



Quality 18CrNiMo7-6 (UNI EN 10084)

PROPERTIES AND EMPLOYEMENTS

It is a case-hardening steel that is similar to 17NiCrMo6-4, but it has a more elevated hardenability, because of the higher content of chromium and manganese.

It is suitable for thick parts or with an elevated diameter, which require a high resistance and toughness at heart, after case-hardening, hardening and stress relief tempering.

CORRESPONDENCE TO INTERNATIONAL DESIGNATIONS

Quality	Europe	Germany		France	Spain	G.B.	USA
	EN	DIN	W.n.	AFNOR	UNE	B.S.	AISI/SAE
18CrNiMo7-6	18CrNiMo7-6	-	-	1.6587	-	-	9314

CHEMICAL COMPOSITION % (EN 10084)

Steel designation		Chemical composition								
Symbolic	Numeric	C	Si max	Mn	P max	S max	Cr	Mo	Ni	B
18CrNiMo7-6	1,6587	0,15 ÷ 0,21	0,40	0,50 ÷ 0,90	0,035	0,035	1,50 ÷ 1,80	0,25 ÷ 0,35	1,40 ÷ 1,70	-

Concentration limits of the elements that are not indicated in the table can be deduced in the EN 10020 regulation. It can be provided with an addition of lead 0,12-0,35% or sulphur controlled up until 0,40% for an improved machinability.

JOMINY HARDENABILITY (EN 10084)

Steel designation		Range limits	HRC hardness measured from the quenched end of the test tube (mm)												
Symbolic	Numeric		1,5	3	5	7	9	11	13	15	20	25	30	35	40
18CrNiMo7-6+H	1,6587	max	48	48	48	48	47	47	46	46	44	43	42	41	41
		min	40	40	39	38	37	36	35	34	32	31	30	29	29

USUALLY AVAILABLE EX STOCK

M.T. Coloration	Quality	Heat treatment	Surface
	18CrNiMo7-6	Soft-annealed	Rolled forged turned