Through laser cladding, worn and damaged parts can be reconditioned and optimized in its properties.

**Advantages**
- Rebuilding of worn areas and new contours
- Metallic bonding of layers
- Very limited distortion
- Minimal heat affected zone
- Low effort in pre and post processing

**Manufacturing to**
- Original size
- Original quality
- Locally improved properties
- Optimized properties for mechanical and chemical resistance

---

**GL-certified Repair Technology**

**Laser Powder Cladding**

**The R³ Solution**

Contact us at:

Seiho Machinery & Electric Co Pte Ltd

UEN No. 198202381N, 803, King George’s Avenue, #02-218, Phone: (65) 6292 1209

Fax: (65) 6298 2508, sales@seiho.com.sg
Reliability of Laser Powder Cladding has been proven by extensive scientific teaching.

Pistons and Turbo Charger Shafts returned after extensive wear were found to have negligible wear.

Hundreds of Laser-Powder-Cladding products were successfully applied and are in service with optimal customer benefits.

Applications

Laser-Powder-Cladding is successfully applied to a wide range of engineering applications and components, e.g.

- Marine Diesel Engines
- Shafts of Electrical Rotors, Engines, Turbo Chargers
- Separators

Laser Equipment

- High Power solid state laser
- High accuracy 6-axis robot for laser system
- Turn Tilt Unit for work piece
- Work space of 3 x 4 M
- Support System for shafts up to 5m length

Contact us at:
Seihô Machinery & Electric Co Pte Ltd
UEN No. 198202381N, 803, King George’s Avenue, #02-218, Phone: (65) 6292 1209
Fax: (65) 6298 2508, sales@seiho.com.sg
Reconditioning of 4-stroke Pistons by Laser Cladding

Scientific test runs prove significantly reduced wear within reconditioned ring grooves compared to new grooves

Common Damages
- Wear of Piston Ring Grooves
- Failure of Chrome Plating

Manufacturing to
- Original size of ring grooves
- Locally improved properties due to stellite cladding

Advantages
- Reuse of worn pistons
- Enhanced Lifetime and Durability
- GL Certified WF 0810089 HH, Beiblatt 2

Contact us at:
Seiho Machinery & Electric Co Pte Ltd
UEN No. 198202381N, 803, King George’s Avenue, #02-218, Phone: (65) 6292 1209
Fax: (65) 6298 2508, sales@seiho.com.sg
Laser-Powder-Cladding is the best choice technology for reconditioning damaged and worn Turbo-Charger Shafts which would otherwise have been condemned.

**Reconditioning Process**
- Laser-Powder-Cladding of worn areas - bearing surfaces - oil ring grooves
- Base material, core remains untouched
- Low temperature input by Laser process - Geometries remain as original
- Accurate and localized cladding
- Locally improved properties by stellite cladding

Contact us at:
Seiho Machinery & Electric Co Pte Ltd
UEN No. 198202381N, 803, King George’s Avenue, #02-218, Phone: (65) 6292 1209
Fax: (65) 6298 2508, sales@seiho.com.sg