



Vulcan Tool Company

High Speed Spindle Attachment

Precision Grinding Solution that's Flexible and Cost Effective

Vulcanaire

Spindle Attachment for applications requiring 4,500 to 300,000 RPM

Functionality of a Jig Grinder can be added quickly to mills and lathes currently on your shop floor.

A Vulcanaire is easily adapted to any machine tool spindle. The result is you have a machine capable of precision grinding holes sizes from .030" to 9.00". This reduces multiple set-ups, saves time, and improves quality. It also provides a simple method for doing certain jobs almost impossible by other methods.



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The basic Vulcaire kit consists of a spindle adapter, torque ring, Adjustable Eccentric Head, air motor capable of delivering the optimum sfpm, collet and grinding wheel.

Holes .030" to 9.00" Diameter

Precision to tenths. Eccentric extension attachments are available for holes up to 9" diameter. The Vulcaire is capable of grinding to tenths, and has sturdy construction ensuring long hours of precision work.

Air Operation

The Vulcaire operates on shop air, 30-100 psi. This is a flexible unit, built by toolmakers for toolmakers, that will save time and money wherever precision grinding is required.

Safety Precautions for Vulcaire

Vulcaire Grinding Attachment is a high speed metal removing tool. Therefore, it should be treated with respect and the following precautions observed:

1. Operators must always wear safety glasses.
2. Wheel manufacturers specifications as to rpm and extension of wheel from spindle must not be exceeded.
3. A filter, regulator and lubricator must always be used in the air supply line to the Vulcaire.
4. Do not exceed 100 psi on any Vulcaire.
5. Vulcaire operators should be equipped with personal protective equipment.
6. Refer to THE GRINDING WHEEL INSTITUTE publications for detailed information for proper use of grinding wheels.

Machine Tool Spindle Adapters

Spindle adapters for hundreds of well known machine tools are available. For special applications we can supply the required adapter to mount the Vulcaire.

Adjustable Eccentric Head

Fine adjust dial in .0001" graduations. Coarse adjust dial in .010" graduations. One full turn equals .050" stock removal on hole diameter. (¾" maximum off-center adjustment)



Vulcaire Spindle Attachment

A set of three Extension Attachments is available

They extend the amount of off-center adjustment of the Adjustable Eccentric head by ¾", 1½", or 2¼". Maximum hole diameters that can be ground are as follows: 20,000 and 30,000 series motors with a maximum 3" diameter wheel - 9"; the 10,000 series motor with a maximum ½" diameter wheel - 6½"; the 5,000 series motor with a maximum ¼" diameter wheel - 6¼".

Save time and wheel expense by grinding with the proper sfpm

Maximum metal removal with minimum wheel wear is the direct result of grinding at the proper surface feet per minute. 5000 sfpm is recommended for abrasive wheels, 3000 sfpm for diamond wheels, and 1000 sfpm for carbide burrs. These speeds are readily attainable with a Vulcaire. Five interchangeable air motors are available.

Series	RPM	Hole Diameter
300	215,000-300,000	0.030"- 0.250"
5,000	100,000-175,000	0.090"- 0.250"
10,000	30,000-65,000	0.250"- 2.200"
20,000	6,000-15,000	1.500"- 4.500"
30,000 (1hp)	4,500-13,500	1.500"- 4.500"

