



100Cr6
Ball bearing steel

(W.NR. 1.3505)

CHEMICAL COMPOSITION: (analysis according to the ISO 683-17:2014 standard)

	C %	Si %	Mn %	P %	¹⁾ S %	Cr %	Mo %	Al %	Cu %	O %
FROM	0,93	0,15	0,25	-	-	1,35	-	-	-	-
TO	1,05	0,35	0,45	0,025	0,015	1,60	0,10	0,050	0,30	0,0015

¹⁾ In the cases where machinability is of primary importance, a maximum sulphur content S=0,030% can be agreed.

*** MECHANICAL FEATURES:** (according to the ISO 683-17:2014 standard)

Spheroidized annealed + cold drawn (+AC+C)
hardness HBW maximum value
241 ^{a) b)}

^{a)} Hardness for cold drawn products with a diameter < 13 mm can be < 320 HBW

^{b)} Upon request it can be supplied with mechanical features differing from those indicated in the standard.

PROPERTIES :

Strain strength and resistance to wear :

This steel grade is generally destined to applications in which a high strain strength and a high resistance to wear under high alternate loads are required. Therefore its main components must have a high hardness, a high elastic limit and a high fatigue strength.

Hardenability:

Good hardenability; hardening must allow quenching in oil to reduce to the minimum the risk of hardening cracks or distortions and to minimize the subsequent grinding operations.

Notes :

CORRESPONDENCE WITH OTHER STANDARDS (purely as an indication) :

UNI 3097 100Cr6	DIN 17230 100Cr6	AISI/SAE 52100	AFNOR 35-565 100C6
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