







Stainless Steel

2S143D S143 Bar

Datasheet Updated 05 August 2021

SPECIFICATIONS

Commercial

2S143D S143

Aerospace-grade precipitation hardening stainless steel.

| 3 0 | PPL | .IED | LC | JΚI | VID |
|------------|-----|------|----|-----|-----|
| | | | | | |

Bar

CHEMICAL COMPOSITION

| Element | % Present |
|--------------------------|---------------|
| Carbon (C) | 0.00 - 0.07 |
| Chromium (Cr) | 13.20 - 14.70 |
| Nickel (Ni) | 5.00 - 5.80 |
| Manganese (Mn) | 0.00 - 1.00 |
| Phosphorous (P) | 0.00 - 0.04 |
| Sulphur (S) | 0.00 - 0.03 |
| Silicon (Si) | 0.00 - 0.60 |
| Niobium (Columbium) (Nb) | 0.10 - 0.40 |
| Molybdenum (Mo) | 1.20 - 2.00 |
| Copper (Cu) | 1.20 - 2.00 |

APPLICATIONS

Aerospace applications Gas turbine blades

- Undercarriage components
- Fasteners

ALLOY DESIGNATIONS

- BS S144
- BS S145
- FV520B
- DEFSTAN 95-14

CHARACTERISTICS

- Excellent strength and hardness levels
- Good general corrosion resistance
- Excellent anti-galling properties

MECHANICAL PROPERTIES

| Property | Value | | |
|-------------------|--------------|--|--|
| Tensile Strength | 930-1180 MPa | | |
| Elongation A50 mm | 15 % | | |
| Hardness Brinell | 277-241 HB | | |
| Proof Stress | 780 MPa | | |

DISCLAIMER

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