

T65 Three Roll Mill

Introduction

Our recently redesigned 2.5"x5" three roll mill lab model has demonstrated powerful performance with its state-of-the-art control, streamlined design and modern all stainless steel structure. In a compact size, this three roll mill is the ideal tool for laboratories and small-volume production in the mixing of electronic thick film inks, high performance ceramics, cosmetics, paints, printing inks, adhesives, epoxy, sealants, pharmaceuticals and many other viscous materials.

This three roll mill lab model offers faster roller speeds and higher throughput up to 3.75 gallons or 30 pounds per hour. The fast roller runs at 432 RPM. Variable frequency drive allows stepless speed control and slow speed runs. Roller spacing and adjustment are set manually with quick engagement mechanism by the use of four small hand wheels. Safety trip limit switch (in the form of a pull cord), emergency stop button, slow-speed washup mode capability and nip guard make this three roll mill very safe to operate. Other advantages include self-lubricating gears and Teflon end plates.



Safety Features

- Emergency pull cord
- Large mushroom style emergency stop button
- Easily accessible stop and start buttons
- VFD enabled slow-speed wash-up operation
- Nip guard (optional)

Premium Features

- Stainless steel rollers are precision ground 420J2 stainless steel to prevent rust or erosion. The hardness is rated at HR50-60 for reliable long-life usage.
- Ceramic rollers are made from cold iso-static pressed and fired 99.5% alumina.
- Rolls are cored for either cooling for heating. Manifold, valve, and collection tank are standard.
- Rollers are ground to 5µm concentricity and 0.5µm surface finish for precise applications
- Higher throughput than most competitors' models
- Variable speed control allows adjustable/slower speed runs
- Emergency pull cord on top of the machine as an extra safety feature
- Roller spacing and adjustment are set manually with quick engagement mechanism by the use of four small hand wheels.
- Gap spacing remains consistent throughout operation
- Teflon receiving apron
- Easily adjustable Teflon end plates
- Unit includes a free standing base allowing easy mobility

TECHNICAL PARAMETERS

Parameter	T65 Three Roll Mill	
Roller Material	Stainless Steel / Ceramic (Alumina)	
Diameter of Roller	2.5" (65mm)	
Length of Roller	5.0" (127mm)	
Roller Speed Ratio (Fixed)	1:2:4	
Speed of Roller RPM	Slow Roller	0~108
	Middle Roller	0~216
	Fast Roller	0~432
Power	3/4HP / .55kW	
Voltage	110V 60 Hz or 220V 50 Hz (10% voltage fluctuation allowed)	
Net Weight	165 lbs (75kg)	
Throughput	0.75-3.75 G/Hr or 6-30 LBS / Hr	
Overall Dimension	25"x11"x15" (635mmx280mmx381mm)	

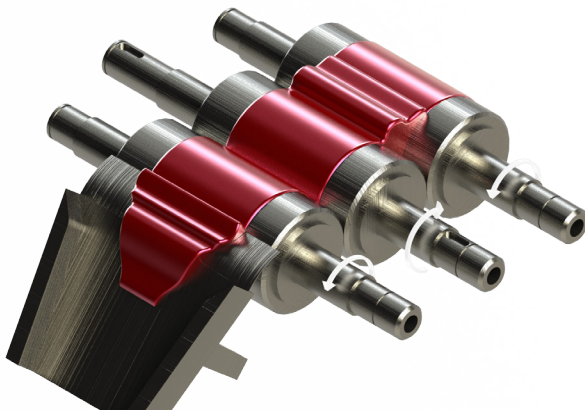
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Torrey Hills T65 Three Roll Mill Honored as Gold Prize Winner at the 5th Annual 2013 Golden Bridge Awards

THT started from the vision of a compact, robust, and continuously feeding mixing device that blends viscous materials. This US and International patent pending overall design is visually appealing. Under the hood the revolutionary mechanical driving system delivers high shear force with minimum operating noise. The rollers are crafted with 5 μ m concentricity and 0.5 μ m surface finish for precise applications. They are cored for either cooling or heating to keep the temperature at the desired level. The engineering team carefully matched the electrical components and bearing systems to maximum the power, dispersing efficiency, and throughput. A VFD is used to provide variable speed control. As a result of these innovations, minimal particle size milling down to submicron level occurs. An easily accessible pull switch adds extra operator protection. This mill is positioned as a leader in mixing tool for a wide range of industries including paints, inks, thick film pastes, adhesives, coatings, ceramics, cosmetics, food, and pharmacy compounding, with comparative advantages in mixing efficiency, continuous feeding capability, and quality control.

Mill Working Mechanism



Mill Structure

