

<b>Quality</b>	X30Cr13
<b>According to Standard</b>	EN 10088-3:2005 (E)
<b>Number</b>	1.4028



<b>Comparable Standards</b>	EN	W.N.	AISI
	X30Cr13	1.4028	420F

<b>Chemical Analysis</b>	<b>C %</b>	<b>Mn %</b>	<b>Si % max</b>	<b>P% max</b>	<b>Cr %</b>	<b>Ni %</b>	<b>Mo %</b>
	0,26 to 0,35	≤ 1,50	1,00	0,040	12,0 to 14,0	—	—
	<b>S%</b>	<b>Others</b>					
	≤ 0,030 <sup>b</sup>	—					

### Hot Work and Heat Treatment Temperatures

Heat Treatment Symbol	Hot Forming		Annealing		Quenching		Tempering
	Temperature °C	Type of cooling	Temperature °C	Type of cooling	Temperature °C	Type of cooling	Temperature °C
+A	1100 to 800	slow cooling	745 to 825	air	—	—	—
+QT 650	1100 to 800	slow cooling	—	—	950 to 1050	oil, air	625 to 675

### Mechanical Properties at Room Temperature

Heat Treatment Condition	Ø mm.	Hardness HB <sup>c</sup> max	Rp0,2 <sup>d</sup> min. N/mm2	Rm <sup>d</sup> N/mm2	A <sup>d</sup> min. %	KV min. J
+A	—	245	—	max 800	—	—
+QT650	≤ 160	—	650	850 to 1000	10	15