



Anhui Qasim Grinding Ball Group

Cast Balls & Cylpebs
Technical Specifications



Cast High & Medium & Low Chrome Grinding Ball

Product Code	Surface 1	Hardness	Volumetri	c Hardness	Impact Fatigue Life(Times)	Impact Value AK(J/cm²)		
Froduct Code	Min	Max	Min	Max	Approx.	Approx.		
ZQCr26	58.0	68.0	56.0	66.0	≥18000	4.0		
ZQCr20	58.0	68.0	56.0	66.0	≥18000	3.5		
ZQCr17	58.0	68.0	56.0	66.0	≥18000	3.0		
ZQCr12	58.0	68.0	56.0	66.0	≥18000	3.0		

D 1 4 C 1	Chemical Composition %											
Product Code	C	Si	Mn	Cr	Mo	Cu	Ni	P	S			
ZQCr12	2.1-3.6	≤1.2	0.2-1.5	10.0-14.0	≤1.0	≤1.0	≤1.0	≤0.06	≤0.06			
ZQCr15	2.1-3.6	≤1.2	0.2-1.5	14.0-18.0	≤1.0	≤1.0	≤1.0	≤0.06	≤0.06			
ZQCr20	2.1-3.5	≤1.2	0.2-1.5	18.0-23.0	≤1.0	≤1.0	≤1.0	≤0.06	≤0.06			
ZQCr26	2.1-3.3	≤1.2	0.2-1.5	23.0-30.0	≤1.0	≤1.0	≤1.0	≤0.06	≤0.06			
ZQCr8	2.1-3.6	≤2.2	0.2-1.5	7.0-10.0	≤1.0	≤0.8	-	≤0.06	≤0.06			
ZQCr5	2.1-3.6	≤1.5	0.2-1.5	4.0-6.0	≤1.0	≤0.8	-	≤0.08	≤0.08			
ZQCr2	2.1-3.6	≤1.5	0.2-1.5	1.0-3.0	≤1.0	≤0.8	-	≤0.10	≤0.10			

Ball Diameter (mm)	20	25	30	40	50	60	70	80	90	100	110	120	125	130	150
Mass(g) Approx.	32	63	110	257	500	867	137 0	205 0	290 0	400 0	530 0	680 0	775 0	874 0	1350 0
Number of Balls(per ton) Approx.	3105 6	1587 3	909 1	389 1	200	115 3	729	487	345	250	188	147	129	114	74

^{*}The above is intended as a guide only. Individual ball hardness readings may fall outside the range listed above.



Cast Grinding Cylpebs

Product	Micro	Surface Hardness		Volumetric Hardness		Impact Fatigue Life(Times)	Impact Value AK(J/cm²)	
Code	Structure	Min	Max	Min	Max	Approx.	Min	Max
ZQCr2	P+C	45.0	50.0	42.0	47.0	≥8000	3.0	4.0
ZQCr12	M+C	58.0	68.0	55.0	65.0	≥18000	4.0	6.0

Product Code	(C	S	Si	N	In	(Cr	N	I o		P		S
Product Code	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
ZQCr2	2.1	3.6		1.5	0.2	1.5	1.0	3.0		1.0		1.0		1.0
ZQCr12	2.1	3.6		1.2	0.2	1.5	10.0	14.00		1.0		0.06		0.06

	Ball Diameter (mm)							
Φ8*10	Ф10*12	Ф12*14	Ф14*16					
Ф16*18	Ф18*20	Ф20*25	Ф25*30					
Ф30*35	Ф35*40	Ф40*50	Φ50*60					

^{*}The above is intended as a guide only. Individual ball hardness readings may fall outside the range listed above.



Product Specifications

Chemical composition %

All the details Chemical composition must strictly meet the requirements of the supplier. Typically, Chemical composition % should comply with the table on the previous page.

Ball weight

Each ball diameter the weights is typically within The ranges on the previous page.

Hardness test result

Hardness should comply with the suppliers 'technical Specification requirements. Typically, hardness shall fall into the ranges on the previous page.

Shape of the ball

Ball shape should comply with the suppliers 'technical specification. Typically the shape shall comply with the maximums on the previous page.

Surface performance defects

 The grinding media should not have cracks and casting defects that affect the performance, such as slag inclusions, sand holes, shrinkage porosity, air holes, cold shuts, etc.
 The following photos is not acceptable:









1) The out-of-round is not acceptable.

Breakage rate

The breakage rate of ZQCr26, ZQCr20, ZQCr15 and ZQCr12 (on the previous page) shall comply within 0.3%.

Impact value & ball drop tower test

Our high chromium grinding ball impact value is greater than 3.0 J/cm2 and impact fatigue life ≥18000 times.





Packaging Options



Container & Bulk
Balls can be transported in
bulk open top trucks, open top
rail cars, or in standard 20 ft
containers



Drums

Recycled drums can also be supplied. Drums are more efficient for some modes of transportation and can also be delivered on wooden pallets.



Bags

Balls can be supplied in polypropylene bags with UV rays resist which have secure bag straps to convinient loading and unloading. bags should be protected from long time direct sunlight to maximize shelf life, better coved



Contact Us

Address: Heli Industrial Area, Economic & Technical Development Zone Ningguo, Anhui, China

Tel: +86 0563 4309002 Fax:+86 0563 4303088

Post Code:242300

Website: www.q-grindingmedia.com

