

# SFERE IN ACCIAIO AL CROMO AISI 52100

Chrome steel balls are through hardened in order to achieve the maximum mechanical strength.

The balls made of this kind of material feature excellent surface finish, considerable hardness and high load carrying capacity, as well as excellent wear and deformation resistance.

These balls are normally used in precision ball bearings, valves and many industrial applications.



## International equivalent :

ITALIA	SPAGNA	GERMANIA	CINA	USA
UNI 100Cr6	UNE F 1310	W. nr. 1.3505	GCr15	AISI/SAE 52100

## Size Range:

0.396mm (1/64 ") a 152,4mm (6 ")

## Standard grade available:

5 – 10 – 16 – 20 – 28 - 40 – 100 - 200 – 500  
– 1000 - 2000

## Chemical composition:

Material	C %	Mn %	Si %	P %	S %	Cr %
100Cr6	0,93 ÷ 1,05	0,25 ÷ 0,45	0,15 ÷ 0,35	≤ 0,015	≤ 0,025	1,35 ÷ 1,60
100CrMnSi6-4	0,93 ÷ 1,05	0,95 ÷ 1,25	0,45 ÷ 0,75	≤ 0,015	≤ 0,025	1,40 ÷ 1,65

## Hardness:

HRC 60 - 66

## Crashing load of chrome steel balls:

Diameter			Crashing load			Diameter			Crashing load			Diameter			Crashing load		
Inch.	mm.	Kgs.	Inch.	mm.	Kgs.	Inch.	mm.	Kgs.	Inch.	mm.	Kgs.	Inch.	mm.	Kgs.	Inch.	mm.	Kgs.
1/8	3.175	666	31/64	12.303	7.350	1	25.400	26.600	-	3.500	792	1/2	12.700	7.780	1 1/16	26.987	29.600
-	3.500	792	17/32	13.494	8.660	1 1/8	28.575	32.800	5/32	3.969	990	9/16	14.288	9.590	1 1/8	30.162	36.100
5/32	3.969	990	-	15.000	10.500	1 3/16	30.162	36.100	-	4.000	1.000	19/32	15.081	10.600	1 1/4	31.750	39.500
-	4.000	1.000	5/8	15.875	11.600	1 5/16	33.337	43.100	3/16	4.762	1.370	21/32	16.668	12.600	1 3/8	34.925	46.800
-	4.500	1.240	11/16	17.462	13.700	1 7/16	36.512	50.600	-	5.000	1.490	23/32	18.256	14.800	1 1/2	38.100	54.600
3/16	4.762	1.370	3/4	19.050	16.000	1 1/2	38.100	54.600	7/32	5.556	1.800	25/32	19.843	17.200	1 5/8	41.275	62.900
-	5.000	1.490	25/32	19.843	17.200	1 3/4	44.450	71.700	15/64	5.593	2.020	-	20.000	17.400	1 7/8	47.625	81.100
7/32	5.556	1.800	13/16	20.637	18.400	1 7/8	47.625	81.100	-	6.000	2.060	7/8	22.225	21.000	2	50.800	90.900
-	6.000	2.060	27/32	21.431	19.700	2 3/16	55.562	106.500	1/4	6.350	2.280	2 1/4	57.150	112.000	2 3/16	55.562	106.500
1/4	6.350	2.280	7/8	22.225	21.000	2 1/4	57.150	112.000	17/64	6.746	2.535	2 5/16	58.735	116.500	2 1/2	63.500	135.000
-	6.350	2.280	29/32	23.018	22.300	2 5/16	58.735	116.500	9/32	7.144	2.810	2 1/2	63.500	135.000	2 3/4	69.850	159.800
5/16	7.938	3.380	15/16	23.812	23.700	2 1/2	63.500	135.000	11/32	8.731	4.000	3	76.200	186.500	3	76.200	186.500
-	10.000	5.090	31/32	24.606	25.100	3	76.200	186.500	3/8	9.525	4.670	4	101.600	309.500	4	101.600	309.500
13/32	10.318	5.380	-	25.000	25.900	4	101.600	309.500	-	10.000	5.090	-	-	-	-	-	-
7/16	11.112	6.140	-	-	-	-	-	-	15/32	11.906	6.940	-	-	-	-	-	-
15/32	11.906	6.940	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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