



# YTZ<sup>®</sup> GRINDING MEDIA

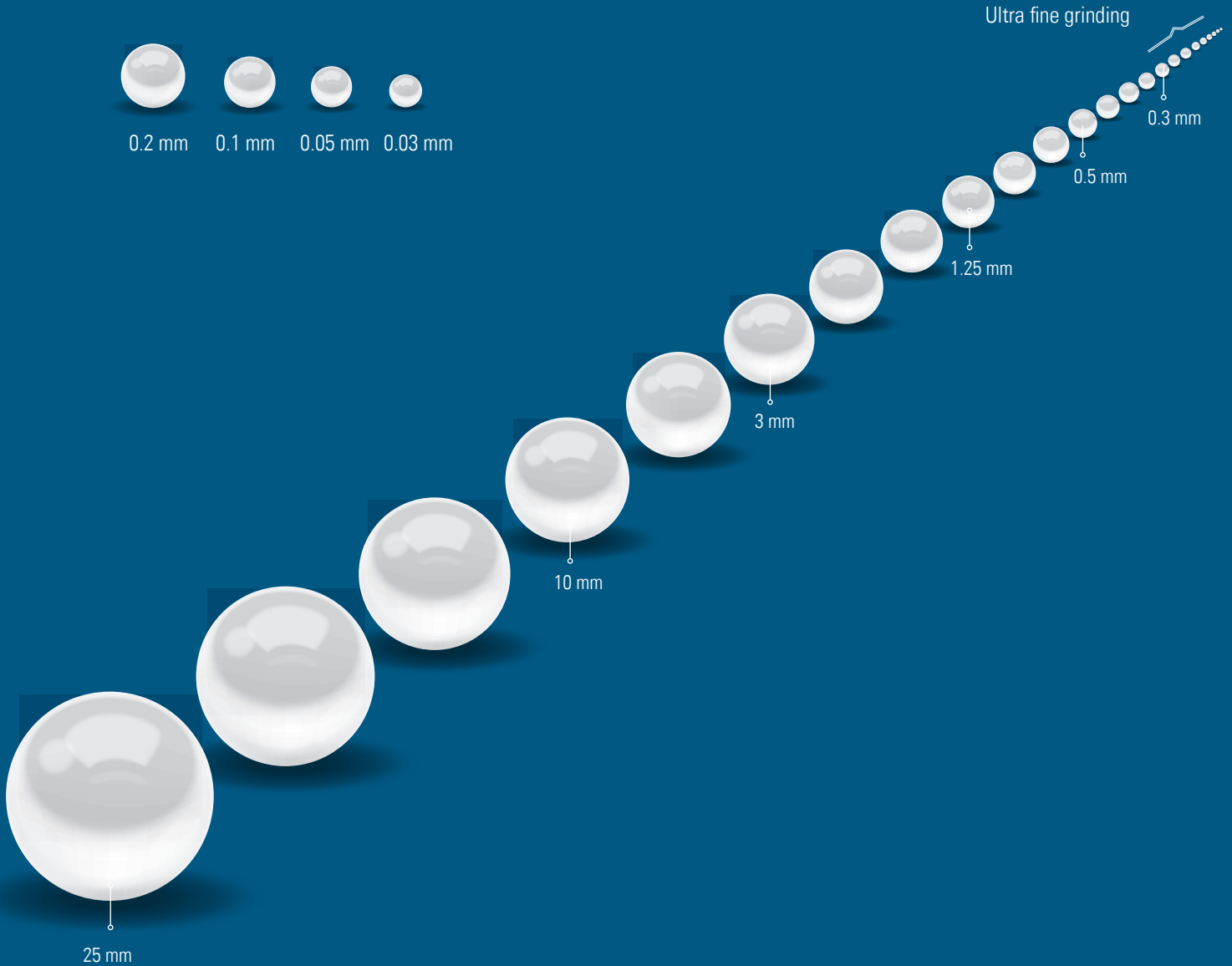
The Ultimate Media for High Speed Agitation Mills



## ULTRA FINE GRINDING



Ultra fine grinding



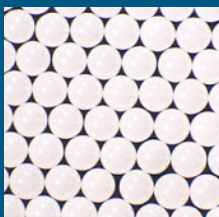
**TOSOH'S YTTRIA STABILIZED ZIRCONIA RAW MATERIAL QUALITY**

# INTRODUCTION

High Quality Zirconia Grinding Media Y TZ has a solid reputation for (nano) grinding and dispersion. Y TZ is manufactured by Nikkato Corporation, one of Japan's leading ceramic manufacturers and a pioneer in the development of strength enhanced zirconia ceramics.

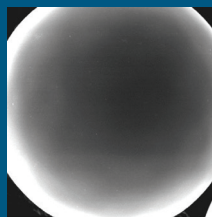
## FEATURES

Empowered by the unique properties of ceramics, Y TZ is resistant to rust and corrosion making it compatible with water-based processes. Y TZ Grinding media, produced from yttria-stabilized zirconia powder, exhibits superior grinding efficiency because of higher density, and has superior wear resistance due to high crushing strength and fracture durability. Y TZ Grinding Media is almost perfectly spherical with a narrow size distribution. This combined with Y TZ's high density provides superior productivity and eliminates product contamination from both media and mill parts.



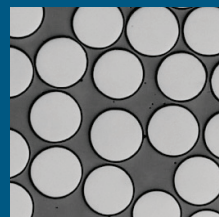
### MEDIA SHAPE

Precise Milling



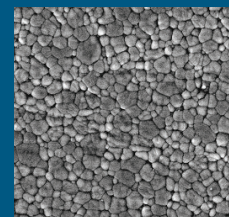
### MEDIA SURFACE

Best Milling Performances



### CROSS SECTION

Virtually no internal defects



### MICROSTRUCTURE

Outstanding wear resistance

## APPLICATIONS



Pharmaceutical



Biomedical



Dental



Battery/Electronics



Food



Cosmetics



Ceramics



Ink/paints

## AVAILABLE SIZES

### Ultra fine grinding

Size (φ, mm)	Bulk density (Kg/L)	Size (φ, mm)	Bulk density (Kg/L)	Size (φ, mm)	Bulk density (Kg/L)
0.03	3.5	0.3	3.9	2	3.7
0.05	3.55	0.4	3.9	2.3	3.7
0.1	3.7	0.5	3.9	2.7	3.7
0.2	3.7	0.65	3.8	3	3.7
		0.8	3.8	5	3.6
		1.0	3.8	10	3.5
		1.25	3.8	15	3.4
		1.5	3.8	20	3.3
		1.75	3.7	25	3.2

### Cylinder

Size (inch)	Bulk density (Kg/L)
3/8	3.6
1/2	3.6

# PHARMACEUTICAL & BIOMEDICAL

Ideal solution for particle reduction in wet milling processes for all materials including pharmaceutical products.

## YTZ ADVANTAGES

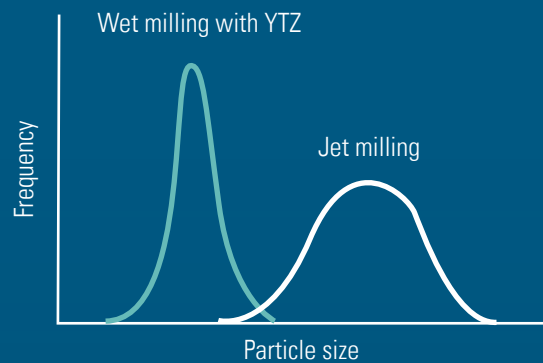
Support in documentation and QA/QC approvals

- Excellent Grinding Efficiency
- Narrow size distribution
- Proven to provide the finest product particle size with the narrowest size distribution
- Batch to batch consistency
- Product reliability - 30+ year continuous production.
- Lowest wear rate
- Compatibility with water based processes
- Traceability from raw material to product
- Suitable for all types of mills including high energy-high throughput equipment

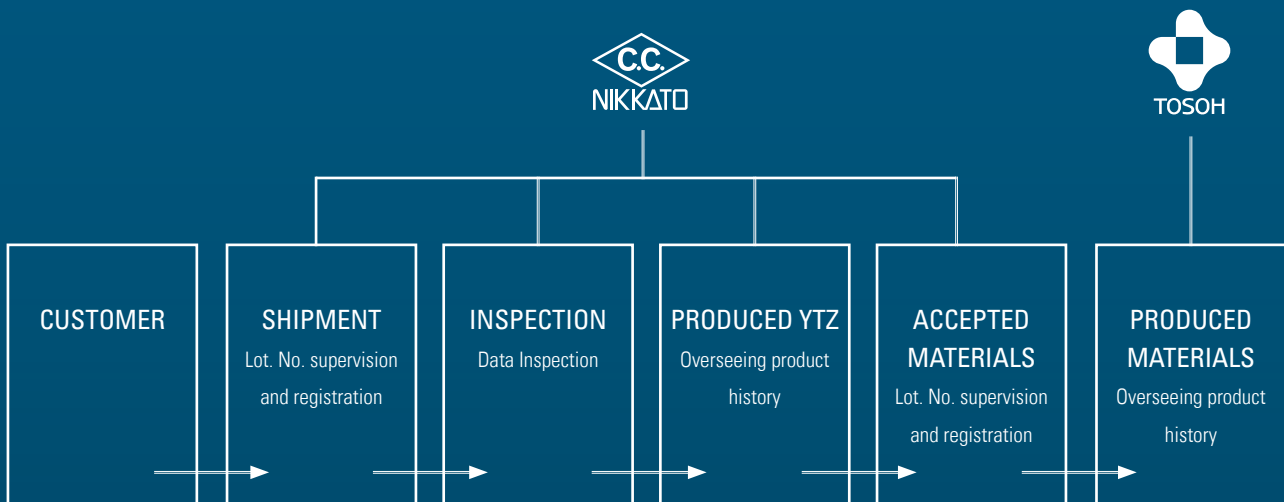


## YTZ QUALITY

YTZ's raw material is Tosoh's Yttria Stabilized Zirconia powder. Tosoh's Zirconia powder has the highest quality worldwide, quality which is inherited also by YTZ Grinding Media. YTZ consists of high purity YSZ without heavy metals and without solvents. Moreover YTZ manufacturing process has a high compatibility with use in pharmaceutical milling, dispersion or size reduction (please contact Tosoh's offices for more information).



## TRACEABILITY



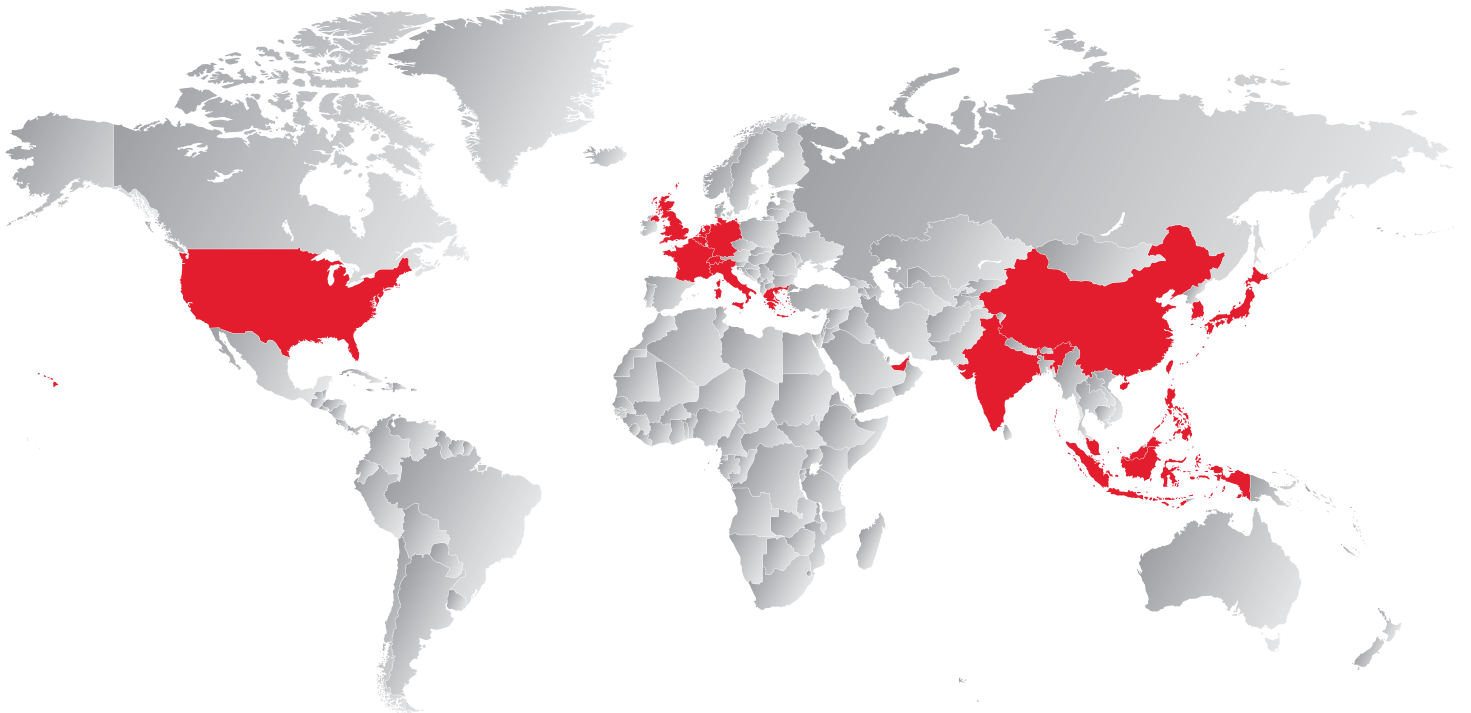
Tosoh and Nikkato have developed a comprehensive quality control system that allows the customers to trace the product from raw material (zirconia) using lot/batch number.



TOSOH

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