

UltraPAC Drop-in Bar Rotator

The new MISTRAS Products & Systems Division "Drop-in, Bar Rotator," replaces the drop-in rotators that have been produced in the past by NDT Automation.

The Bar Rotator is a mechanical device with rollers that allows for the rotation of cylindrical parts (tube or bar) in a horizontal manner for ultrasonic inspection. The Bar Rotator is used in conjunction with an UltraPAC Immersion System and is inserted into the tank with an X, Y, and Z axis. The Bar Rotator is stepper motor driven and is fully controlled by the UltraPAC Computer System in conjunction with the other axes for a completely automatic scanning inspection. The Bar Rotator is able to scan parts from 1" to 12" in diameter, using 3 different roller positions, in each case both rollers in the system are driven to minimize part slippage.

Bar Rotator Features and Specifications:

Construction: Stainless Steel

Size: 36" x 17" x 22" high; 914mm long x 432mm wide x 560mm high

Weight: 60 lbs. (27kg)

Capacity: 200 lbs (91kg)

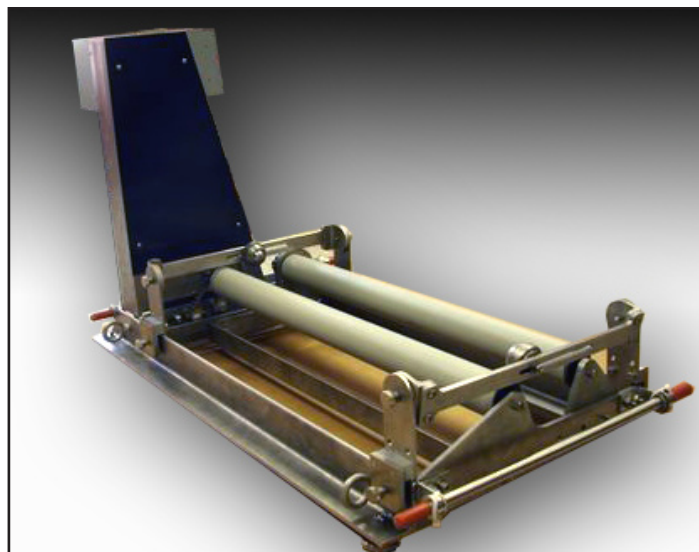
Part Diameter Range: 1" - 12" using 3 different positions for the outside roller 25mm-305mm

Roller Position Range: (1"-4"), (4"-7") and (7"-12"); (25-100mm), (100-178mm) and (178-305mm)

Part Length Range: 2"- 40" (30" + 10" overhang) 50mm - 1016mm (762mm+254mm overhang)

Speed: 3 RPS, 180 RPM, or 20" (508mm)/second surface scanning speed

Resolution: 1.702 mils surface movement



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Motor: 2-phase, NEMA 34 Stepper motor, 880 oz-in torque max @ 5.0A

Stepper Motor Driver: Internal to Bar Rotator

Driver Power Requirements: 42 VDC (Range 24-48 VDC), 5.0 Amps maximum

Drive Type: Chain Drive

Roller Diameter: 2.14" (54.4mm)

Roller finish: Durable Grey PVC Cover, 1/8" (15.88mm) thick

Connection Information: Traditional Step (clock) and Direction inputs to control motion

*Specifications are subject to change