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PRODUCT CATALOG / Grinding Jars

Zirconia-Lined Stainless Steel Milling Jar

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TENCAN / PRODUCT INFORMATION

Zirconia-Lined Stainless Steel Milling Jar

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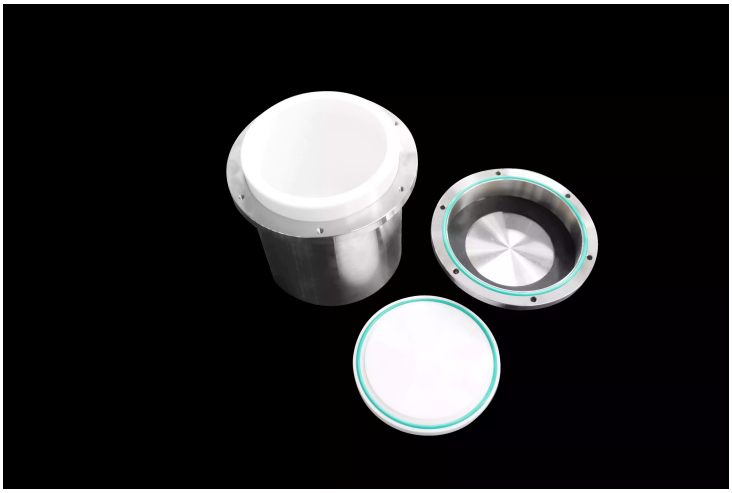

A composite jar that combines a stainless-steel support shell with a zirconia ceramic working liner.

Overview

A composite jar that combines a stainless-steel support shell with a zirconia ceramic working liner. Specify the liner, lid and seal as well as the outer dimensions, particularly for a proposed sealed-atmosphere process.

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.

The liner does not make the complete assembly incapable of contamination. Inspect liner condition, seams and seals; the outer shell is not evidence of a pressure rating.

Key features

- The product information describes separate outer support and ceramic contact materials.
- Listed reference volumes are 15, 50, 100, 250 and 500 mL.
- A rounded liner bottom is described to support material movement and cleaning.

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.

Composite jar reference

Item	Published reference
Outer support	Stainless steel; the product information gives 304 as a common example
Working liner	Zirconia ceramic; supplied grade to be confirmed
Listed nominal volumes	15, 50, 100, 250 and 500 mL
Liner density	Approximately 5.9–6.0 g/cm³
Published liner hardness	Mohs >8.5; Vickers HV ≥1200
Closure reference	Sealed arrangement; seal material and vacuum/gas requirements to be specified
Complete dimensions / permitted pressure	Request the actual assembly drawing and rating

Material properties are published references, not a certificate for a supplied batch or a complete assembly temperature/pressure rating.

Applications

Compatible high-purity materials research where the working liner and a supported outer construction need to be evaluated together.

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 liner composition, dimensions, lid/seal, proposed atmosphere and any glovebox loading arrangement.

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 · Air-cooled systems · Ultrasonic-assisted systems

Selection guidance

Match zirconia liner with a stainless-steel outer shell 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

No identifiable trial of this exact product/configuration was found in the available planetary-milling test summaries. A result from a different mill, jar grade or assistance system is not attributed to this product.

A comparison to request

For a zirconia liner with a stainless-steel outer shell 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.

Discuss a 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/zirconia-lined-stainless-steel.html
Sample grinding www.planetaryballmill.com/sample-testing/