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# PLANETARY MILLING.

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PRODUCT CATALOG / Planetary Mills

## Ultrasonic planetary ball mill

Ultrasonic-assisted configuration

Generated 2026-10-22 13:03:21 CST (UTC+08:00)  
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# Ultrasonic planetary ball mill

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A configured planetary milling system with ultrasonic assistance.

## Overview

A configured planetary milling system with ultrasonic assistance. It is intended for applications where grinding and dispersion need to be evaluated together, particularly in a suitable liquid process.

## How it works

Planetary motion supplies the mechanical grinding action. The added ultrasonic system introduces vibration into the configured process; liquid-mediated cavitation and acoustic streaming should not be described as guaranteed dry-powder effects.

## Key features

- An integrated proposal combining planetary milling, an ultrasonic generator and a transducer.
- Base-mill dimensions and ultrasonic power/frequency are specified for the selected system.
- Evaluate grinding, dispersion and temperature together in a matched sample test.

## 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.

### Configuration information to confirm

| Item                                     | Published reference                                                            |
|------------------------------------------|--------------------------------------------------------------------------------|
| <b>Grinding mechanism</b>                | Planetary milling with an integrated ultrasonic-assistance proposal            |
| <b>System components</b>                 | Generator and transducer; exact fitted arrangement to be confirmed             |
| <b>Base-mill drive reference</b>         | Gear drive; selected base model to be specified                                |
| <b>Jar arrangement reference</b>         | Two or four jars, depending on the configuration                               |
| <b>Published base example</b>            | XQM-6; example jar rotation reference 0–670 rpm                                |
| <b>Ultrasonic power / frequency</b>      | Not specified for a delivered configuration; request the actual quotation data |
| <b>Compatible jar / liquid process</b>   | Confirm jar, transducer arrangement, sample chemistry and loading              |
| <b>Cooling / temperature measurement</b> | Specify as part of the application review                                      |

## Applications

Dispersion and deagglomeration studies, ceramic or battery-material suspensions and application-specific powder processing.

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

## Accessories and options

Discuss the selected base mill, fitted jars, transducer arrangement, ultrasonic controls and cooling needs. Ultrasonic assistance is not presented as a universal retrofit for any jar or mill.

- Jar and media: confirm material, volume, holder fit and the complete working load.
- Vacuum or gas requirements: specify the complete jar, lid and seal arrangement; no pressure rating is assumed.
- Utilities and supply scope: state voltage, frequency, phase, destination and required documents; confirm included versus optional items.

[Compare milling jars](#) · [Compare grinding media](#) · [Low temperature planetary grinding machines](#) · [Ultrasonic planetary ball mills](#)

## Selection guidance

Provide the liquid, solids loading, viscosity, temperature limit and target measurement. Ask for the actual ultrasonic configuration rather than using generic frequency examples as a delivered specification.

[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

Request an ultrasound-on/off comparison on the same configured base mill, using matched sample portions, media, loading, temperature logging and analytical methods. Any percentage improvement requires measured results.

[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.

**Email** [lichang0516@gmail.com](mailto:lichang0516@gmail.com)

**Phone / WhatsApp** +86 19021571516

**Product page** <https://www.planetaryballmill.com/planetary-ball-mills/ultrasonic-planetary-ball-mill.html>

**Sample grinding** [www.planetaryballmill.com/sample-testing/](http://www.planetaryballmill.com/sample-testing/)