

BRC500

BRC550

BRC525

BRC575

Brake Disc/Drum Reconditioning Center

The new requirements of late model vehicles are a very smooth surface finish, minimum runout, perfect parallelism, no taper, and perfect perpendicularity, all while removing the least amount of material possible. The best lathe for the modern, high tech, quality-minded shop is no longer just a machine that hacks off massive amounts of material in a short time. The best lathe must now achieve a much higher standard of precision—equal to or in fact, better than new OEM rotors.

The BRC500 design starts with an extra-heavy-duty rigid and strong foundation, machined to exacting precision standards by highly experienced and trained German machinists using the most sophisticated computerized machine tools available. This design, matched with specially machined guides and ways with extra-heavy-duty cutting tools and tool holders, provides the precision rigid geometry needed for a near perfect rotor or drum. The BRC500 is a world product with this foundation produced by RTI's partner, Hunger, the largest brake lathe manufacturer in Germany with more than 30 years of experience. Final assembly and quality testing is at RTI in the US.

RTI adds new technology with special constant torque, infinitely variable speed feed motors controlled electronically with special Pulse Width Modulation controls. From high speed rough cut to extra fine "burnishing" speed for fast and precise results. We searched the world for the best smooth running spindle drive motor with no vibration.

The BRC500 is the first modern bench brake lathe developed specifically for the new requirements of late model automobiles and light trucks.



BRC550 with optional bench. Standard Adapters: Hub Surface Locator and Outboard Supporting Cone – 4.75"-6.75" (120-170 mm) Hat ID; Inboard Centering Cones – 1.30"- 3.10" (33-79 mm) Pilot

We connected this motor using high tech "quick change" multi-groove belts and a special high torque roller chain, again to eliminate vibration. There are two spindle speeds, 110 and 220 RPM. At the extra high spindle speed, the fastest in the industry, a better surface finish is possible at all feed speeds, 0.0015"-0.010" per spindle revolution.

Finally, we created a special Hub Surface Locator technology using a new concept in adapter design. The extra rigid 30mm "Big Arbor" with sealed roller bearings is 40% stronger than standard 1" arbors and is machined to the highest precision standards. Runout is controlled by the special arbor face and Hub Surface Locator, not just the shaft. Finally we added a special High Mass vibration dampening out-board supporting cone, again to eliminate vibration. This design solves all of the problems - even with the most difficult hubless composite rotors!

The BRC500 comes standard with special RTI Positive Rake cutting tips with tip holders incorporating RTI's special shear angle that produces a surface finish and rotor precision that exceeds OEM standards. Negative Rake cutting tips and tip holders are also available. Standard Adapters, which provide comparable coverage to competitors' extra cost sets, include coverage for most hubless and composite rotors, and fly wheels with addition of optional tool holders.

The BRC550 is like the BRC500 except with the added feature of Electronically Controlled Offset Step Feed. This feature stops the cutting tools periodically, creating a non-directional finish and an even finer surface finish automatically. This is a feature required by the most demanding German car makers.

The BRC525 and BRC575 are similar to the BRC500 and BRC550 respectively, except that they use an industry standard 1" arbor and include no adapters.

Hole ID; Bearing Race Cone Set – 1.38"-2.60" (35- 66 mm) Race ID.

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