

Bar

Corrosion application



SY22 is a fully austenitic advanced corrosion resistance alloy that offers resistance to both aqueous corrosion and attack at elevated temperatures but also good tensile properties.

1. Chemical content

UNS N06022
EN NiCr21MoCr14W
Wr 2.4602

Ni	Cr	Mo	Fe	W	Co
base	20 - 22,5	12,5 - 14,5	2 - 6	2,5 - 3,5	< 2,5

2. Corrosion resistance

Stress-Corrosion cracking resistance according to NACE MR0175 is guaranteed.

4. Shapes – Tolerances – Destinations

3. Applications

- Chemical industries (sulfuric acid, hydrochloric acids, nitric acids, ferric and cupric salts,...)
- Petrochemical processing
- Pollution control (Flue gas desulfurization)
- Pulp and paper industry
- Marine applications

Standards related to these applications :
ASTM B574 and B564, NACE MR0175

Round bars

Section	Ø 4 to Ø 20mm	Ø 20 to Ø 115mm	Ø 100 to Ø 300mm
Process	Cold bars	Hot-rolled bars	Forged bars
Surface Conditions	Raw, rectified, chamfrened	Peeled , rectified, polished, roller burnished, raw	Peeled , ground, rectified, polished, raw
Length	3 to 6m	3 to 6m	
Weight	min 400Kg	min 1000Kg	
Packaging	Wooden box or narrow strapping	Wooden box or narrow strapping	Secured package
Tolerances	drawn straightened and rectified h9, Ra < 1,2µm	Peeled + roller burnished h11, Ra < 3,2µm	
	Ground	+/- 3mm	+/- 3mm
	Peeled (Ra < 6,3µm)	-0/+ 0,8mm for diameter < 80mm -0/+1,2mm for diameter > 81mm	- 0 / +3mm
	Straightness	< 1mm/m	< 4,2mm/m
Uses	Bars for machining	Bars for machining or hot-transformation	
Customer processes used in manufacturing finished parts	Machining, free-cutting	Machining, forging, stamping, hot-rolling, drop forging, ring beking, drawing, upsetting, ring rolling,...	

4. Shapes – Tolerances – Destinations

Square bars	
Section	80x80mm to 250x250mm
Process	Bloomed (up to 120x120mm) 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, upsetting, drawing, ring rolling

Other shapes : Please consult us

5. Certificate

Certificate 10204-3.1

Chemical composition according to relevant standards.

Bars for hot-transformation :

Ultrasonic test according to the norm EN10308

Bars for other 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.