

15CR-5NI

15Cr-5Ni is a martensitic precipitation-hardenable stainless steel used in applications requiring strength, toughness, and corrosion resistance

15Cr-5Ni is similar to but improved over 17-4 by **minimizing delta ferrite content for enhanced transverse toughness**. Aging conditions such as H1025 can provide a good balance of properties and resistance to SCC. Applications range from aerospace structures to oil and gas applications, highlighting the alloy's versatility. 15Cr-5Ni Project 70+ offers enhanced machinability through controlled alloying additions.

Similar alloys: 15Cr-5Ni Project 70+, Custom 630 (17-4)



KEY FEATURES OF 15CR-5NI

- **High strength and hardness:** 15Cr-5Ni offers high strength and hardness, making it an ideal choice for applications that require durability and resistance to wear and tear.
- **Excellent corrosion resistance:** The alloy's high chromium and nickel content provides excellent corrosion resistance, making it suitable for use in harsh environments and applications where corrosion could be a concern.
- **Good fabricability:** 15Cr-5Ni can be easily fabricated into complex shapes, which makes it a versatile material for various manufacturing processes.
- **Enhanced toughness:** Compared to its predecessor, 17-4, 15Cr-5Ni is designed to have greater toughness, particularly in the transverse direction. This makes it more resistant to cracking and fracturing under stress.
- **Wide range of applications:** From aerospace components to food processing machinery, the properties of 15Cr-5Ni make it suitable for a wide range of applications.
- **Customizable properties:** The specific properties of 15Cr-5Ni can be adjusted through different heat treatment processes, allowing for customization based on specific application needs.
- **Cost-effective:** Given its durability, machinability, and versatility, 15Cr-5Ni can be a cost-effective choice for many applications, reducing the need for frequent replacements and maintenance.

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