



Technical resources

Three roll mill

Model: TCTR

<https://www.tencanballmills.com/en/products/grinding-series/other-grinding-equipment/three-roll-mill.html>

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Three roll mill with ceramic rollers for high-viscosity material grinding and dispersion. Efficient shear force action ideal for paints, inks, and cosmetics.

Technical specifications

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Ceramic roller spacing	5-140 μ m
Ceramic roller speed	0-500RPM
Drive configuration	120 W DC motor / 1.5 kW servo motor

These specifications describe the series. Confirm the selected model, power supply and configuration before ordering.



This machine achieves grinding and dispersing effects through the mutual extrusion of the surfaces of three horizontal ceramic rollers and the shearing forces generated by different steering and speed differences. It is the most effective grinding and dispersing equipment for high-viscosity materials.



The most effective grinding and dispersing equipment for high viscosity materials.

Technical parameters

Equipment model: **TCTR-50T**

Ceramic roller material: zirconia/alumina/silicon carbide/silicon nitride, nano-level imported raw material ceramic roller

Porcelain roller specifications: diameter: 50mm ; Length: 150mm

Porcelain roller precision: roller concentricity/straightness less than 2 microns, surface finish less than 0.3 microns

Speed ratio: Speed ratio is 1:2:4

Porcelain roller spacing: 5-140 microns

Porcelain roller speed: 0-500RPM (maximum speed of discharge roller per minute)

Power configuration: 120W DC motor, stable torque, convenient and safe

Electrical appliance control: touch screen speed adjustment, knob speed adjustment, distance display, speed display

Movement mode: gap adjustment is unilateral operation, and the porcelain roller moves parallel, which is convenient and fast

Size: about L360mm*W190mm*H285mm

Power: 120W, 220V (50Hz)

Weight: about 20kg

Equipment model: **TCTR-80**

Ceramic roller material: zirconia/alumina/silicon carbide/silicon nitride, nano-level imported raw material ceramic roller

Porcelain roller specifications: diameter: 80mm ; Length: 200mm

Porcelain roller precision: roller concentricity/straightness less than 2 microns, surface finish less than 0.3 microns

Speed ratio: Speed ratio is 1:3:9

Porcelain roller spacing: 5-140 microns

Porcelain roller speed: 0-500RPM (maximum speed of discharge roller per minute)

Power configuration: 1.5KW servo motor, stable torque, convenient and safe

Electrical control: knob speed adjustment, speed display

Movement mode: gap adjustment is unilateral operation, and the porcelain roller moves parallel, which is convenient and fast

Cooling system: with built-in cooling interface, optional external equipment

Size: about L600mm*W380mm*H495mm

Power: 1.5KW, 220V (50Hz)

Weight: about 75kg



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Before operation, review the selected model's instructions and the material requirements.