



Quality F5 (ASTM A182)

PROPERTIES AND EMPLOYEMENTS

F5 (12CrMo19-5), is an alloy steel with chrome that has elevated mechanical characteristics and it is suitable for the fabrication of parts of installations that require an excellent resistance to embrittlement under pressure and at elevated temperature (up to 600°C).

CORRESPONDENCE TO INTERNATIONAL DESIGNATIONS

Quality	Europe	Germany		France	Spain	G.B.	USA
	EN	DIN	W.n.	AFNOR	UNE	B.S.	ASTM
F5	12CrMo19-5	~ 12CrMo19-5	1,7362	~ Z15CD5-05	-	625-520	ASTM A182 F5 ASME SA 182

CHEMICAL ANALYSIS



C max	Mn	Si max	P max	S max	Cr	Ni max	Mo	Cu max
0,15	0,30 ÷ 0,60	0,50	0,030	0,030	4,00 ÷ 6,00	0,50	0,44 ÷ 0,65	0,35

Concentration limits of the elements that are not indicated in the table can be deduced in the en 10020 regulation.

MECHANICAL CHARACTERISTICS

Steel	Normalisation temperature 900°C min – Tempering temperature 620°C min				
Symbolic	R _e min	R _m min	A min	Z min	Durezza HB
	N/mm ²		%	%	max
F5	275	485	20	35	143÷217

USUALLY AVAILABLE EX STOCK

M.T. Coloration	Quality	Heat treatment	Surface
	F5	Normalised and stress relieved	rolled / forged turned
	F5	Annealed	rolled / forged