

316 STAINLESS STEEL BALLS

AISI type 316 stainless steel balls meet requirements for an unhardened ball with excellent toughness and resistance to corrosion. Corrosion resistance may be increased through annealing. Both non-annealed and annealed balls are widely used in valves and related equipment. For further information regarding annealed and non-annealed, please see our 302SS spec sheet under Metals.

Type 316 is a low carbon austenitic, chromium-nickel-molybdenum stainless steel with corrosion resistance superior to most other chromium-nickel stainless steels in many types of chemical corrodents, as well as marine atmospheres. Applications include, phosphate industry parts, textile finishing equipment, printing equipment, body jewelry and valve industries.

Material	AISI	Federal	Military	ASTM	UNS	AMS	Military & Gov't Standards
Stainless Steel (Type 316)	316	QQ-S-763	-	A-493	S-31600	-	-

(Additional testing may be required to certify that materials comply with specific standards.)

Material Analysis:

All sizes and grades are of the highest quality and in accordance with AISI type 316. Passivation to ASTM A380 available upon request.

Chemical Analysis	
Carbon	0.08% maximum
Chromium	16 to 18% maximum
Manganese	2.0% maximum
Silicon	1.00% maximum
Sulphur	0.03% maximum
Phosphorus	0.045% maximum
Nickel	10.00 to 14.00% maximum

Mechanical Properties:

Typical Hardness will be 25-39 RC maximum and include the following properties:

Mechanical Properties	
Tensile strength	80,000 to 120,000 psi
Elongation in two inches	10% to 50%
Reduction in area	55% to 65%
Modulus of elasticity	28,000,000 psi
Density	0.29 lbs/cu. in.

Available Grades & Sizes:

Grade	Size Range (inches)
50	1/8" - 2"
100	1/8" - 2"
200	1/8" - 2"
1000	1/8" - 2"

General Information:

Size (inches)	Balls (p/lb)	Size (inches)	Balls (p/lb)
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1/8"	3,410	11/32"	164
5/32"	1,750	3/8"	127
3/16"	1,010	1/2"	53.4
7/32"	638	9/16"	37.5
1/4"	427	5/8"	27.4
9/32"	300	3/4"	15.8
5/16"	219	1"	6.7

MM sizes available on request.

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