

HuaMing Alumina Technology Ltd., China

<http://www.alumina-ball.com/>

Industry standards for Alumina Grinding Ball

JC/T 848.1 – 1999, China

1. Application Scope

The standards stipulate the product classification, technical requirement, testing method, inspecting regulations and sign, packing, transport and storage for alumina grinding ball.

The standards is applied to ceramic industry used alumina grinding ball with alumina content not less than 75%.

2. Quoted Standards

- (a) GB/T 2997 – 1996
- (b) GB/T6900.3-1996
- (c) GB/T6900.0-1996

3. Definition

Equivalent Wear and Tear: the wear loss of alumina ball grinding with water in PU tank.

4. Product Specification and Classification

- (1) Ball diameter: the common used ball diameter is: $\Phi 20$, $\Phi 25$, $\Phi 30$, $\Phi 40$, $\Phi 50$, $\Phi 60$. other diameter is available upon request.
- (2) Ball series: according the alumina ball performance: 95MQ, 90MQ, 85MQ, 80MQ, 75MQ.

5. Technical Requirement

- (1) Appearance: alumina grinding ball meet the following stipulations.

Table 1

Item	Index
Color	White
Fleck	Diameter 2mm less, 2/100cm ² or less
Pit	Depth 2mm less, surface 2cm ² less, 2/100cm ² or less
Crack	Not allowed

- (2) Appearance, size and tolerance:

Table 2

Appearance size	Tolerance
$\Phi \geq 70$	± 2.5
$70 > \Phi > 30$	± 2.0
$\Phi \leq 30$	± 1.5

- (3) Physical and chemical property of alumina grinding ball

Table 3

Index		95MQ	85MQ	80MQ	90MQ	75MQ
Fe ₂ O ₃ :	%	≤ 0.5				
Al ₂ O ₃ :	%	≥ 95	≥ 85	≥ 80	≥ 90	≥ 75
Crush Strength:		After crush strength test and equivalent wear and tear test, no				

break.

Water absorption: %	≤0.1				
Bulk density: g/cm ³	≥3.60	≥3.50	≥3.40	≥3.20	≥3.10
EWT:	≤0.30	≤0.35	≤0.40	≤0.45	≤0.50

6. Test method

A. Appearance size and appearance quality test

(1) Appearance size, 0.05mm accuracy calipers, test 10 balls, vertical measure 2 diameter of every ball, tolerance meet the table 2 requirement.

(2) Appearance quality test, visual test.

B. Al₂O₃ content test.

C. Fe₂O₃ content test.

D. Bulk density, water absorption test.

E. Crush strength, EWT test.

7. Testing principles

A. Testing

(1) Ex factory test: test the appearance, diameter tolerance, bulk density, water absorption and EWT.

(2) Regular test: every haft year test on batch production.

B. Sampling test

10 Tons batch, samples 500 grams and test.

C. Test regulations

8. Marking, package, transport and storage

A. Marking: product name, classification, manufacturer name, address, registered mark, production date, speciation, quantity, contamination proof, and executing standings to be marked on every package.

B. Package: Alumina grinding ball, packed in PP woven bag with water-proof layer, every bag not exceed 25KGs,.

C. Transport and storage:

For more details, pls kind visit:

URL : <http://www.alumina-ball.com/>

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