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PLANETARY MILLING.

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PRODUCT CATALOG / Grinding Jars

corundum planetary mill jar

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TENCAN / PRODUCT INFORMATION

corundum planetary mill jar

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An alumina ceramic jar for planetary milling of compatible nonmetallic samples.

Overview

An alumina ceramic jar for planetary milling of compatible nonmetallic samples. The product information also identifies zirconia media as a pairing to evaluate, without making that combination a universal recipe.

How it works

The jar working surface forms part of the contact system between sample, media and mill. Material selection should balance the required mechanical action with chemical compatibility and the acceptable contribution from wear.

Check aluminium contamination limits and the sample chemistry. Do not translate a ceramic material’s thermal capability into a complete jar, seal or mill operating limit.

Key features

- Published nominal-volume, external-diameter and height rows are reproduced.
- A hard ceramic surface does not remove the need to check aluminium transfer.
- The product information explicitly advises careful handling because the jar remains a brittle component.

Specifications

Published catalog references are reproduced below. Nominal volume is not a sample-mass rating. Confirm the selected model, material grade, electrical supply and complete supplied configuration

in the quotation.

Published dimensions and configurations — 1

Model / nominal volume	External diameter (mm)	Height (mm)
50mL	56	70
100mL	70	72
250mL	95	88
500mL	106	112
1000mL	133	131
1500mL	132	141
2000mL	132	173

Applications

Ceramic raw materials, minerals and compatible laboratory powders where alumina contact can be accepted.

Suitability depends on the actual sample, process and analytical requirements; a listed application is not a guaranteed final-particle-size result.

Accessories and options

Confirm jar dimensions, lid and holder compatibility, and ask for the supplied alumina grade rather than assuming it from appearance.

State the required grade, quantities, drawings and destination when requesting a quotation. Confirm what is included, the document requirements, packing and commercial terms; no generic delivery time or universal custom capability is assumed.

Compare milling jars · Compare grinding media · Low temperature planetary grinding machines · Ultrasonic planetary ball mills

Selection guidance

Match alumina (corundum) to the sample chemistry and the elements or residues that matter to the analysis. Then confirm the dimensions, complete loaded mass and operating arrangement against the selected mill.

Work through the selection guide · Request a configuration quotation

Trials and comparisons

Material/application reference

Silica

XQM; exact model not recorded · Dry milling

- Sample: 176 g
- Jar: 500 mL alumina/corundum jar
- Recorded sampling / duration: 45 min

Recorded observations

Observation	Sampling time	D50 (µm)	D90 (µm)
Starting sample	Before milling	26.15	58.62
Recorded sample	45 min	1.77	3.69

This is an XQM-family record, not verification of every XQM model. The requested 1 µm target was not demonstrated. Exact ceramic/media grades and measurement/dispersion methods are not supplied.

Material/application reference

Alumina powder

XQM; exact model not recorded · Water-based wet milling

- Sample: 100 g
- Jar: 500 mL corundum jar; alumina media recorded
- Recorded sampling / duration: 60 and 120 min samples

Recorded observations

Observation	Sampling time	D50 (µm)	D90 (µm)
Recorded sample 1	60 min	8.28	15.11
Recorded sample 2	120 min	5.19	10.90

Two starting grades appear in the entry, so no starting distribution is assigned to these measured samples. Jar/media grade, interruption history and measurement method are unspecified. This supports a material-level comparison of recorded time points, not proof of a premium-jar advantage.

How to plan a fair comparison

For a alumina (corundum) comparison, use matched sample portions and the same measurement/dispersion method. State the jar, media, mass/volume loading basis, processing schedule and contamination measurements. A change in material grade alone is not established as the cause of a result.

These anonymous records are not operating instructions. Measurement and dispersion methods are not fully specified in the test summaries; results apply to the reported samples and conditions.

Discuss a matched sample evaluation

Plan your milling configuration.

TENCAN develops and manufactures planetary milling equipment, with application support in Changsha and a production base in Wushi, Hunan.
Share your material, batch size, target particle size and contamination limits. Our team can help confirm the mill, jars, media and electrical requirements, or arrange a sample grinding evaluation.
Reference information applies to the described models and conditions. Confirm the final specification and supplied accessories with TENCAN before ordering.
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Product page https://www.planetaryballmill.com/milling-accessories/jars/corundum-planetary-mill-jar.html
Sample grinding www.planetaryballmill.com/sample-testing/