Multi-pole Radial Ring is a new type of ring magnet, produced by special technology. By this technology, surface magnetic flux can reach top level, about 50%-100% higher than the arc magnets and radial ring magnets. The surface flux is distributed by sine wave shape. Because of its high surface gauss, it can remarkably raise the efficiency of motors efficiency, and it also helps motor to be light-weight and save raw materials. These make it to be a good choice for high-performance motors.

Magnetic Products (MPCO) Inc. can offer high efficiency multipole magnetic rings. These Neodymium (NdFeB) rings are revolutionizing the permanent magnet space for synchronous motors, stepping motors and DC brushless motors widely used in automotive, computers, electronics, communications, office, school equipment and common household products. Until recently, full magnetic rings were made of separate magnets joined together to create the desired ring shape. Now new technology enables the creation of super strong, one piece, multi-pole radial magnetic rings.
Technology:

Hot pressing is a new method of producing sintered NdFeB magnets. This process consists of combining base powders, hot pressing the resulting material, and then baking or sintering the resulting ring to achieve a radially magnetized product. This new technology improves the magnetic flux which in turn provides better efficiency and performance.

Available Dimensions:

<table>
<thead>
<tr>
<th>O.D</th>
<th>I.D</th>
<th>Thickness(T)</th>
<th>Height(H)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;40mm</td>
<td>&lt;15mm</td>
<td>2-5mm</td>
<td>25-50mm</td>
</tr>
</tbody>
</table>

*Special sizes may be produced depending on the grade, height-to-diameter ratio, and wall thickness.
Applications:

- Actuators
- Magnetic bearings
- Magnetic clutch
- Peripheral motors
- Spindle motors
- Steering control motors
- Servo motors
- Stepper motors
- Synchronous motors
- Linear actuator motors
- Powered tools
- Other new products

Advantages:

- 1-Higher flux density
- 2-Rotor shaft can be non-magnetic material, to reduce weight of motor without reducing magnet performance
- 3-Higher utilization of Permanent magnet
- 4-Motor assembly is made much easier; installation of one or more rings versus gluing arcs into place.
- 5-Radial sintering assures no “weak spots”.
- 6-Magnets are multi-poled — thus the ring does not compromise the magnetic properties
- 7-The radial orientation results in a super strong magnet by virtue of superior metallurgy developed specifically to be radially oriented.

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