CUSTOM 465®



Custom 465 is a workhorse of the medical industry, providing the best combination of corrosion resistance, strength, and toughness of any commercially available material today.



Custom 465 is a premium melted, martensitic, age-hardenable stainless steel capable of ultimate tensile strength in excess of 300 ksi in the cold worked + H900 condition. This next-generation alloy was designed to have excellent yield strength, fracture toughness, and hardness in this condition. Custom 465 is well-suited for high-strength dental and medical instruments, including torsion drivers, reamers, drills, and needles, as well as structural aerospace components, drive shafts and other downhole oil drilling tools, and automotive springs and sensors.







Similar alloys: Custom 455°, 13-8 Mo

KEY FEATURES OF CUSTOM 465

- Corrosion resistance: The general corrosion resistance of Custom 465 is excellent, approaching that of 304 stainless steel. Exposure to 5% neutral salt spray at 95°F (35°C) caused little or no rusting after 200 hours regardless of condition.
- High strength: Custom 465 can achieve hardness up to 55 HRC in the cold worked + H900 condition, providing the necessary strength and wear resistance for cutting and drilling applications.
- High toughness: Custom 465's excellent fracture toughness ensures long-lasting, reliable performance during demanding dental and medical applications.
- Availability: Carpenter Technology offers Custom 465 to ASTM A564 specifications, cold worked with age treatment. The alloy is also available cold worked, ready for one-step aging treatment.



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