SCF 19 / SCF 19® MAX

CARPENTER TECHNOLOGY

SCF 19 / SCF 19 MAX is a nitrogen-strengthened, austenitic, Cr-Ni-Mn-Mo alloy that combines high strength with excellent corrosion resistance.

The addition of 5% molybdenum provides excellent resistance to localized pitting/crevice corrosion as well as stress corrosion cracking. SCF 19 / SCF 19 MAX is supplied in the warm-worked-strengthened condition achieved through forging at temperatures below the recrystallization temperature. SCF 19 covers minimum yield strength values of 120 ksi, while SCF 19 MAX to minimum of 140 ksi. Due to its combination of strength, corrosion resistance, and low magnetic permeability, SCF 19 / SCF 19 MAX is an ideal candidate for several oil and gas drilling components in harsh corrosion environments.

Similar alloys: 15-15LC® Modified, 15-15HS MAX, SCF 260®

KEY FEATURES OF SCF 19 / SCF 19 MAX

- **Corrosion resistance:** SCF 19 / SCF 19 MAX is known for its superior combination of strength and corrosion resistance, especially in aggressive drilling environments. It has been found to be particularly effective in mitigating pitting corrosion during storage.
- **Toughness:** SCF 19 / SCF 19 MAX displays excellent toughness, with typical Charpy V-notch (CVN) values exceeding 150 ft-lbs.
- **Longevity:** SCF 19 / SCF 19 MAX is an ideal candidate for extending non-magnetic drill collar (NMDC) life and reducing total costs due to repairs and scrapped tools.
- **Versatility:** SCF 19 / SCF 19 MAX can be produced in hollow bars to facilitate use in oil and gas drilling applications.

Explore SCF 19 and SCF 19 MAX in depth, along with our full alloy portfolio
CarpenterTechnology.com/Performance