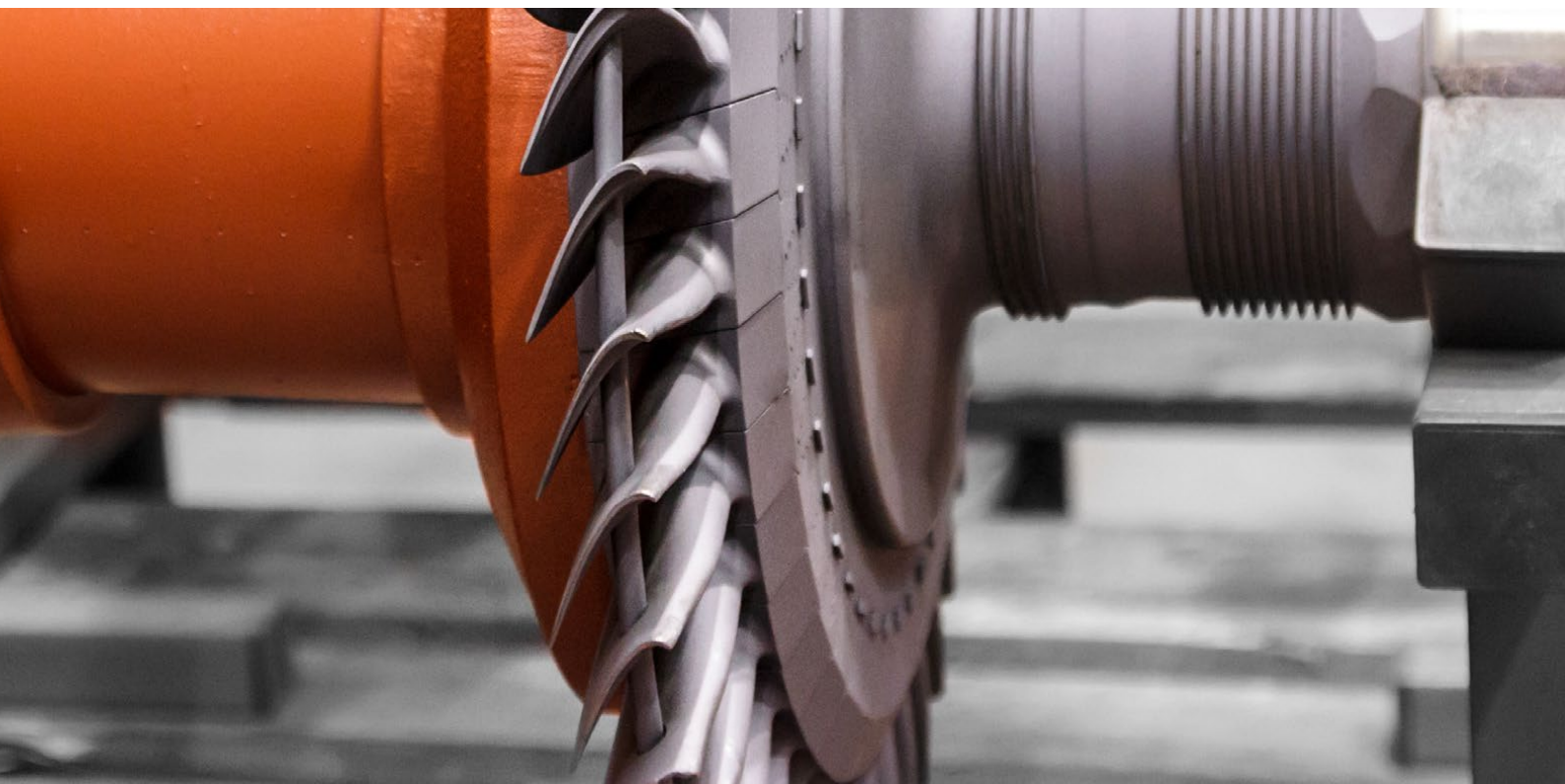


TURBOCHARGER **PARTS, SERVICE & REPAIR**

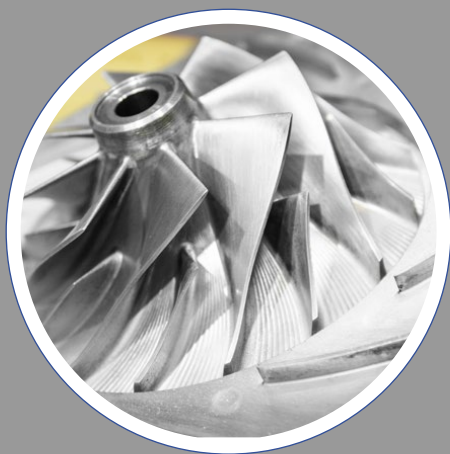


WHO WE ARE

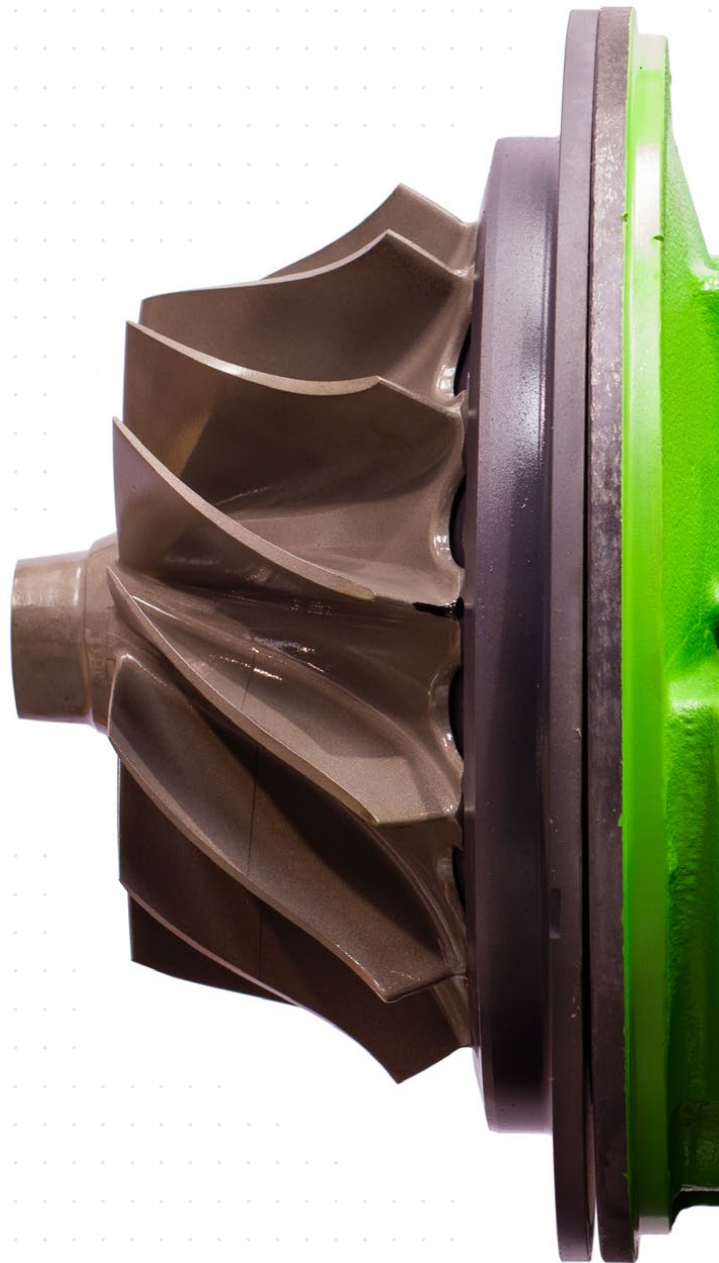
Turbo Internacional is an independent multi-brand turbocharger service company, solely dedicated to the maintenance, repair & sale of exhaust gas turbochargers.

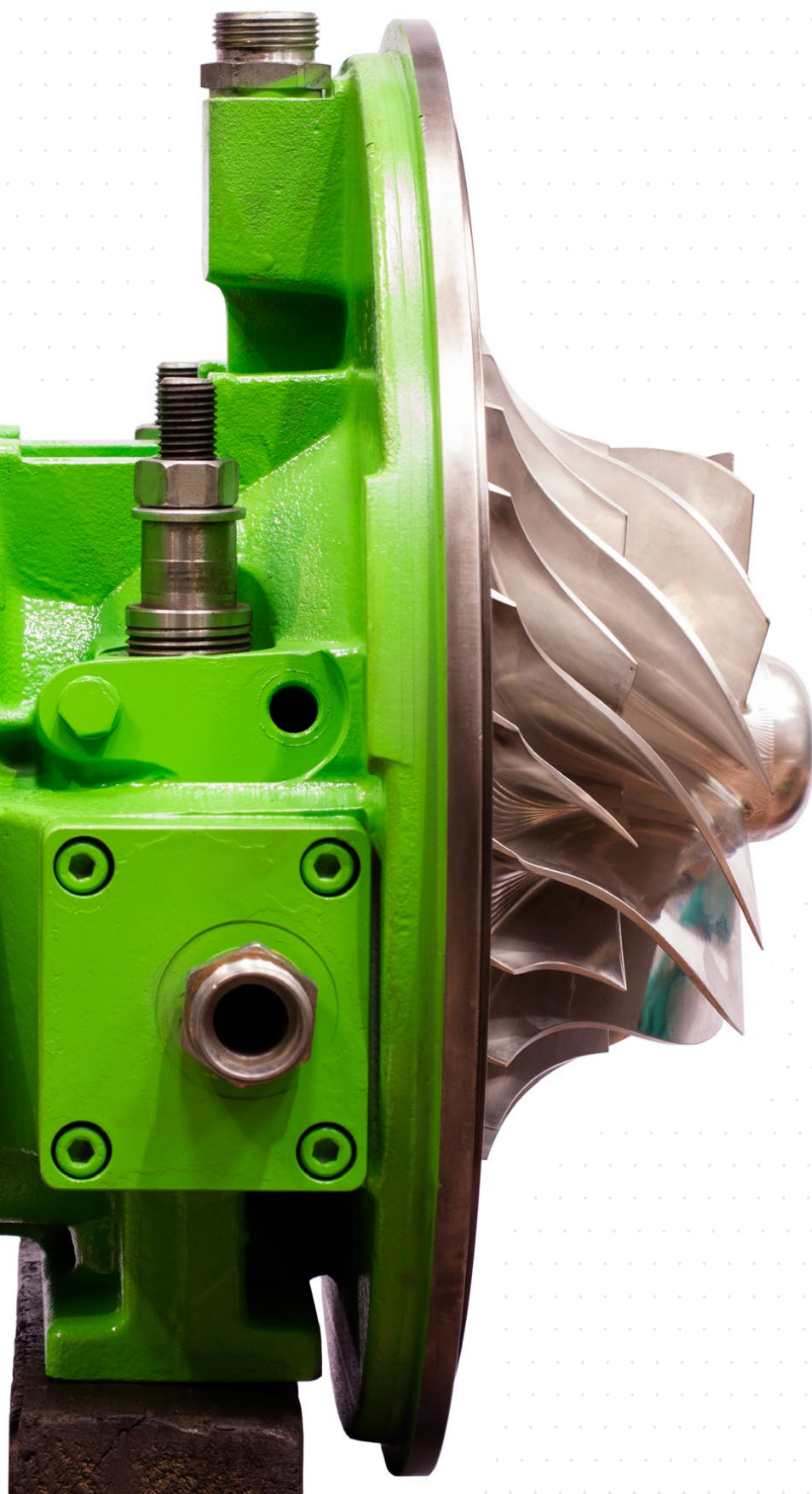
We are able to service the main turbocharger brands like **ABB, MAN, PBS, Mitsubishi, KBB, MTU & Napier**, both in our workshops & on site in power plants, offshore vessels & railways.

From scheduled overhauls, retrofits, precise reconditioning to on-site emergency repairs, our highly skilled, resourceful & certified service engineer workforce is able to carry out the most complex or routine tasks, which is always a guarantee of success & peace of mind for our customers.



“We are committed to give a high quality service whenever & wherever our customer requires it.”





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SUPPLY

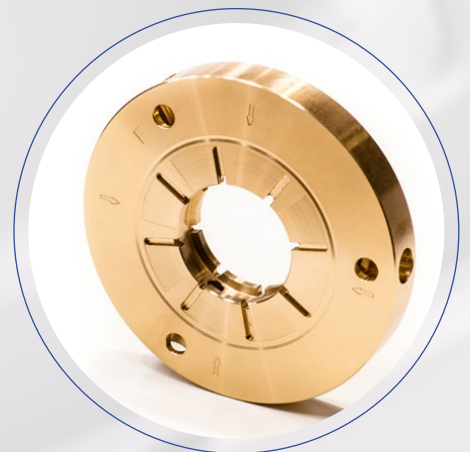
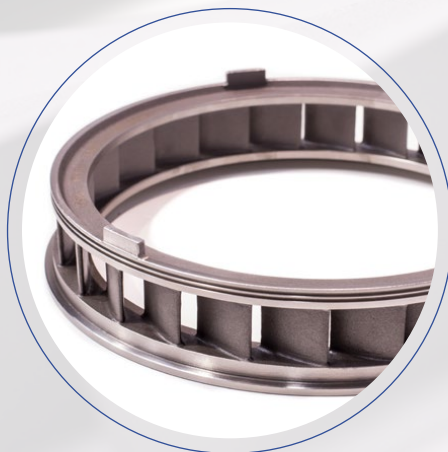
Spare parts

We value our customers, and know that when their engines fail, each second counts, that's why we maintain a growing stock of spare parts, allowing us to be ahead of our competition with speedy response times keeping those down times to the minimum.



“Supplying the Power & Marine industries with Quality parts for over 10 years”

The spare parts we have been supplying for **over a decade** are best in class and up to the highest quality standards, proving to be a solid and smart alternative to the OEM, at a reasonable cost. This is why we are confident in exceeding the industry standards offering a **12 month warranty** for all our spare parts.



Retrofits

Turbo Internacional can offer a wide range of retrofit options from multiple manufacturers. It is often the case where the current turbocharger in operation may be obsolete, under-performing, problematic, unreliable or costly to maintain, this is where the retrofits come into play, bringing benefits such as **higher reliability, higher performance**, cutting edge technology & clever build for easy & **cost effective maintenance**.

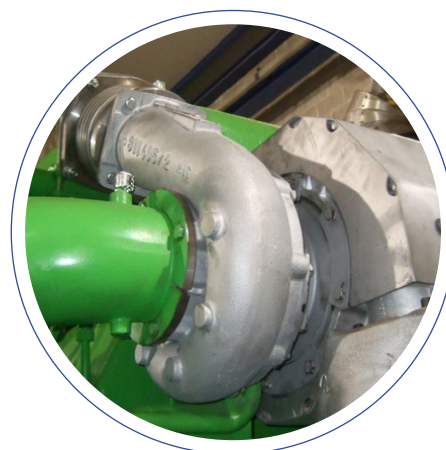
However, one of the key strengths of most retrofit options is that they also serve as a direct replacement of other brands of turbochargers, most times as a direct bolt-on replacement. These turbochargers are suitable for a wide range of engines & fuels including diesel, heavy fuel, natural gas, biogas, land fill gas, etc.

“These retrofits are highly beneficial in replacing actual units which may be obsolete, under-performing, problematic, unreliable or costly.”

We have successfully carried out an important number of retrofits on diesel, gas & biogas engines during the last few years giving us an invaluable wealth of field data & experience that allows us to reliably recommend & find a solution for your particular engine.

Here at Turbo Internacional your retrofit turbochargers, whichever the brand or type, will be serviced by highly skilled factory trained technicians who can assess you with the latest improvements & updates that will keep your turbochargers running at full performance.

We are at your disposal to offer a tailor made solution whenever possible.



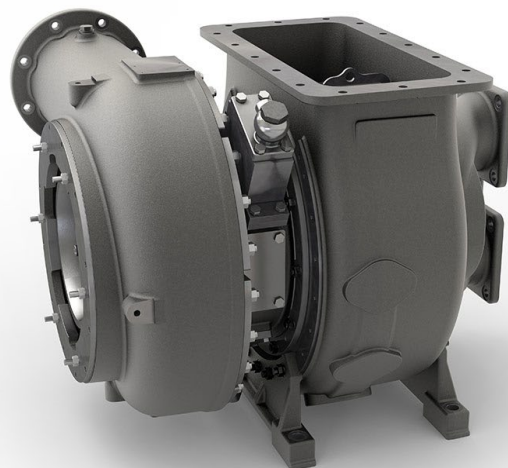
KBB Retrofit option

If you're planning to replace your older turbocharger by a modern, more efficient one, KBB offers you a wide range and series of turbochargers as retrofits, with different special features and designs to meet your requirements.

- **ST27 Series** – The Modern Boost
- **HPR Series** – Proven to be reliable
- **M40** – The compact axial boost

WHY choose KBB?

- Enhanced turbocharger performance: this results in a higher engine efficiency and lower fuel consumption
- Better acceleration performance of the engine and lower emissions (particles, NOx, CO2)
- Quicker and easier maintenance as well as longer maintenance intervals (TBO - Time between Overhaul)
- High spare parts availability and thus shorter delivery times
- Lower spare parts and service costs



RECONDITIONING

Bearings

In our special bearing room free of dust, which meets strict standards of hygiene and cleanliness, we carry out the reconditioning of bearing assemblies & gear oil pumps for turbochargers types such as VTR, VTC and PDH.



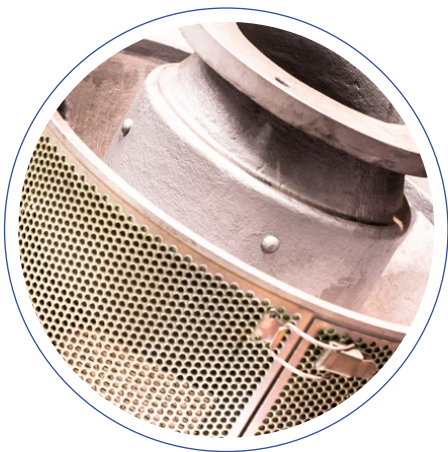
The bearings are completely dismantled; the components are cleaned & measured. In every case the naked bearings are replaced & the rest of the components such as damping springs & bearing bushes are carefully inspected for reuse, in other case they are replaced.

Once the bearings are reassembled with new naked bearings & inspected/replaced parts, the complete units pass through the test benches where their final tolerances are measured & adjusted if needed.



Finally the bearing units are submerged in a preserving agent, packed & closed in tin cans for optimal storage conditions.

“Turbo Internacional guarantees the same lifetime for the reconditioned bearings & pumps as for new units.”



AIR FILTERS / SILENCERS

Air filters / silencers are reconditioned by completely dismantling them, microblasting the supports, body & filter panel, replacing the felt layers & securing tabs, & renewing the filtering elements. This is a cost effective solution that renders the silencer to as new condition.

MAINTENANCE & REPAIR

Service

We pride ourselves in having the best in class service team available 24h to carry out maintenance, inspections & emergency repairs.

Once our service is requested an expert engineer will depart to the power station or vessel to diagnose & put your turbocharger back into operation. In cases where the extent of supply is previously known our service man will bring along with him the necessary spares.

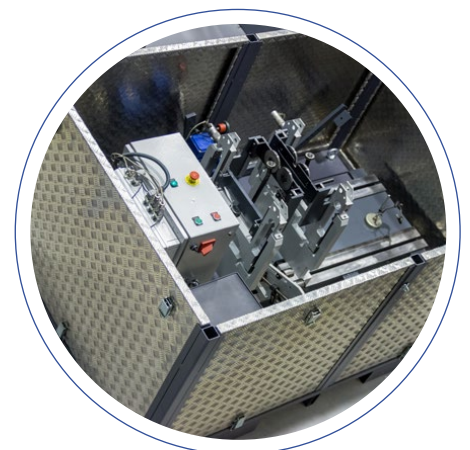


Qualified engineers

All of our service engineers are receiving continuous theoretical and practical in-house training by senior members, and regularly attend OEM factory courses, enabling them to perform the most complex or routine tasks for all turbo makes, with ease and confidence.

On-site balancing

We can also perform dynamic balancing on-site with our portable balancing system. For occasions where taking the rotor to our shop for full maintenance is not feasible we will bring our portable balancing machine right to your installation to carry out the balancing on the spot.





Workshops

We have modern and fully equipped workshops that enable us to perform with a very high quality level of work, overhauls, inspections & repairs for all brands of turbochargers.

Some of the main jobs being performed in our workshops:

- Blade repair
- Ultraviolet Crack Detection
- Hardness testing
- Hydrostatic Testing
- Wall thickness test of gas casings
- Dynamic Balancing
- Micro Blasting
- Metal Spraying
- Hydraulic tests
- Machining
- Complete overhauls
- Balancing from 100g. up to 2.000Kg.





Balancing

Our balancing machines are capable of balancing rotors from 100g. up to 2.000Kg. All rotors going out of our workshop, either as new supply units, reconditioned units, or assembled inside a complete turbocharger are balance checked & if necessary corrected according to manufacturer specifications.

Our balancing machines are calibrated & certified on a yearly basis by the manufacturer, ensuring their precision according to ISO norms.

Hardness test

We carry out hardness tests according to OEM specifications, with certified equipment on all the compressor wheels coming & leaving our workshops. With this test we can diagnose & prevent failure during operation & also assess on the state of a particular wheel.



Turbine shaft repair

Rotor shafts can be rebuilt back to OEM specification, depending on the extent of the wear, on the bearing journals, sealing areas & pump spigots.

Ultrasonic wall thickness test

Wall thickness tests are carried out with a certified tester, to measure the thickness of the gas casings walls in order to find weak points that will lead to cracks & water leaks during operation.



Welding repairs

Our welding department is qualified to perform many types of standard & special welding repairs, suitable for each particular component & material.

PARTNERSHIPS

In addition to our fully equipped Service Center in Madrid, and two service points in Cartagena and Las Palmas de Gran Canaria sea ports, our global presence consists of strategic cooperation agreements and partnerships for the European, Asian and North American markets, allowing us to provide swift and prompt response times in emergency situations wherever required.



Authorized Service Partner

KBB - Kompressorenbau Bannewitz GmbH (Germany)

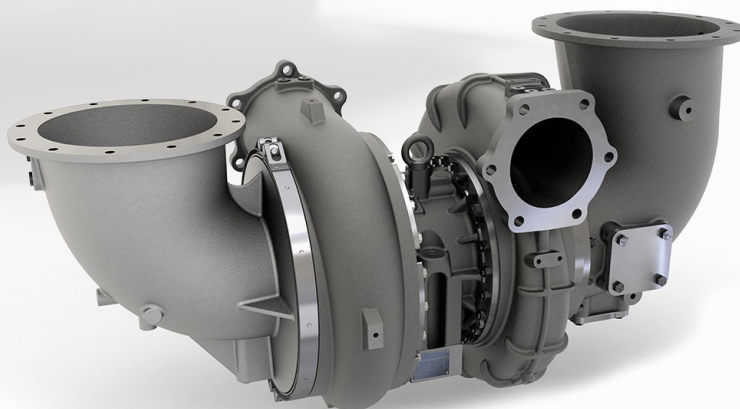
Boost your power. Boost your efficiency.

KBB (Kompressorenbau Bannewitz GmbH) is a German based manufacturer with more than 60 years in the business, delivering an excess of 60.000 exhaust-gas turbochargers of both axial and radial turbine. They have been developing and building some of the leading turbochargers used on medium-speed diesel and gas engines in ships, locomotives as well as on generator plants, meeting the highest demands in terms of performance and reliability.

Authorized Partner

Turbo Internacional is an authorized KBB partner for genuine parts and services. As a certified member of their global service network, we are able to carry out inspections, overhauls and warranty works in accordance to their procedures and policies.

Our vast in house knowledge and experience in the field backed by KBB's long proven expertise, makes us a reputable partner to cover your needs with the best possible outcome.



QUALITY ASSURANCE

Reporting & Documentation

From the initial stages of any maintenance or repair service up to the final stage, our team of professionals keep a strict documented control of each step of the workflow. This allows us not only to maintain highly detailed and transparent communications with our customers, but it also enables us to track the cause of any possible future incident in the process.



“Having a well-documented workflow in place is a key part in building a relationship of trust with our customers and keeping a professional environment”

ISO 9001 & 14001 Certifications

We are proud to announce our serious commitment to the environment and our adherence to international standards of quality management, all our supplies, repairs and maintenance are covered by the ISO 9001: 2015 and ISO 14001: 2015 standards, certified by Bureau Veritas. All of our work flows and material supplies are inspected for compliance with these principals.

We also form part of the prestigious Repro group



CONTACT

Please contact us so we can give you an honest and independent assessment and provide you with a quotation adapted to your specific needs:

Service center:

Uranio, 33 - Local 7
Arganda del Rey
28500 Madrid
Spain

VAT: ESB84654722

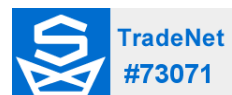
Tel: +34 91 872 01 81

24h: +34 679 988 103

Fax: +34 91 870 67 28

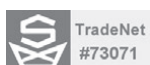
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www.turbointernacional.com





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