Quality	**431**
According to Standard	**ASTM A 276 - 06**
Number	**-**

Comparable Standards	**EN**	**W.N.**	**BS**
	X17CrNi16-2	1.4057	431S29

Chemical Analysis	**C %**	**Mn %**	**Si %**	**P%**	**Cr %**	**Ni %**	**Mo %**	**S%**	**Other Elements**
	0.20	1.00	1.00	0.040 max.	15.0 to 17.0	1.25 to 2.50	—	0.030 max.	—

Hot Work and Heat Treatment

Type[A]	**Heat Treatment Temperature[B] °F (°C), min**	**Quenchant**	**Hardness HRC, min**
431	1875 (1020)	Oil	40

Mechanical Properties at Room Temperature

Finish	**Condition**	**Diameter or Thickness in. (mm)**	**Tensile Strength, min ksi**	**Tensile Strength, min Mpa**	**Yield Strength,[A] min ksi**	**Yield Strength,[A] min Mpa**	**Elongation in 2 in. (50 mm)[B] or 4D min%**	**Reduction of Area, min, %**	**Brinell Hardness, max**
		over 1 1/2 (38.10) to 1 3/4 (44.45)	**125**	**860**	**100**	**690**	**18**	**45**	**-**
Hot Finished or	**A**	**all**	**-**	**-**	**-**	**-**	**-**	**-**	285
Cold Finished		**-**	**-**	**-**	**-**	**-**	**-**	**-**	-