

property

This material is a stainless steel. It is processed by Selective Laser Melting. The material has a high corrosion resistance, high strength and excellent ductility. The manufactured components can be machined, welded, polished and coated.

application

The material can be used especially for functional parts, small series, prototypes and one-offs applications requiring high corrosion resistance and good mechanical properties.

mechanical properties

| property | unit | as built | heat treated |
|------------------------------|------|----------|--------------|
| tensile strength | MPa | 930 ± 50 | 1040 ± 60 |
| yield stress (Rp 0,2%) | MPa | 450 ± 50 | 430 ± 20 |
| elongation at break | % | 20 ± 5 | 15 |
| E modulus | GPa | 170 ± 30 | |
| hardness (DIN EN ISO 6508-1) | HRC | 17 | |

thermal properties

| property | unit | as built | heat treated |
|-------------------------------|-------|----------|--------------|
| thermal conductance | W/m°C | 13 | |
| maximum operating temperature | °C | 550 | |

The given values are guideline values. They are affected through part-geometry, material-additives or environmental influences. They are compiled on the base of present experiences and knowledge. A legitimate obligatory assurance of certain properties or the appropriateness for a precise application on the basis of our information is not construable.