Hi-Gravitational Barrel Finishing Machine

Mighty-Mild® Vertical

CE For International Models MMC1-4V

Industry's highest 40G!

Patent US9283647 JP5939709 | Design JP1694983 JP1694984 | Awarded 2019 Minister of Economy, Trade and Industry of National Invention Award; 2018 Japan Chamber of Commerce Chairman's Prize and Machinery Industrial Design Award; 2015 Nagoya City Mayor Prize of Aichi Environmental Award | Made in Japan

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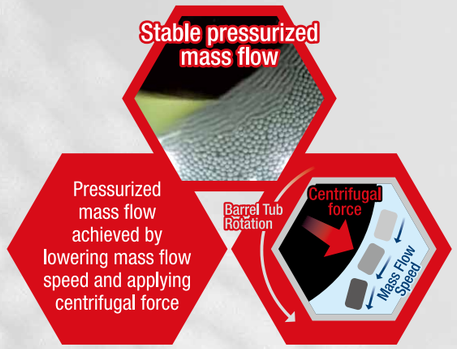
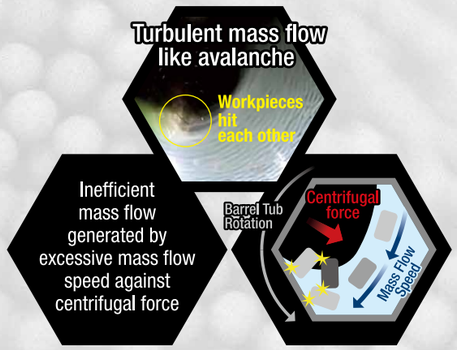
Principle of hi-gravitational barrel finishing method

Stable pressurized mass flow (patented) enhances the performance of abrasive media to the maximum.

Mighty-Mild



Centrifugal Barrel Finishing Machine



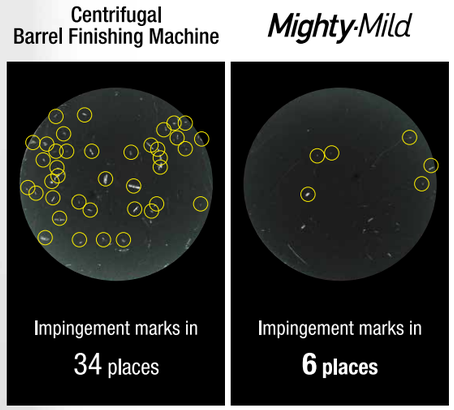
Suited applications

Electric Electronics	Ceramic capacitors Magnets Optical components	**Medical Dental**	Implants, Artificial joints Dental brackets Endoscopic components
Machine elements Precision	Miniature bearings Cutting chips Oil-pneumatic components	**Ornament Daily necessities**	Fishing tools Clock components Jewelry

Polishing quickly and carefully with the industry's highest 40G

Drastic reduction of cracks and impingement marks

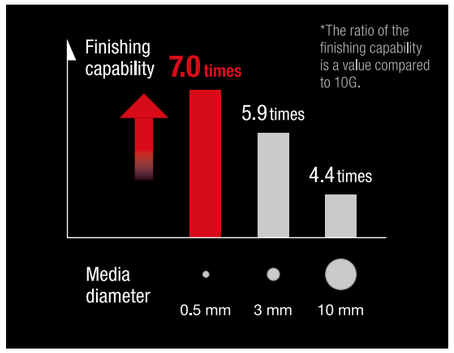
Smooth pressurized flow reduces the number of collisions between workpieces, resulting in a drastic reduction in cracks and impingement flaws.



Drastic improvement in finishing capability

It exerts more than four times the finishing capability compared to conventional centrifugal barrel machines. In particular, it gives a higher finishing effect to minute workpieces and media.

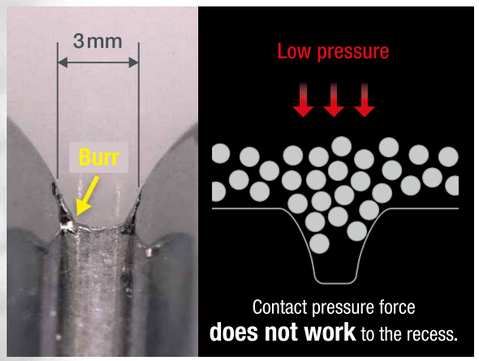
Influence of finishing capability due to increase in pressure (10G → 40G)



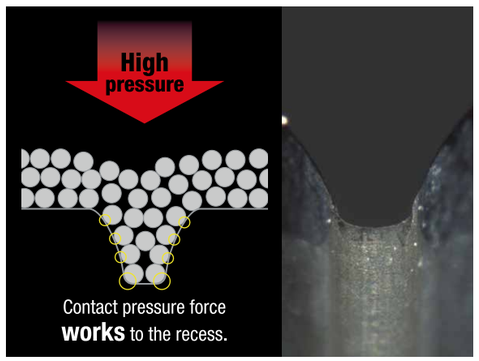
Even complicated recesses and fine shapes are finished quickly and carefully.

The industry-highest gravity, 40G, removes hidden burrs by pushing media deep into gaps that could not be polished before.

Centrifugal Barrel Finishing Machine



Mighty-Mild

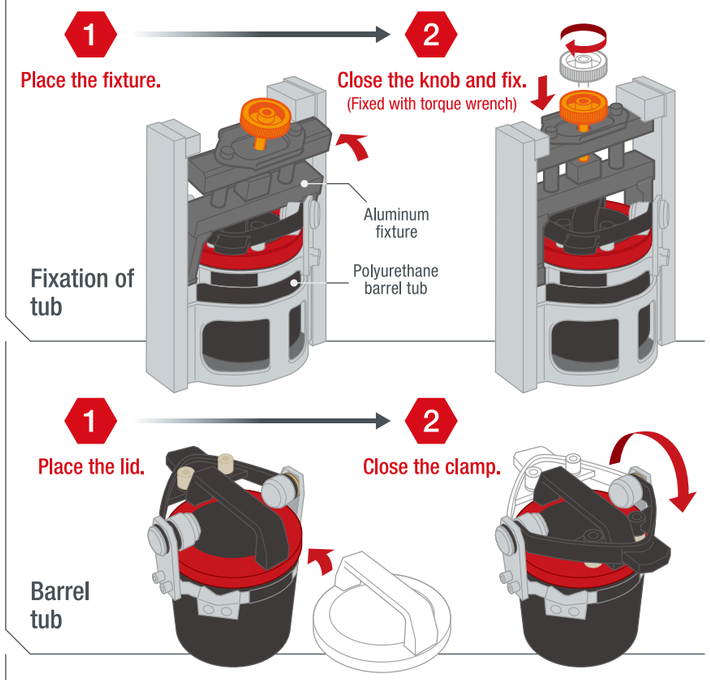


Labor saving, safe, and simple

Universal design easily operable for anyone

Light and easily operable. Even women and the elderly can handle it easily.

Two-motion system



Highest reliability and support for stable operation

Highest-level safety reliability

Compliant with ISO13489-1 European and American PLe safety standards

CE

Automatic rotation speed correction function

Automatically corrects the rotation speed to +/-5 rpm or less of the setting.This ensures the constant finishing condition.

Patent JP5939709

Five times longer product life of drive section

(compared to conventional models)

Newly developed bearing structure realizes both the industry's highest 40G and longer life of the drive section.

Barrel tub fixation detection function

Detects the failure to fix the barrel tub or looseness caused during finishing and automatically stops the tub.

Patent JP2024-119459

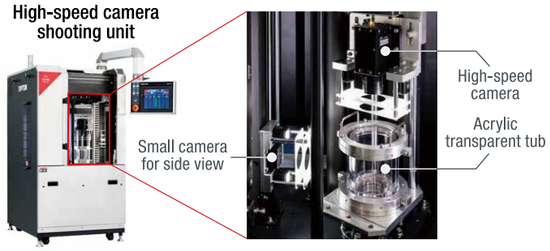
Special specifications

Flow analysis specification (high-speed camera)

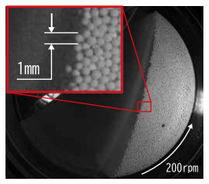
The behavior in the highly rotating finishing tub can be observed precisely using the high-speed camera. In addition, the speed distribution of the content can be evaluated quantitatively by PIV analysis of the captured video.

*Applicable to both dry and wet types.
*PIV (Particle Image Velocimetry): A method to measure velocity distribution of particles on a two-dimensional plane based on a particle image

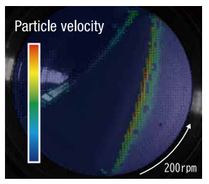
High-speed camera shooting unit



Shooting by high-speed camera



PIV analysis results



Please contact us for details regarding this specification.

MMC1-4V specifications

Model	MMC1-4V
No. of barrels	4 barrels
ID of Barrel Tub	1.0 L / 105 mm (Inner diameter) x 105 mm (Depth)
	0.5 L / 105 mm (Inner diameter) x 52.5 mm (Depth)
Motor capacity	Revolution / 2.2 kW Rotation / 2.2 kW
Machine size	950 mm (W) x 1220 mm (D) x 1620 mm (H)
Machine weight	Approx. 900 kg

Dimensions

(mm)