

## Bar

### Corrosion application



SY276 is a based Ni alloys, with high Mo and Cr level, and low carbon content. His composition offers a excellent corrosion resistance in a wide range of aggressive environments.

#### 1. Chemical content

UNS N10276    Wr 2.4819

Ni	Cr	Mo	Fe	W	Co
base	14,5 - 16,5	15 - 17	4 - 7	3 - 4,5	< 2,5

#### 2. Corrosion resistance

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

#### 3. Applications

- Chemical industries (sulfuric acid, phosphoric acid)
- Pulp and paper industry
- Pollution control (waste treatment, ...)
- Oil and gas, petrochemistry
- Heat exchanger, evaporators,...

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

#### 4. Shapes – Tolerances – Destinations

##### 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	<b>Peeled</b> , rectified, polished, roller burnished, raw	<b>Peeled</b> , 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
<b>Tolerances</b>	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
<b>Uses</b>	Bars for machining	Bars for machining or hot-transformation	
<b>Customer processes used in manufacturing finished parts</b>	Machining, free-cutting	Machining, forging, stamping, hot-rolling, drop forging, ring beking, drawing, upsetting, ring rolling,...	

#### 4. Shapes – Tolerances – Destinations

Square bars	
<b>Section</b>	<b>80x80mm to 250x250mm</b>
Process	<b>Bloomed</b> (up to 120x120mm) or forged
Surface Conditions	ground
Length	3 to 6m
Weight	min 1000Kg
Tolerances	+/- 3mm
Straightness	10mm/m
<b>Uses</b>	<b>Bars for hot-transformation only</b>
<b>Customer processes used in manufacturing finished parts</b>	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.