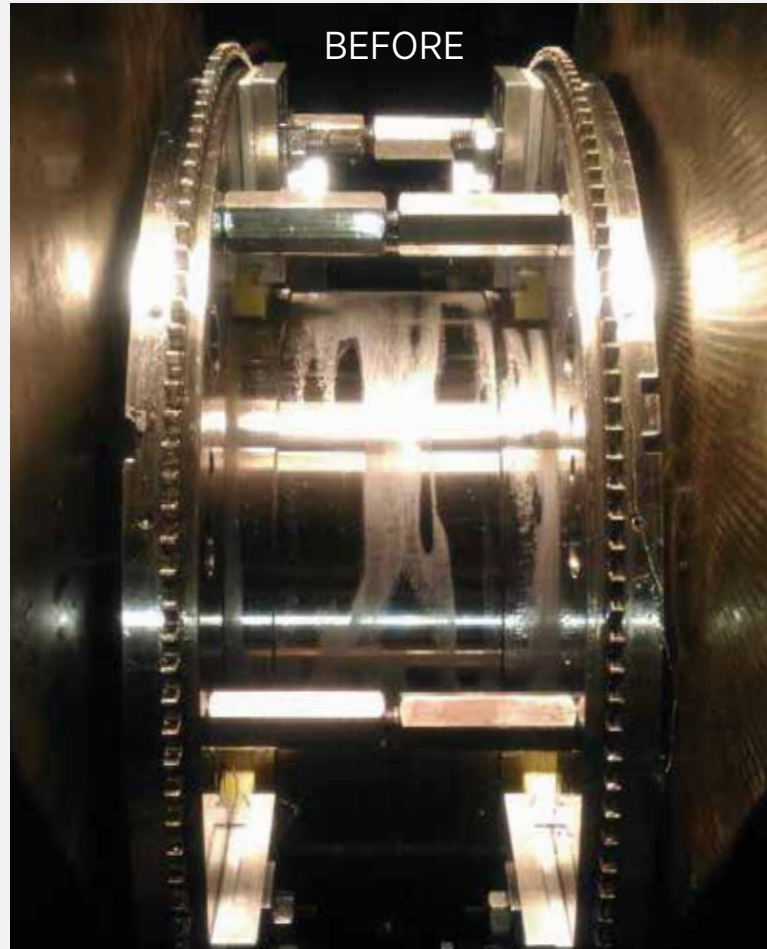


ON-SITE SERVICES

In-situ Machining of
Crankshafts Damaged &
Overhardened Surfaces
Need To Be Grinded



Damaged Crankpin



In-situ machining of 29
crankpins
for 4 diesel generators in
Madagascar - Aksa Enerji
Power Plant

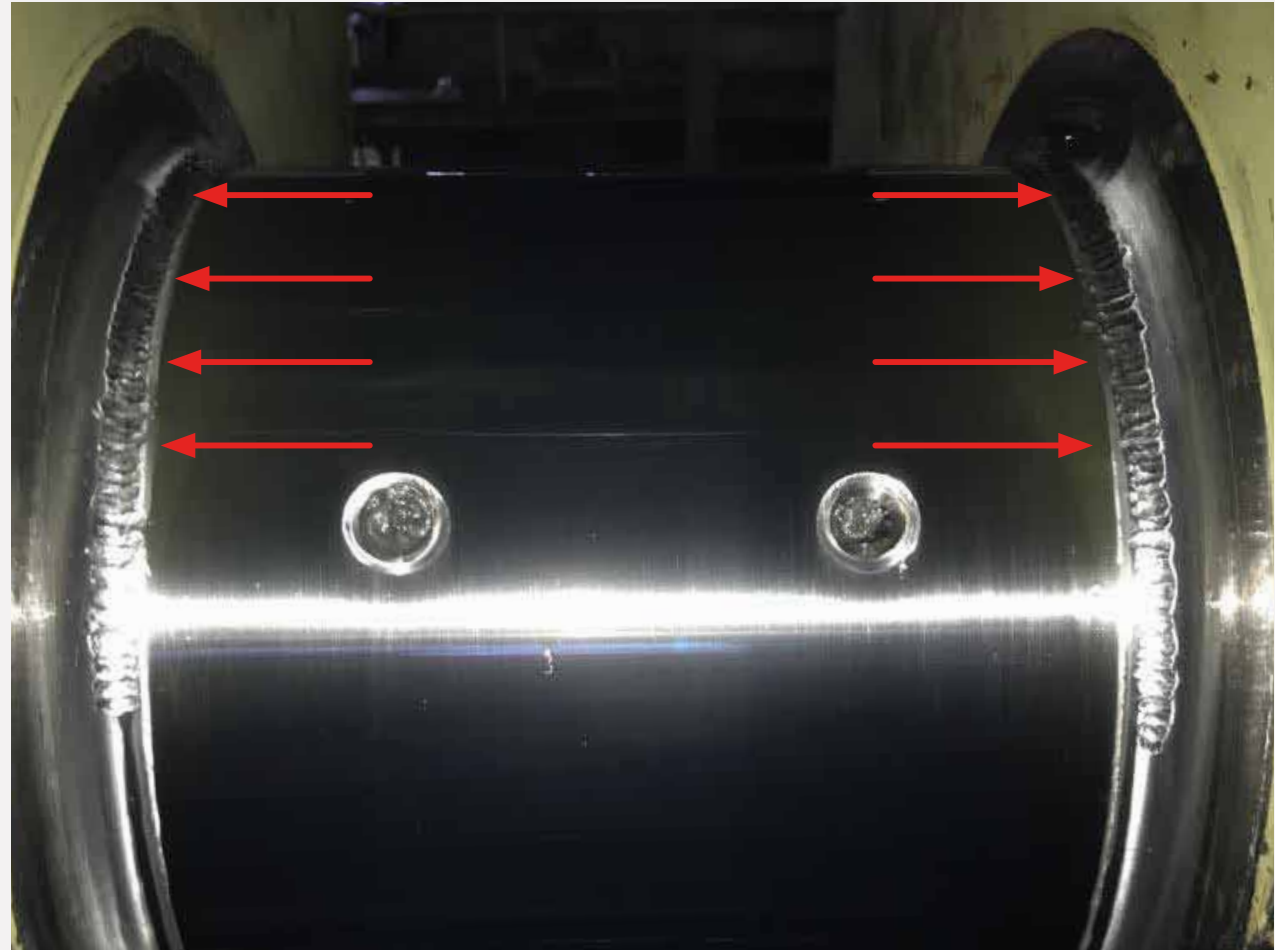
Diesel Generators:
Deutz MWM
BV16M640



Heat Treatment of the Overhardened Crankpin



Straightening of a Bended Crankshaft By Radius Peening



In-situ machining of a turbine rotor's bearing journal in a power plant

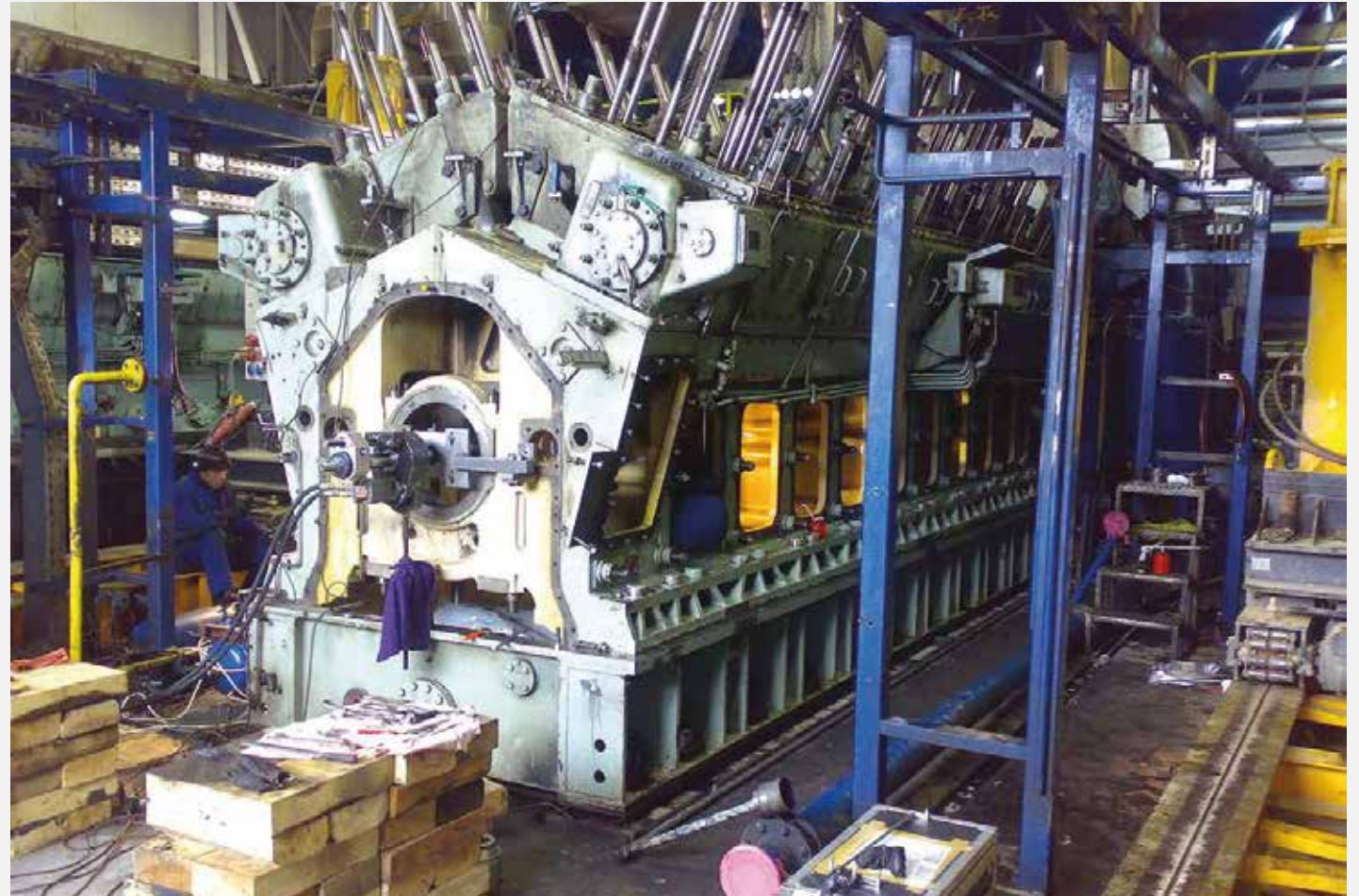
In-situ Machining of Various Rotors in Power Plants Located All Around The World



Line Boring of Main Bearing Journals in the Engine Room



Line Boring of Main Bearing Journals in the Power Plant



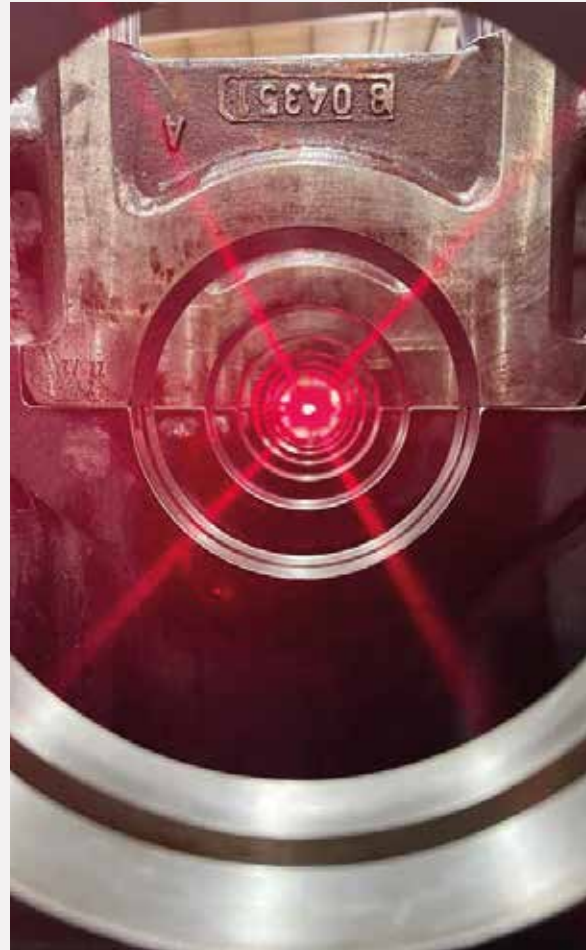
Line Boring of Sterntube
or Sterntube Way



Line Boring of Rudder
Bearing Bore



Laser or Optical Alignment
Measurement of Bores



In-situ Surface Grinding
and Flange Facing



Surface Grinding of
Counterweight Contact Surface



Additional new workshop construction will be completed in 2023.

Total new capacity: 7500sqm (3 workshops)
Largest engine reconditioning company in all Europe.





- New additional workshop construction-4000sqm
- On-site laser cladding (portable)
- Chris marine LDM tool for liner measurement
- Climax flange facing tools
- Climax line boring tools
- Climax OD machining tools

MATRA

Since 1958

www.matramotor.com

Deri OSB Nubük Cad. No:8 YB5 Özel Parsel Aydınli Yolu TUZLA / İSTANBUL

+90 (216) 591 05 80

+90 (216) 591 05 87

info@matramotor.com