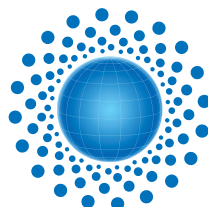


# PRECISION BALLS



CATALOG



**RGPBALLS**  
A WORLD OF SPECIAL BALLS

# COMPANY PROFILE

RGPBALLS Srl, for over fifty years has been one of the major European companies in the production, marketing and distribution of precision spheres, rollers and bearing spheres. The company is ISO 9001:2015, ISO 14001:2015, ISO 18001:2007 certified.

The main headquarters, recently expanded with a new 3,000 m<sup>2</sup> warehouse, has 10,000 m<sup>2</sup> available including offices, warehouse, selection department, metrological laboratory, metallographic laboratory.

Located in Cinisello Balsamo, easily reachable thanks to the immediate vicinity of the main motorway junctions, RGPBALLS Srl employs 70 people in the main headquarters, 20 of which are responsible for the marketing/administrative part, 12 of the metallographic measurement and control laboratory. The rest of the staff is employed in the selection, logistics and warehouse department.

Our warehouses have more than 4,000 tons of stocked products available in order to quickly meet the needs of customers all over the world.

For years, the Group has set the goal of achieving high quality standards by continuing to invest in order to obtain an always increasing reliability towards its customers. Last but not least, the inclusion of a metallographic laboratory with cutting-edge machinery for the analysis of steel microstructures.

We also have qualified personnel available to perform ad hoc consultancies to identify the most suitable item for the requested application.

Thanks to the factories of our Group we have the option of monitoring production with a 100% control on every stage of product processing, by means of a precise and reliable Quality Management.

2015  
Foundation

10.000  
m<sup>2</sup> Headquarter

70  
employees

4.000  
tons of products

More than  
3.000  
customers

## CERTIFICATIONS



# AISI 440C STAINLESS STEEL BALLS

Martensitic hardened stainless steel balls, they feature remarkable hardness, wear resistance, surface finishing, narrow dimensional tolerances. For that reason this type of steel is frequently used in precision devices. Balls are provided in the passivated condition.

## Applications

Precision bearings, anti-friction bearings, special valves, conveyor belts and rollers, ballpoint pens.

They are used in foodstuff, medical instruments, quick couplings, recirculating ball bearings, knotting devices, oil refinery devices.

## Chemical composition

%C	%Si	%Mn	%P	%S	%Cr	%Mo	-	-	-	-	-
0,95-1,20	1,00 max	1,00 max	0,040 max	0,030 max	16,00-18,00	0,75 max	-	-	-	-	-

## International standards

ITA	USA	GER	FRA	UK	RUS	CHN	JAP
X 105CrMo17	440C	1.4125	Z100CD17	-	95X18	9Cr18Mo	SUS440C

## Physical / mechanical / thermal / electric / magnetic properties

Property	Symbol	U.o.M.	Type	Notes	Values
Density	$\delta$	g/cm <sup>3</sup>	Physical	Room temp.	7,70
Young's modulus	E	GPa	Mechanical	-	210
Specific heat	c	J/kg-K	Thermal	Room temp.	450
Coefficient of linear thermal expansion	$\alpha$	10 <sup>-6</sup> /°C	Thermal	( $\Delta T=0-100^{\circ}C$ )	10,2
Thermal conductivity	$\lambda$	W/(m-K)	Thermal	Room temp.	19,6
Electric resistivity	$\rho$	$\Omega \cdot m \cdot 10^{-9}$	Electric	-	680
Relative magnetic permeability	$\mu$	-	Magnetic	Not hardened	> 700

## Technical data

Property	Type	U.o.M.	Values	U.o.M.	Values
Hardness	Mechanical	HRC	57 - 65	-	-
Ultimate tensile strength	Mechanical	MPa	1900 - 2000	psix10 <sup>3</sup>	275 - 290
Service temperature	Thermal	°C	0 / 400	°F	32 - 752

## Range

Diameters (min/max)	U.o.M.	Diameters (min/max)	U.o.M.	Precision grades (ISO 3290-1 / DIN 5401 / AFBMA)
0,300 - 300,000	mm	1/64 - 12	"	See section International Standards: ISO 3290-1 / DIN 5401 / AFBMA

## Corrosion Resistance

The material resists to corrosion in contact with freshwater, steam, oil, petrol, alcohol.

They are subjected to pitting corrosion in sea water environments.

Poor corrosion resistance in acid environments.

**® RGPBALLS S.r.l.**

Via E. De Amicis 59/C 61/A,  
20092 Cinisello Balsamo (MI) - Italia

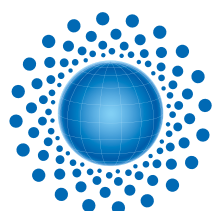
P.I. / C.F. / Reg. Impr. 08678490965  
N. REA: MI-2042305  
Cap. soc. € 500.000 int. vers.

☎ +39 02 6178 857 / +39 02 6601 7032 / +39 02 6129 4593

📞 +39 02 66016688

✉ [rgpballs@rgpballs.com](mailto:rgpballs@rgpballs.com)

🌐 [www.rgpballs.com](http://www.rgpballs.com)



**RGPBALLS**  
A WORLD OF SPECIAL BALLS