

AISI 429 / UNS S42900 / DIN 1.4001

Iron Chrome Ferritic Stainless Steel

Alloy 429 Data Sheet

Introduction

AISI 429 is basic Iron Chrome Ferritic Steel modified from AISI 430 with lesser Chromium content for better weldability & moderate corrosion resistance primarily used in form of Bars & Plates.

Chemical Composition (Typical)

Element	Limits	
	min	max
Carbon	0.000	0.120
Manganese	0.000	1.000
Phosphorus	0.000	0.040
Sulphur	0.000	0.030
Silicon	0.000	1.000
Chromium	14.000	16.000
Iron	Remainder	

Mechanical Properties (Typical)

Parameter	Value
Yield 0.2 % (Mpa/Nmm ²), Min	205
Tensile (Mpa/Nmm ²), Min	450
Elongation (% in 50MM), Min	22
Reduction Area(%), Min	--
Hardness (BHN), Max	183

Physical Properties

Parameter	Value
Density (Kg/m ³)	7650
Elastic Modulus (Gpa)	200
*Co-eff of Expansion ($\mu\text{m}/\text{m}/^\circ\text{C}$)	11.4
*Thermal Condc. (W/m.K)	25.7
Electric Resistivity (n Ω .m) 25°C	590

*Note : @500°C

Corrosion Data

AISI 429 is similar to parent grade 430 with moderate corrosion resistance and low as compared to 300 series stainless steel. AISI 429 offers better weldability.

Equivalent Grade Designation

AISI 429
SUS429
SS 429
UNS S42900
1.4001
X7Cr14
SAE 51429

Alloy 429 Data Sheet

Available Product Forms

Round, Square, Hexagon & Flat Bars
Seamless / Welded Pipes
Seamless / Welded Tubes
Hot & Cold Rolled Plates & Sheets
Forged Bars
Forged Flanges

Common Manufacturing Specifications

AMS 5503, AMS 5627, ASTM A176, ASTM A182, ASTM A240, ASTM A268, ASTM A276, ASTM A314, ASTM A473, ASTM A479, ASTM A493, ASTM A511, ASTM A554, ASTM A580, ASTM A815, ASME SA 176, ASME SA 182, ASME SA 240, ASME SA A268, ASME SA A276, ASME SA A314, ASME SA A473, ASME SA A479, ASME SA A493, ASME SA A511, ASME SA A554, ASME SA A580, ASME SA A815

Alternate to Alloy

AISI 430F, AISI 304 & AISI 316 are better alternative with increased machinability, corrosion resistance & cold workability respectively.

Applications & Industries

Steam & Gas turbine parts
Valve & Pumps body parts
Mining Equipments
Machine parts & Cutlery
Fasteners - Bolts, Screws, Nuts & Springs
Petrochemical Equipments
Automotive parts & Bushes

Excellence Inherent

With 3 decade long experience inherited, we aim at providing better solutions for Industrial Piping Sector. Skilled Team, passion drives our *will* to be better with resolute for continous customer & vendor concurrence. We also perceive our duty towards planet for its unconditional support & try to minimise any harm caused due to our activity. For Instance, *We Stay Paperless*

The Information contained in this data sheet is for reference purpose only and actual data may vary from product to product. Complete rely on these values for product design recommended. User will be solely responsible for any failure in intended construction. FERROBEND™ is trademark Property of FERROBEND.

