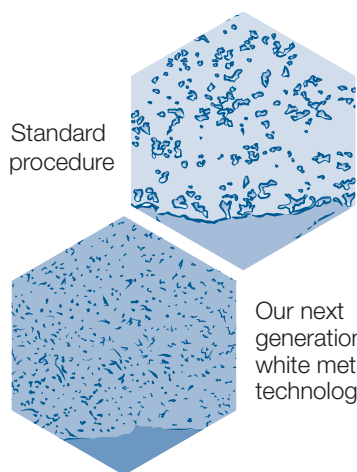


# Wärtsilä White Metal Technology

Making a real technological difference with our innovative new laser technology

Wärtsilä is always looking to support our customers by sourcing new innovations that make products durable, efficient and environmentally sound. Our Wärtsilä White Metal Technology delivers that.



Utilising our specially designed white metal laser technology, we can significantly improve the mechanical and tribological properties of white metal applications.



It delivers benefits such as increased performance and lifetime of bearings, thrust pads, gearboxes, stone crushers, mills and grinders.

## The white metal journey

Existing processes are made through vertical and centrifugal casting:

- Warming up the metal to 500°C.
- Material utilisation ration approximately 25% (60% to recycle).
- Manual process is dependent on operator's experience.
  - Involves smoke, cooling water and handling hazardous components such as acids.

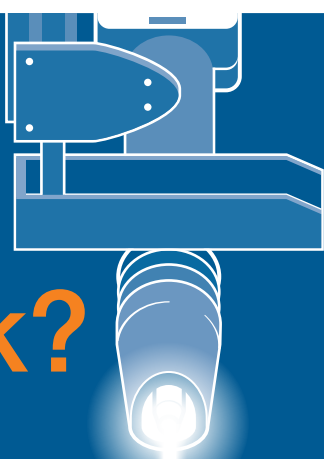
All of this costs time, money, experienced personnel and the right equipment.

## Wärtsilä White Metal Technology on the other hand...

the application is an automatised method that is:

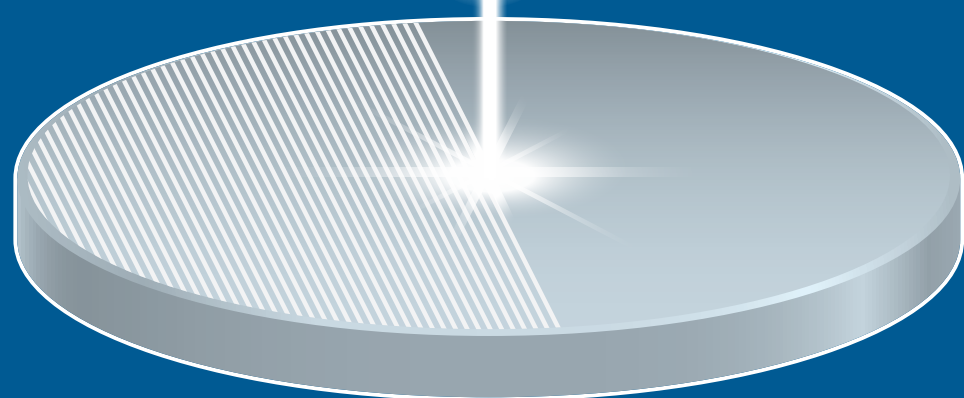
- Independent from environmental conditions, minimalising hazardous impact.
- Faster processing with enhanced quality.
- Completely free of inner defects.
- Suitable for mass production and complicated geometries.
- A special application for white metal repairs.
- Cost-effective.

## How does it work?



The pre-machined base metal is placed under the laser. The program starts and the laser welds regular and precise lines of white metal in extreme precision.

It's easy, fast, safe and environmentally sound.



**Wärtsilä White Metal Technology**  
Faster, cheaper, cleaner and safer than traditional casting methods



## Did you know...

using our innovative laser technology, a tilting pad the size of a coffee cup only takes two minutes for the white metal process to be completed?

## Why go with Wärtsilä White Metal Technology?

Do you want your materials to have:



Improved mechanical and tribological properties, making a real technological difference to your vessel or power plant?



Exceptional, long-lasting bonding strength?



A longer life span, especially under high load requirements and heavy vibration demands?