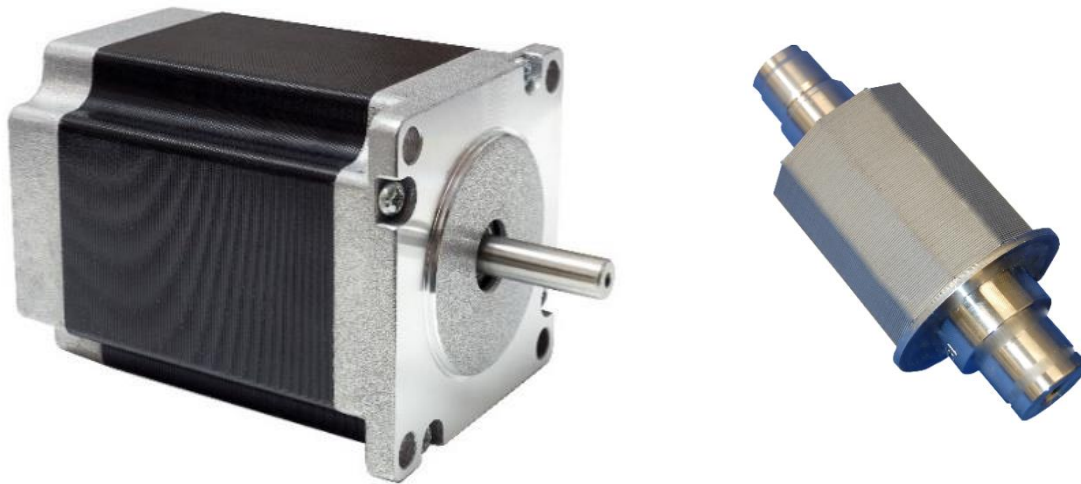


BONDING PRETREATMENT FOR SERVOMOTORS

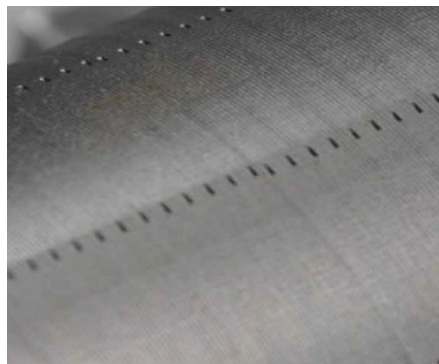


APPLICATION

- Bonding pretreatment of shafts and sheet metal stacks for rotor production
- Pretreatment of magnets for bonding as an option
- For synchronous and asynchronous three-phase and servo motors
- Long-term stable adhesion through surface modification
- Surface tensions:
 $\sigma > 38 \text{ mN/m}$
- Increase of demolition values
- Alternative or complementary to conventional blasting and washing processes



Laser processing rotor



Laser treated rotor surface

LASERSYSTEM AND - PROCESS

- Even with Low Power Systems efficient and economical
- Processing:
up to $5 \text{ cm}^2/\text{s}$ with CL50
- Faster processing times due to higher laser power
- Process-oriented suction technology
- Optionally:
Process monitoring and component control
- Own laser production and application expertise
- Process qualification up to the serial production

COMPACT TURNKEY SOLUTION FOR YOUR WHEELS & CASTORS PRODUCTION

- Machine type:
cleanCELL2220
- ESD compliant design
- Footprint (W x L):
1.722 mm x 2.847 mm
- Weight:
approx. 1.200 kg
- 2-station rotary table with
automatic clamping system
- Workpiece spectrum:
Loading height up to 445 mm
Diameter up to 260 mm
- Automatic diameter check
- Loading height check
- Camera system for process
visualization and
documentation
- High technical availability
(> 98,5%)
- Designed for 24/7 operation
- Customer-specific
adaptations possible



cleanCELL2220 with rotary table



Right: Mandrel with rolls
Left: Laser optics with 90°
positioning

COST-BENEFIT: ECONOMIC EFFICIENCY

- **Running costs:**
cleanCELL2220
incl. suction
< 7,00 €/h
- **Costs per unit:**
Rim d=100mm, b=30mm
Laser CL500G (500 Watt)
3-shift operation
~ 0,10 €/piece

PLEASE CONTACT US - WE ARE HAPPY TO ADVISE!

 **cleanLASER**
cleaning with light