

# AISI 420 MOD UNS S42000

AISI 420 Mod is a martensitic 13Cr modified stainless steel with increased strength and hardness compared to standard 13Cr versions. It is used in the quenched and double tempered condition to Yld 80 KSI min, Hardness 18/22HRC.

# AISI 420 MOD / UNS S42000

**Approvals:** NACE MR 0175/ ISO 15156-1 / -3. Conforms to major OEM purchasing specifications.

## APPLICATIONS

AISI 420 Mod is widely used in the manufacture of oil industry completion equipment such as packers, valves and pressure containing parts. Is suitable for constructional and fastener applications where moderate corrosion resistance is required.

### Heat Treatment

Hardened and tempered.

### Weldability

Moderate.

## STOCK PROFILE SIZES - ROUND BAR

MM	Inch	MM	Inch	MM	Inch
50,8	2	133,35	5,25	203,2	8
76,2	3	139,7	5,5	209,6	8,25
82,55	3,25	146,1	5,75	215,9	8,5
90	3,54	152,4	6	228,6	9
95,25	3,75	158,8	6,25	241,3	9,5
101,6	4	165,1	6,5	254	10
114,3	4,5	177,8	7	279,4	11
120,7	4,75	190,5	7,5	304,8	12

In addition to solid bar, we offer a comprehensive range of added value services via our ISO approved subcontract network. Including boring, honing, turning, heat treatment and testing. **All material is of prime western european approved origin.**

## STOCK PROFILE SIZES - HOLLOW BORED BAR (MIN YLD 80 KSI)

6" OD x 4" ID	6.5" OD x 2.5" ID	8" OD x 3" ID	8" OD x 5.75" ID	9" OD x 150mm ID
6.25" OD x 3.5" ID	7" OD x 4" ID	8" OD x 4" ID	8.5" OD x 5.5" ID	10" OD x 150mm ID

## CHEMICAL COMPOSITION

Weight %	C	Si	Mn	S	P	Cr	Ni	Mo
Min.	0,18	0,25	0,25			12,50		
Max.	0,22	1,00	1,00	0,005	0,02	14,00	0,20	0,30

## MECHANICAL PROPERTIES: BAR

	Yield strength Rp0.2, MPa	Tensile strength Rm, MPa	Elongation [%]	Hardness [HB]	Impact, Charpy-V, -10°C [J]
Min.	550 (80 ksi)	689 (100 ksi)	20		20
Max.	655			≤ 22	

Sverdrup Steel UK Limited  
Unit A1, Old Colliery Way  
Beighton  
Sheffield S20 1DJ

Tel: +44 114 2877994  
Email: [ukmail@sverdrupsteel.com](mailto:ukmail@sverdrupsteel.com)  
Web: [sverdrupsteel.com](http://sverdrupsteel.com)

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