

# Reverse Engineering Services

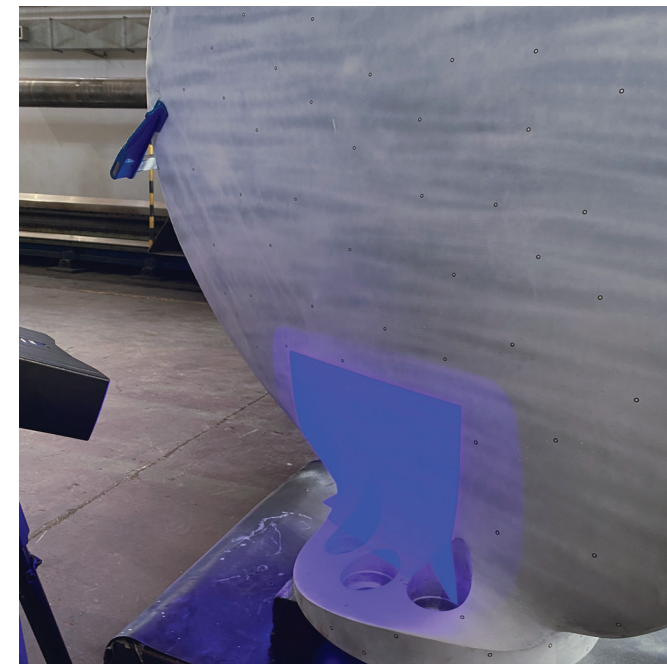






# Your Reliable, Fast and Cost- Effective OEM Alternative

KIMI



In the shipping and power industries, unexpected failures in power production machinery are frequent due to continuous operation under highly demanding conditions and harsh environment.

Sourcing parts for old or obsolete spares can be challenging, due to long delivery times and high costs. KIMI, not only offers repair and maintenance services for turbines, compressors, pumps, generators and motors, but has also been a leading provider of reverse engineered solutions since 1984.

Our substantial investments in advanced reverse engineering technology, leadership in CNC machines, and metallurgical expertise, guarantee innovative manufacturing solutions of the highest quality, precisely tailored to meet our clients' needs. Serving leading clients such as Public Power Corporation, Hellenic Petroleum and the Greek Navy, KIMI's reverse engineered solutions excel across three major industries: Marine, Power and Oil & Gas.





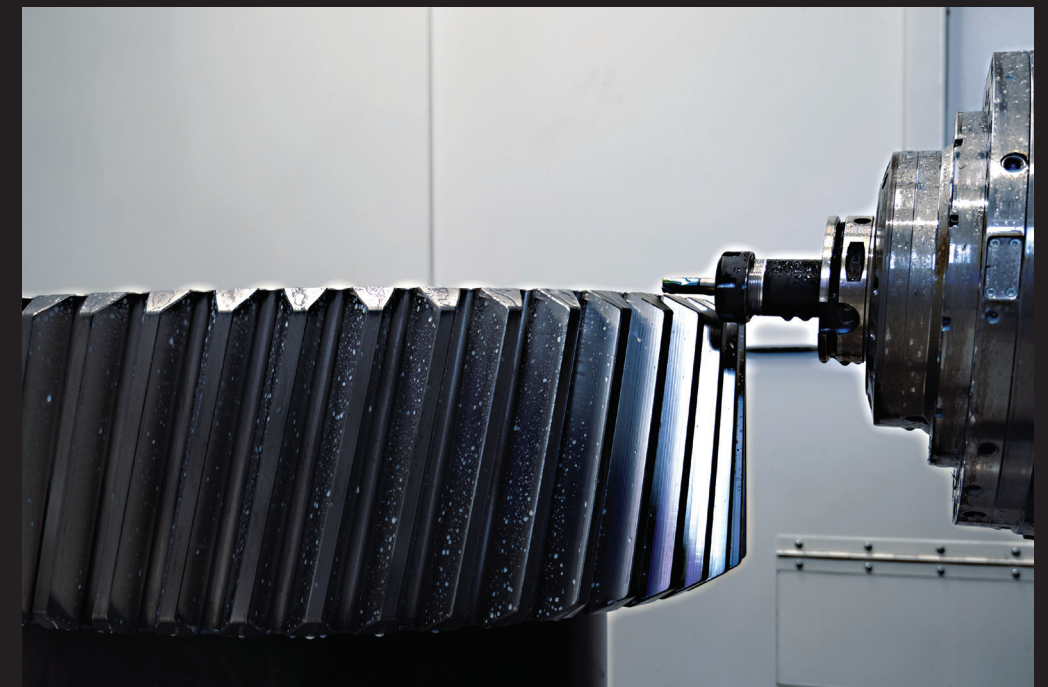
# Gas and Steam Turbines

Blades and disk corrosion, blades or rotor cracking, rubbing between the labyrinths or diaphragms gland seals and the rotor, pinion gear / bull gear tooth failure are some common steam turbine failures. Depending on the solution chosen, these failures may result in long down times and high expenses.

Tailored engineering solutions are also designed and offered for gas turbines operating in stringent environmental conditions, such as in the LNG and Navy sectors.

After detailed inspection, condition evaluation and reporting are carried out, KIMI proceeds with the re-engineering and then manufacturing or re-manufacturing of critical individual parts or complete assemblies such as:

- Rotating and stationary blades
- Nozzles / diaphragms / guide vanes labyrinths
- Journal bearings, thrust bearings, bearing pads, bearing pockets
- Complete rotors
- Bull gears and pinions
- Exhaust casings / steam chests



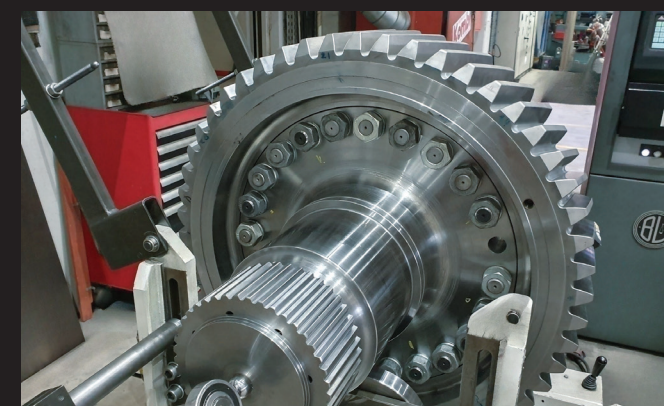
# Tailor Made Solutions for Marine, Power and Oil & Gas Industry

Our cutting-edge reverse engineering solutions extend beyond gas or steam turbines to a wide range of high precision engineering components, regardless of age or manufacturer.

By applying advanced 3 scanning technique or CMM, any part can be precisely modeled to an accuracy of 0.002 mm, irrespective of its geometry complexity. In our metallurgical laboratory, samples are analyzed and required materials are accurately specified.

All critical components are manufactured in the multi axes, high-precision machining centers of our CNC machining department. Tailor made engineered solutions provided by our workshop, include, but not limited to:

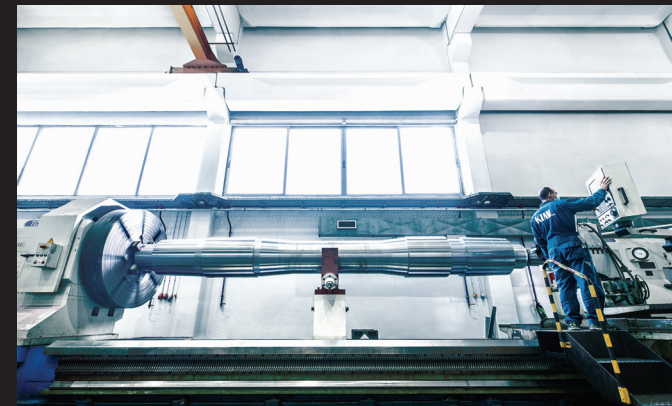
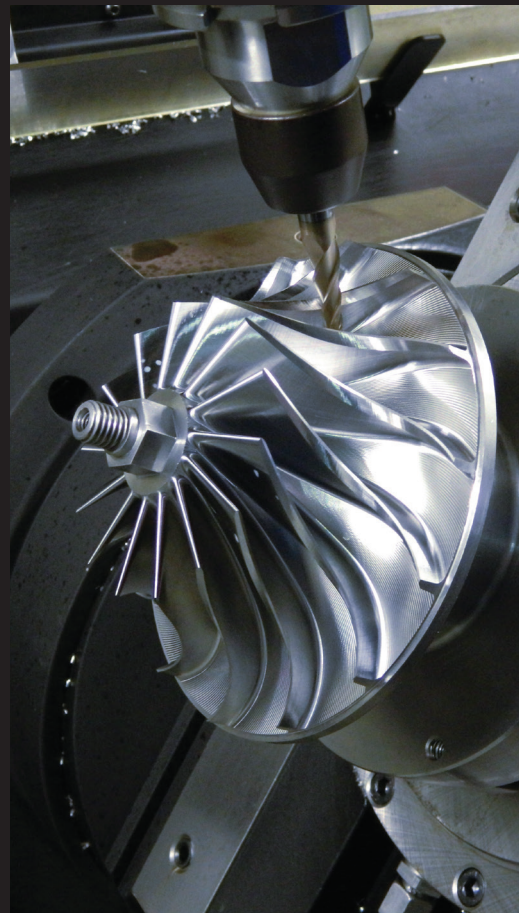
- Gears
- Pump components
- Air compressor components
- Propeller blades
- Large scale line shafts (up to 25 m length), stern tube, bearings
- Reduction gear boxes
- Couplings, special bolts





# Our Value Proposition

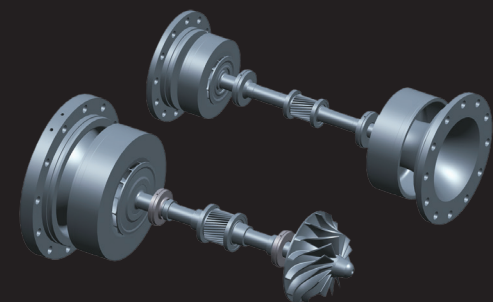
**By upgrading the design and materials of components originally produced years ago, we ensure a prolonged lifespan and superior performance.**



Our metallurgical expertise and technical know how allow us to integrate improvements into our reverse-engineered solutions.

In the context of Classification approval, our manufacturing services undergo thorough quality testing conducted in our in-house quality laboratory, working closely with Classification societies.

This meticulous approach guarantees prompt testing and successful certification acquisition, even for projects of considerable complexity.



# Key Benefits

- Fast production response, even for the most geometrically complex parts
- Technological leadership guarantees spare parts quality equal to new
- Reproduction of obsolete spare parts with long delivery time
- Recommendations for material and design upgrades based on 40 years of experience and expertise
- In-house quality laboratory, accredited by ESVD, ensures full compliance with Classification rules upon client request







SCAN ME



KIMI is an independent service organization that offers premium repair solutions for marine and power equipment. The company was established in 1984 and has since then evolved to a one-stop shop with a wide service portfolio.



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