

Manufacture, Rehabilitation, Reverse Engineering for Fluid Film Bearings

Our goal is to put competence and professionalism at the service of the Customer.
We are the guarantee of your success.

Services

General Project Energy collaborates with companies in the **gas, steam and hydro turbine sectors**, as well as in the **pump and compressor industries, maritime, steel, and cement industry**, providing the following specialized services:

New components

Supply of **new components** based on customer documentation, drawings, and technical specifications



Reverse engineering

Reverse engineering through advanced 3D laser scanning technology



Overhaul of in-service components

Overhaul of in-service components, with technical support on applicable refurbishment methodologies



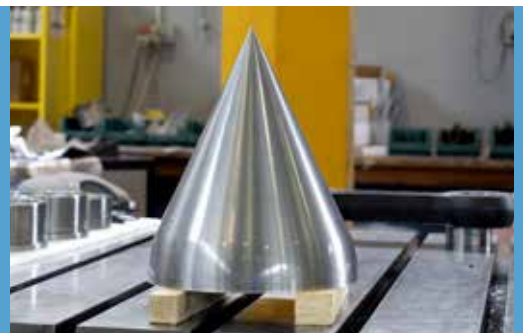
Fluid Film Bearing

Supply and refurbishment of hydrodynamic fluid film bearings, including pads, bushings, and components with anti-friction alloy overlays, covering a dimensional range from 20 mm to 2200 mm



Mechanical machining

Complete mechanical machining services: turning, boring, and grinding for small, medium, and large components



Anti-Friction Overlay Technologies

Specialized equipment for anti-friction metal coating processes

Max melting furnace capacity: 1000 kg

Rotation Ø: 20 to 2200 mm

Max weight: 6000 kg

Brons 300 Centrifuge

Brons 400 Centrifuge

Brons 1500 Centrifuge

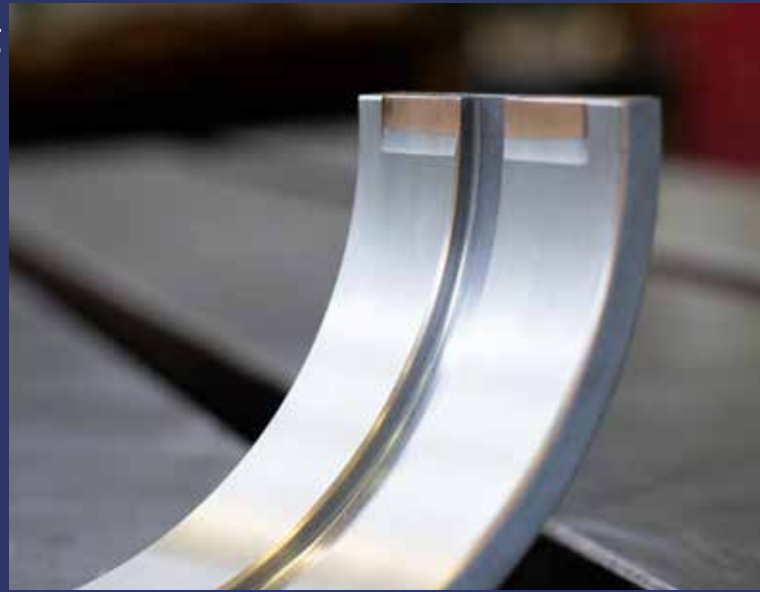
GPE 2200 – Industry 4.0 Centrifugal Casting System

Gravity casting station – dimensions 4 x 6 m

White metal brazing and coating using
oxy-acetylene torch welding

and TIG/GTAW welding

Application of pink metal coating for
trimetallic bearing assemblies



Quality Control

Quality control activities performed by certified Level 2 NDT personnel (UNI EN ISO 9712) across multiple sectors (PT/UT/MT/VT)

Hexagon Absolute Arm V2P, 8525, 7-axis with magnetic base and locking ring

REcreate Reverse Engineering Solution software

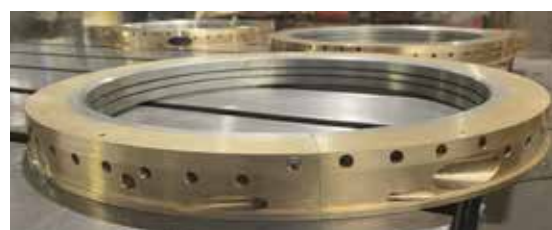
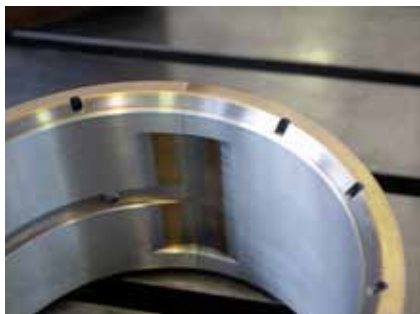
PC-DMIS Portable Interface software

SolidWorks CAD software



Quality

G.P.E. works following the **UNI EN ISO 9001:2015** certification, in order to operate in a global vision applied to all company processes, both internal and those managed externally to qualified partners.



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