

Bar

Corrosion application



It is a Ni Cr Fe alloy with an addition of Al for exceptional resistance to oxidation and other forms of high temperature corrosion. It also has high mechanical properties at high temperature (up to 500°C / 600°C). It is a non-magnetic alloy.

1. Chemical content

UNS N06601 EN NiCr23Fe Wr 2.4851

Ni	Cr	Fe	Al
58 - 63	21 - 25	Bal	1 - 1,7

2. Corrosion resistance

Stress-corrosion cracking resistance according to NACE **MR0175** is guaranteed

3. Applications

- Chemical Industries
- Furnace components (muffles, ...)
- Gas and Petrochemistry

Standard relative to these applications :
ASTM B166 or B564

4. Shapes – Tolerances – Destinations

Round bars

Section	Ø 4 to Ø 20mm	Ø 20 to Ø 300mm
Process	Cold bars	Forged or Hot-rolled bars
Surface Conditions	Raw, rectified, chamfrened	Peeled , ground, rectified, linished, raw
Length	3 to 6m	3 to 6m
Weight	min 400Kg	min 1000Kg
Packaging	Wooden box or narrow strapping	Secured package
Tolerances	Drawn straightened and rectified h9, Ra < 1,2µm	
	Ground	+/- 3mm
	Peeled (Ra < 6,3µm)	Forged bars: - 0 / +3mm Hot- rolled bars: -0/+0,8mm for diameter < 80mm -0/+1,2mm for diameter > 81mm
	Straightness	< 1mm/m
Uses	Bars for machining	Bars for machining or hot-transformation
Customer processes used in manufacturing finished parts	Machining, free-cutting,...	Forging, stamping, drop forging, ring becking, drawing, ring rolling, upsetting, machining,...

4. Shapes – Tolerances – Destinations

Square bars	
Section	80x80mm to 265x265mm
Process	Bloomed (up to 120x120) or forged
Surface Conditions	Ground
Length	3 to 6m
Weight	min 1000Kg
Tolerances	+/- 3mm
Straightness	10mm/m
Uses	Bars for hot-transformation only
Customer processes used in manufacturing finished parts	Forging, stamping, drop forging, ring becking, ring rolling,...

Others shapes : Please consult us.

5. Certificate

Certificate 10204-3.1
Chemical composition according to relevant standards.

Bars for hot-transformation :
Ultrasonic test according to standard EN10308

Bars for others applications :
Condition and tests according to specified standard

The data enclosed in this document are only given as indicative values and correspond to our standard product. Different specific requirement are subject to discussion and formal approval by Aperam Alloys Imphy. For further information or special request, please contact us.