

# Duplex Stainless Steel

## Characteristics.

- “Duplex” stainless steels are known as austenitic-ferritic.
- They’re not totally austenitic (like 304) nor purely ferritic (like 430).
- Its duplex microstructure contributes to a high mechanical resistance.
- High chromium, molybdenum and nitrogen content that offers good resistance to local and uniform corrosion.
- Good resistance to abrasion and erosion.
- Duplex stainless steels have a good welding ability.
- Low thermal expansion.
- Applicable in gas and oil equipment, marine technology, seawater desalination plants, chemical industry, pulp and paper industry, firewalls, and walls against explosions in offshore platforms, bridges, storage tanks, pressure vessels, reactor vessels and heat exchangers, rotors, impellers, axes, etc.

## Duplex stainless steels can be divided in three groups:

1. Lean Duplex (LDX 2101).
2. Standard duplex (2205).
3. Super duplex (Ferralium 255, Zeron MR 100 y 2507).

## Shape or Presentation

- Plate
- Sheet
- Strip
- Bar
- Tube
- Accessories
- Welding wire