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■ PRODUCT CATALOG / Grinding Jars

agate planetary mill jar

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A natural agate planetary mill jar for analytical and laboratory sample preparation where a silica-based working surface is appropriate.

Overview

A natural agate planetary mill jar for analytical and laboratory sample preparation where a silica-based working surface is appropriate. Match it with the analytical elements of interest and the intended milling conditions.

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.

Agate is silica-based and can contribute silicon or natural inclusions. It is not a universal answer when silicon contamination must be avoided.

Key features

- The published chart lists nominal volume and internal/external dimensions.
- Custom dimensions can be discussed against the required holder geometry.
- The test records includes material-level agate jar and media records, not a certificate of jar purity.

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)	Internal diameter (mm)	Height (mm)
50mL	65	45	57
100mL	75	50	70
150mL	90	62	80
250mL	94	73	90
300mL	102	79	95
400mL	106	80	103
500mL	106	82	108
1000mL	133	107	141
2000mL	156	130	190

Applications

Geological, environmental, ceramic and other laboratory sample preparation that can tolerate silica contribution.

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

Accessories and options

Specify the exact jar envelope, media and closure. Handle the jar as a brittle component and inspect it before use.

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 natural agate 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

Ore samples

XQM; exact model not recorded · Two agate-jar sample runs

- Sample: 40.2 g and 102 g
- Jar: 250 mL agate jar; agate media
- Recorded sampling / duration: 90 min per sample

Recorded observations

Sample	Sample mass	D50 (µm)	D90 (µm)
Sample 1	40.2 g	2.82	9.03
Sample 2	102 g	3.62	11.23

Both samples were recorded in one entry, but identical composition/batch and all other conditions are not established. The difference cannot be attributed solely to sample loading. The 3 h total covers two 90 min runs.

How to plan a fair comparison

For a natural agate 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/agate-planetary-mill-jar.html>

Sample grinding www.planetaryballmill.com/sample-testing/