

DATASHEET SINEX

PRODUCT OVERVIEW

Sinex has been specifically developed to replace full material stainless steels components for regular carbon steel with a Sinex laser clad layer. Sinex offers the same technical functionalities as stainless steel 316L. This layer can be used for new components as well as repairs. The layer thickness may vary between a minimum of 225µm and a maximum well above 5000µm.

TYPICAL APPLICATIONS

Sinex offer a solution for substituting expensive stainless steel base materials. Piston rods, rollers and drums can be manufactured out of much cheaper regular carbon steel with a Sinex laser clad layer.

TECHNICAL SPECIFICATIONS

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|----------------------------------------------|-------------------------------------|
| Corrosion resistance (ISO 10289) | 2100hrs, grade 9 |
| Pitting resistance (PREN) | 25 |
| Wear resistance (ASTM65 volume loss) | 90mm ³ |
| Impact resistance (# impacts@20 Joule) | > 5.000 |
| Ductility | High |
| Micro hardness | 200-250HV |
| Thermal shock resistance | High |
| Operating temperature to maintain properties | < 800 °C |
| Roughness | 0,15 < Ra> 1,6 µm |
| Bonding strength | ∞ (infinite; intermetallic bonding) |
| Porosity | 0% |
| Heat affected zone | < 0,2mm |
| Topclad length measurement system | Optional |

