

## 1.4935 422

X20CrMoWV12-1	%C	%Si	%Mn	%P	%S	%Cr	%Mo	%Ni	%V	%W
	0.17	0.10	0.30	-	-	11.0	0.80	0.30	0.20	0.40
	0.24	0.50	0.80	0.025	0.015	12.5	1.20	0.80	0.35	0.60

### STEEL PROPERTIES

1.4935 422 is a high-alloyed martensitic stainless steel designed for high-temperature and high-pressure applications

### EQUIVALENT GRADES

EN 10088-3	1.4935	X20CrMoWV12-1
AFNOR	-	
JIS	SUH616	
AISI	422	
BS	-	

### APPLICATIONS

1.4935 422 is used in applications where high strength and resistance to thermal and mechanical stresses are required. This includes components in high-temperature and high-pressure environments, such as steam turbines and power generation equipment.

### HEAT TREATMENT

1.4935 422 is supplied in annealed +A & +QT Conditions.

### Mechanical Values for 1.4935 422 at room temperature in EN 10088-3: 2014 in conditions 1C, 1E, 1D, 1X, 1G, 2D

Diameter (mm)	Heat Treatment Condition	Hardness HB max.	0.2% Proof strength min.	Tensile Strength R <sub>m</sub> Mpa	Elongation after fracture A % Min.		Impact Energy (ISO-V) KV J Min.	
					(long)	(tr.)	(long)	(tr.)
-	+A	245	-	Max 800	-	-	-	-
<= 160	+QT800	-	650	850 to 1000	10	-	12	-

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**Mechanical Values for 1.4935 422 Bright Bars at room temperature in EN 10088-3: 2014 in conditions 2H, 2B, 2G, 2P**

Diameter (mm)	Annealed		Heat Treatment Condition	0.2% Proof strength min.	Tensile Strength R <sub>m</sub> Mpa	A5 % Min Elongation		Impact Energy (ISO-V) KV J Min.	
	R <sub>m</sub> Mpa Max	HB Max				(long)	(tr.)	(long)	(tr.)
=<10	950	305	+QT850	700	900 to 1150	7	-	-	-
10<t<=16	950	305	+QT850	700	900 to 1150	7	-	-	-
16<t<=40	900	280	+QT850	650	850 to 1100	8	-	12	-
40<t<=63	840	260	+QT850	650	850 to 1000	8	-	12	-
63<t<=160	800	245	+QT850	650	850 to 1000	10	-	12	-

### PRODUCTS OFFERED

- PEELED BARS
- BRIGHT BARS
- HEXAGONS
- SQUARES
- FLAT BARS
- WIRES