

DATASHEET QUARITE-XT

PRODUCT OVERVIEW

Quarite XT has been specially developed to combine the best of two worlds without using carbides: an excellent corrosion resistance with a high wear resistance. Quarite XT has the highest wear resistance of the non-carbide layers. This is due to the small hard bearing phases that are being formed during lasercladding. 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

Quarite XT is a moderately priced laser clad layer for situations in which components are exposed to high wear and corrosion. Typical applications are heavy duty cylinder rods, rotating shaft ends, bearing liners, mandrels and counterparts of seals in a potential corrosive environment.

TECHNICAL SPECIFICATIONS

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| Corrosion resistance (ISO 10289) | > 1000hrs, grade 10 |
| Pitting resistance (PREN) | 59 |
| Wear resistance (ASTM65 volume loss) | 53mm ³ |
| Impact resistance (# impacts@20 Joule) | > 7.000 |
| Ductility | Very high |
| Micro hardness | 570HV |
| Thermal shock resistance | Very high |
| Operating temperature to maintain properties | < 875 °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 |

