

WHY CHOOSE AN AVENGER?

An Avenger is more than just a name; it represents a passion and commitment to excellence.

Every model is a true planetary grinder with all gear-driven, unique, counter-rotating heads. Featuring all-steel, case-hardened gears with power routed to each of the three grinding heads as well as the rotating drum. The gearbox housing is made with high precision CNC aluminum for superior cooling, it is built very much like the transmission in your car!

Avengers use Magnetic Instant-Change Tool Mounting. Attach scraper tools, standard M6 three-hole metal trapezoid tools, and Velcro-Mounted polishing tools (Velcro adapters are included with the machine.) Avengers are designed to make work easier!

Avengers keep working and working without the need for frequent maintenance such as changing snapped belts or dealing with dirty, spent grease. Every 500 to 1000 Hours of work, just pop the bottom oil seal, drain, fill the oil according to the specs in your manual, re-install the seal – done. Low cost, low frequency, low hassle!

Avengers use powerful and versatile three-phase motors which provide the advantages of variable speed functions and forward/reverse action. In general, Three-Phase Motors are incredibly durable for several reasons: they have no starting windings which are known to run at very high temperatures, no capacitors, no switches and no brushes to replace. The absence of these single phase components simplifies the function of the motor so the only parts that may wear are two bearings on the shaft. This results in decades of motor life!

Motor controls on all Avengers is a USA Made NEMA 4X Variable Frequency Drive, IP 66 – rated for harsh environments where water and dust protection are mandatory. With the heat sinks always open to open air (not sealed in a cabinet as with all competitive machines) you get maximum cooling to allow temperatures to radiate away faster as opposed to being sealed in a cabinet. Only the vital and sensitive components are sealed in the NEMA 4X housing – there is NO way for dust or water to seep into the electronics cavity! Additionally, on the (3) 240 volt single-phase models (460, 550, 650), the same electronics automatically converts single-phase to three-phase power. These features alone makes an Avenger vastly more superior and reliable than any single or three-phase machine.

220V power is common but not always available all the time! For those times, a practical and easy-to-use solution is available - the Voltage Cleaver (single-phase models, 460 and 550)! It combines two 120V circuits to 220V, Single-Phase, 20 Amp so your Avenger gets the right power for the right job ALL the time! Our confidence and engineering of the Avengers backed by a 2-Year, FULL "bumper-to-bumper" warranty. Whether it's the FREE lifetime technical support or just job-specific guidance, we are always there for our customers!

Additional Features	Competition	Avengers
Weight Plates - 20" Model	Up to two (2) 25 lb weights can be added, such as SASE PDG-5000.	Up to two (2) 68 lb weights can be added, Avenger 460 model.
Variable Speed	850 - 2000 RPM	0 - 1450 RPM
Attachment Plates	Magnetic, Hammer, Bolt-On	Magnetic - tooling snaps on and off in mere seconds; it takes less than one minute to change a set in the middle of a job!
Diamond Tooling Prices	\$35 to \$49 Per Pad	\$30 to \$34 Per Pad
Productivity - Step 1 of Concrete Grinding	350 to 600 SqFt Per Hour (20" Machine)	350 to 600 SqFt Per Hour (20" Machine)
Component Protection	Completely sealed - in any concrete floor grinder only 3-phase motors can withstand excessive dust and slurry, single phase motors and definitely NOT the electronics!	USA Made 3-Phase Motors & Avengers' USA Electronics - Completely sealed (but open to "fan" and air cooling) to withstand excessive dust and slurry.
Maintenance	No special tools required. Belts purchased separately. Time to change a belt in the field: 3 hours to 6 hours.	No special tools required. They only require the oil in the gear box to be changed, every 500 to 1000 Hours. By doing so an Avenger will last decades without any additional maintenance! They use 120W to 180W Machine/Gear Oil.
Belt Cost	\$300.00+ Per Belt	Not Applicable – There are NO BELTS in an Avenger. Steel Gears Never Break!
Portability	Easy handling isn't convenient on with brands, in fact, the head & motor do not easily detach from the frame for transporting down stairs.	Head & motor can be removed from the frame for easy handling - all Avengers. Plus two handle bars are included that insert into both sides of the frame to easily transport the <i>complete</i> grinder down stairs.