

## HC Series Electromagnetic Chuck

**Magna-Lock USA HC series** electromagnetic chucks are primarily used on surface grinders, lathes, cylindrical grinders, and other machines. They are available in a variety of standard styles and sizes while other sizes and models can be furnished and will be quoted on request.

Standard Magna-Lock USA rotary chucks are available with the popular concentric ring top plate pattern. This concentric ring top plate pattern has steel poles and brass non-magnetic separators with variable standard spacing increments available. This brass ring design assures moisture proof construction, positive holding, and trouble-free regrinding. There are three types of standard rotary electromagnetic chucks. The specifications of each type are as follows:

- Type I is a rotary electromagnetic chuck with a 7  $\frac{1}{2}$ " diameter bronze center cover plate to provide access to the collector ring and brush holder assembly. This is the most standard model and most popular of rotary chucks that are manufactured by Magna Lock USA.
- Type II is a rotary electromagnetic chuck with a removable center cover designed to carry the magnetic holding derived from the chuck's innermost coil to provide holding action down to a 2 ¼" diameter. The height of this chuck is greater than a Type I chuck and there is an entirely different construction used around the innermost chuck body ring. Because of this, it is not possible to convert a Type I rotary chuck to a Type II rotary chuck.
- Type III is a rotary electromagnetic concentric ring chuck designed especially for certain vertical spindle rotary table surface grinders. The collector ring for this type of chuck is a separate assembly that is mounted down on the machine spindle completely external to the chuck. Accessibility to the collector ring and brush holder is through a removable cover in the machine itself, so this type of chuck does not have the typical removable center cover and provides magnetic holding down to about 3" diameter in the center.

Magna-Lock USA has designed many special rotary chucks for small lathe and boring applications as well as special sectional models for automatic loading and unloading of workpieces. Our engineers are prepared to design and build rotary chucks of any size not standard. Our experience in rotary electromagnetic chucks includes successful installations up to 12 feet in diameter. Other top plate patterns to meet specific requirements are available on special order. These special top plate patterns include radial pole, heavy-duty crossover, cloverleaf, tear drop, staggered pole, straight chordal laminated, and grid style. Our top plates are replaceable without having need to replace the entire chuck. Additionally, we can supply parallels or wear plates to adapt to special applications. Special note should be given that Magna-Lock USA concentric ring top plates work well with parallels as some competitor's top plate construction does not.

Collector rings on 30" and larger sizes are located in the center of the chuck allowing easy access. Collector ring and brush holder assemblies for smaller diameter chucks may be arranged to meet customer's machine specifications.

All electromagnetic chucks operate on direct current. Magna-Lock USA rotary chucks are normally 115- or 230-volt DC operation but can be furnished for other DC voltages. Please specify DC voltage desired when ordering.

Radial pry slots can be provided in chuck top plates to facilitate removal of large smooth workpieces that tend to "wring in" on the chuck. Extra cost of pry slots will be quoted on request.

For mounting purposes, rotary chucks can be furnished with counterbored clearance holes at selected bolt circle diameters or with tapped holes in the underside, with quantity and locations to meet customers' requirements. Male or female pilots for centering the chuck can also be provided as required.





## **Contact Us**

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Model	Work Surface		Height		Weight		Watts
	in	mm	in	mm	lb	kg	
HC-30	30.875	784	5.5625	141	900	408	566
HC-36	36.875	937	5.5625	141	976	443	980
HC-42	42.875	1089	5.5625	141	1500	680	1380
HC-48	48.875	1241	5.5625	141	2350	1066	1750
HC-54	54.75	1391	5.5625	141	2900	1315	1835
HC-60	60.875	1546	5.5625	141	3700	1678	2085
HC-72	72.125	1832	5.5625	141	5200	2359	3030
HC-84	84	2134	5.5625	141	7100	3220	4255
HC-96	96	2438	5.5625	141	9350	4241	5750

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	Models HC-30 to HC-54	Models HC-60 to HC-96
Magnetic Pole Width	.50"	.75"
Non-Magnetic Separator	.1875"	.25"
Total Pitch	.6875"	1"

Part Number	Part Name		
198847	1/2" Brush Holder Assembly		
197291	1/2" Collector Ring Assembly		
198308	3/4" Brush Holder Assembly		
203990	3/4" Collector Ring Assembly		
198857	1/2" Brush Assembly Replacement Kit		
199911	Rubber Gasket for 1/2" Collector Ring		
199918	3/4" Brush Assembly Replacement Kit		
199993	Standard Brass Cover Plate		
226-4004-50	O-Ring for use with 3/4" Collector Ring		

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