

Stainless Steel

201-201L-202-204 Sheet & Plate

Datasheet Updated
05 August 2021

SPECIFICATIONS

Commercial

200 Series

The 200 series of low nickel austenitic stainless steels.

CHEMICAL COMPOSITION

Element	% Present
Chromium (Cr)	16.00 - 18.00
Manganese (Mn)	6.80 - 8.50
Nickel (Ni)	2.00 - 5.00
Nitrogen (N)	0.00 - 0.25
Iron (Fe)	Balance

ALLOY DESIGNATIONS

AISI 201 stainless steel corresponds to the following specifications:

- UNS20100/EN1.4372/JIS SUS 201

AISI 201L stainless steel corresponds to the following specifications:

- UNS20103/EN1.4371

AISI 202 stainless steel corresponds to the following specifications:

- UNS20200/EN1.4373

AISI 204C stainless steel corresponds to the following specifications:

- UNS20400/EN1.4597

SUPPLIED FORMS

- Sheet
- Plate

APPLICATIONS

200 series austenitics are typically used to replace types 304 and 301 as well as carbon (chrome-manganese) steels mainly for indoor use for low corrosion applications at room temperature.

- Cooking utensils
- Restaurant equipment
- Appliances
- Automotive trim
- Architectural applications
- Windows & channel spacers
- Doors
- Railway cars
- Trailers
- Hose clamps
- Furniture
- Bins
- Safety Shoes (mid-sole protector)
- Industrial Strapping
- Railway Rolling Stock

There is also grade 201LN for welded constructions, structural uses and low temperature applications.

Examples include:

- Sides & roofs of trains
- Liquefied gas storage vessels
- Structural members/chassis of railway rolling stock, trucks & trailers
- Coal handling equipment

CHARACTERISTICS

- Lower nickel than 300 series – with it being replaced by manganese
- Lower cost than 300 series
- Similar mechanical & physical properties to 300 series
- Similar fabrication performance to 300 series, including deep-drawing
- Corrosion resistance similar to 430 (i.e. not nearly as good as 300 series)
- High carbon may cause stress corrosion cracking, especially after welding thicker material
- Non Magnetic

Performance Comparison:

- Formability: Similar to 304, better than 430
- Strength: Stronger than 304 (and 430)
- Corrosion Resistance @20 C: Similar to 304, better than 430 but susceptible to stress corrosion cracking/intergranular corrosion especially after welding

MECHANICAL PROPERTIES

Property	Value
Proof Stress	310 Min MPa
Tensile Strength	655 Min MPa
Elongation A50 mm	40 min %

DISCLAIMER

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