## Affordable Automation for Welding, Cutting and Semi-Automatic Processes

## CIR-O




CIR-O machines are lightweight, heavy-duty, multipleuse circular drives. Each of the three sizes of machines has a positive rack and pinion drive and infinitely variaable speed control which provides smooth, accurate travel in all positions. The carriage provides a mounting surface for a variety of different process tools. A single center-punch mark is all that is needed to locate the machine on the workpiece. It is then ready to flame-cut, bevel or weld. Permanent magnets or vacuum cups can be purchased separately to hold it in place.


1. BUG-5100-F drive unit provides the power with a solid-state variable speed control.
2. CIR-3040, CIR-4040 and CIR-5040 carriage insures accurate work paths by meshing firmly with the gear. A quick-acting manifold with a short connection hose, and a centering pin are mounted on the carriage.
3. CON-3000, CON-4000, CON-5000 ring and gear assembly with its perfectly round cut gear makes every cut true.
4. OPTIONAL CIR-9002 offset leg and magnet assembly - four of these units are used to eliminate the blind spot under the ring. Each unit clamps onto a standard leg. An adjustable tip adaptor must be used to offset the cutting tip under the ring.
5. Standard $2^{\prime \prime}(50 \mathrm{~mm})$ leg [four supplied with the machine].
6. OPTIONAL CIR-9021 5" (127 mm) leg [use with template kit and CIR-9020 magnet foot].
7. OPTIONAL CIR-9020 magnet foot fuse with CIR-9021 5" (127 mm) leg] locks machine to work - four required.
8. Center location with stainless steel center pin.
9. Rotating post mount - this combination of modules provides accurate positioning of a torch for any single torch operation.


## CIR-O HEAVY DUTY CIRCLE CUTTER

Capacities and Speed Ranges

## Dimensions:



NOTE: Torches, tips and magnets or vacuum cups must be ordered separately.

| PART | POWER <br> NUMBER | SHIPPING <br> REQUIREMENT <br> WEIGHT | NET <br> WEIGHT |  |
| :--- | ---: | :--- | :--- | :--- |
| CIR-3303 | 120 VAC/50-60-1 | CIR-3303 | $66 \mathrm{lbs} .(30.0 \mathrm{~kg})$ | $48 \mathrm{lbs} .(21.8 \mathrm{~kg})$ |
| CIR-3323 | 240 VAC/50-60-1 | CIR-3323 |  |  |
| CIR-3313 | 42 VAC/50-60-1 | CIR-3313 |  |  |
| CIR-4404 | 120 VAC/50-60-1 | CIR-4404 | $90 \mathrm{lbs} .(40.8 \mathrm{~kg})$ | $65 \mathrm{lbs} .(29.5 \mathrm{~kg})$ |
| CIR-4424 | 240 VAC/50-60-1 | CIR-4424 |  |  |
| CIR-4414 | 42 VAC/50-60-1 | CIR-4414 |  |  |
| CIR-5505 | 120 VAC/50-60-1 | CIR-5505 | $128 \mathrm{lbs} .(58.0 \mathrm{~kg})$ | $90 \mathrm{lbs} .(40.9 \mathrm{~kg})$ |
| CIR-5525 | 240 VAC/50-60-1 | CIR-5525 |  |  |
| CIR-5515 | 42 VAC/50-60-1 | CIR-5515 |  |  |

## INSIDE DIAMETER OUTSIDE DIAMETER

CIR-3303 CIR-3323 CIR-3313 3"-14" (75-356 mm) 26"-56" (660-1422 mm) CIR-4404 CIR-4424 CIR-4414 3"-22" (75-559 mm) 34"-64" (864-1626 mm) CIR-5505 CIR-5525 CIR-5515 3"-30" (75-760 mm) 42"-72" (1060-1830 mm)

|  |  | DIAMETER |  | DIAMETER |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | INCH | IPM | MM | MM/MIN |
|  |  | $\begin{array}{r} 3 \\ 6 \\ 10 \\ 14 \end{array}$ | $\begin{array}{r} .4-8 \\ .8-16 \\ 1.4-28 \\ 2-39 \end{array}$ | $\begin{array}{r} 75 \\ 150 \\ 250 \\ 350 \end{array}$ | $\begin{array}{r} 10-210 \\ 20-420 \\ 35-700 \\ 50-1000 \end{array}$ |
| $\begin{aligned} & \overline{\bar{i}} \\ & \overline{\bar{\omega}} \end{aligned}$ |  | $\begin{aligned} & 26 \\ & 30 \\ & 34 \\ & 38 \\ & 42 \\ & 46 \\ & 50 \\ & 56 \end{aligned}$ | $\begin{array}{r} 3.5-70 \\ 4-80 \\ 4.5-92 \\ 5.2-105 \\ 5.7-115 \\ 6.3-125 \\ 6.8-135 \\ 7.6-155 \end{array}$ | $\begin{array}{r} 650 \\ 750 \\ 850 \\ 950 \\ 1050 \\ 1140 \\ 1250 \\ 1420 \end{array}$ | $\begin{array}{r} 90-1805 \\ 105-2100 \\ 120-2400 \\ 130-2640 \\ 50-3000 \\ 60-3200 \\ 175-3500 \\ 200-4000 \end{array}$ |
|  |  | $\begin{array}{r} 3 \\ 6 \\ 10 \\ 14 \\ 18 \\ 22 \end{array}$ | $\begin{array}{r} .3-5 \\ .6-11 \\ .9-18 \\ 1.3-26 \\ 1.7-33 \\ 2-40 \end{array}$ | $\begin{array}{r} 75 \\ 150 \\ 250 \\ 350 \\ 450 \\ 550 \end{array}$ | $\begin{array}{r} 7-140 \\ 14-280 \\ 23-460 \\ 32-650 \\ 42-840 \\ 50-1000 \end{array}$ |
| $\overline{\bar{v}}$ |  | $\begin{aligned} & 34 \\ & 38 \\ & 42 \\ & 46 \\ & 50 \\ & 54 \\ & 58 \\ & 64 \end{aligned}$ | $\begin{array}{r} 3.2-63 \\ 3.5-70 \\ 3.9-78 \\ 4.3-85 \\ 4.6-93 \\ 5-100 \\ 5.4-110 \\ 6-120 \end{array}$ | $\begin{array}{r} 850 \\ 950 \\ 1050 \\ 1150 \\ 1250 \\ 1350 \\ 1450 \\ 1625 \end{array}$ | $\begin{array}{r} 80-1600 \\ 87-1760 \\ 97-1950 \\ 105-2130 \\ 115-2300 \\ 125-2500 \\ 135-2700 \\ 150-3000 \end{array}$ |
|  |  | $\begin{array}{r} 3 \\ 6 \\ 10 \\ 14 \\ 18 \\ 22 \\ 26 \\ 30 \end{array}$ | $\begin{array}{r} .2-4 \\ .4-8 \\ .7-13 \\ 1-19 \\ 1.3-25 \\ 1.5-30 \\ 1.8-37 \\ 2-41 \end{array}$ | 75 150 250 350 450 550 650 750 | $\begin{array}{r} 5-100 \\ 10-210 \\ 17-350 \\ 24-500 \\ 32-640 \\ 38-760 \\ 45-900 \\ 52-1050 \end{array}$ |
| $\overline{0}$ |  | $\begin{aligned} & 42 \\ & 46 \\ & 50 \\ & 54 \\ & 58 \\ & 62 \\ & 66 \\ & 72 \end{aligned}$ | $\begin{array}{r} 2.9-57 \\ 3.2-63 \\ 3.4-68 \\ 3.7-75 \\ 4-80 \\ 4.3-85 \\ 4.5-90 \\ 4.9-100 \end{array}$ | $\begin{aligned} & 1050 \\ & 1150 \\ & 1250 \\ & 1350 \\ & 1450 \\ & 1550 \\ & 1650 \\ & 1825 \end{aligned}$ | $\begin{array}{r} 73-1458 \\ 80-1600 \\ 87-1750 \\ 94-1900 \\ 100-2000 \\ 105-2150 \\ 115-2300 \\ 125-2500 \end{array}$ |

## Optional Accessories:



TEMPLATE KIT - consists of a sheet aluminum master template, alignment bars, spacer legs, tensioning assembly and torchholder. Pattern is cut in tempered hardboard and bolted to ring


ANNULAR CARRIAGE - for special welding and cutting applications - when material to be cut or welded passes through the ring track.


VACUUM MOUNTS - CON-1006 for use on non-ferrous material such as stainless, aluminum etc. Use with ARV-1020 Vacuum Pump Kit.

Litho in U.S.A.

