

TRIMRITE is a hardenable martensitic stainless with superior corrosion resistance compared to other stainless steels, hardness up to 51 HRC, and good ductility and cold formability.

TRIMRITE is balanced to be fully martensitic in the hardened condition and is magnetic in all conditions. **Careful additions and carbide control helps improve corrosion resistance** compared to traditional 410 and 420. The alloy can be hot worked, cold worked, machined, and heat treated using the same equipment and methods used for 410. **TRIMRITE is a reliable and performance-driven choice for dental drills**, and is used in many other applications: medical and surgical tools, fasteners (especially self-drilling types), cutlery, food processing equipment, valve parts, gauges, guides, shafting, conveyor chain, and instruments.



Similar alloys: 410, 420

KEY FEATURES OF TRIMRITE

- **Corrosion resistance:** TRIMRITE has superior corrosion resistance compared to similar grades such as 410, 420, and 440 due to balanced chemistry and heat treatment. Corrosion resistance is crucial for dental tools, which are frequently exposed to sterilization and body liquids.
- **Hardness and strength:** TRIMRITE can achieve hardness up to 51 HRC, providing the necessary strength and wear resistance for cutting and drilling applications.
- **Formability and machinability:** TRIMRITE has good cold formability and can be easily machined and heat treated with standard equipment and processes.
- **Ductility and toughness:** TRIMRITE maintains good ductility and toughness in high hardness levels, enabling the precision, reliability, and durability required in dental procedures.
- **Availability:** TRIMRITE is continuously manufactured at Carpenter Technology and is available for immediate production to your requirements.