

4340

4340 VAC-ARC is a cost-effective, low alloy, nickel-chromium-molybdenum steel.

The alloy is **designed to achieve high strength through an austenitize and temper heat treatment, which can achieve a wide range of desired properties.** It offers an excellent mix of ductility, toughness, and strength, with superior hardenability and depth of hardening compared to 4140 alloys. This steel is refined through a vacuum arc remelting process, ensuring the highest cleanliness, ductility, and toughness with an ideal ingot structure for manufacturing, making it well-suited for a wide range of applications.

Similar alloy: 300M



KEY FEATURES OF 4340

- **High strength levels:** Heat treatable to achieve high strength.
- **Excellent hardenability:** Superior depth of hardening compared to 4140 alloys.
- **Optimal ductility and toughness:** Offers a balanced combination for reliability.
- **Vacuum arc remelting process:** Ensures maximum cleanliness, ductility, and toughness through a preferred ingot structure.
- **Versatile applications:** Suitable for aerospace, transportation, consumer, defense, energy, and industrial sectors. This includes everything from bearings to shaft applications.
- **Comprehensive specifications:** Meets various AMS standards and specific industry requirements.
- **Cost-effective:** Compared to other high-performance materials, 4340 can offer an optimum balance of performance and cost, making it an ideal choice for many applications. Remember, the choice of material should always be based on the specific requirements of the application.

