ARCAIR-MATIC®

N7500 AUTOMATED GOUGING SYSTEM

www.thermadyne.com/arcair
The Arcair-Matic® N7500 gouging system delivers high productivity for any metal fabrication operation where gouging and welding represents a large portion of the work schedule. The system can be utilized on almost all metals.

**FIVE TIMES FASTER, TEN TIMES LESS GRIND**

A typical automated gouge requires 10 times less grinding and improves your overall metal removal productivity.

The Arcair-Matic® N7500 gouging system will produce excellent U-groove edge preparation and back-gouging for both plate and pipe, with little edge distortion than flame cutting. It can U-groove a 1.5" (38 mm) thick plate about 50% faster than an automatic flame torch can bevel. And since a U-groove requires a lot less fill metal than a bevel joint, welding is done at 1.5 times the speed.

**EASE AND VERSATILITY FOR HUNDREDS OF METAL FABRICATION USES**

Ensures conformity to pre-determined, pre-selected groove depth while maintaining a tolerance of ±0.025" (0.065 mm) throughout the length of the gouge.
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Digital LCD Remote Pendant

- Ease of use – start/stop function, travel delay, electrode diameter
- Rough machining feature to stall the feed of the electrode to compensate for pitted area or out-of-round steel rolls, thereby maintaining the concentricity of the shaft/roll
- “Travel delay” function assures excellent groove geometry at the very beginning of the groove, thereby eliminating the need for a starting pad
- Shock-absorbent bumper
- Patent Pending

Torch Head

- Redesigned Torch Head with an extended front end – gives the operator better view of the weld seam that’s being back-gouged
- Can be oriented 360 degrees in any direction giving flexibility to fit the application

Digital Circuitry Control Box

- Redesigned digital circuitry control box
- A synergic mode ensures conformity to pre-determined, pre-selected groove depth and width specifications

Arcair\textsuperscript{\textregistered}, the industry leader in air carbon-arc products, introduces the Arcair-Matic\textsuperscript{\textregistered} N7500, a next generation automatic gouging system that provides superior performance, flexibility, versatility, and safety.

Covering a broad range of applications, the Arcair-Matic N7500 gouging system can be utilized on almost all metals, including stainless steel, carbon, manganese, and chrome-moly steels. It is perfect for applications on pressure vessels, wind towers, shipbuilding, railroads, bridge and girder manufacturing, and with heavy equipment used in mining industries.

As a bonus feature, use the remote pendant to track actual arc time to help schedule routine maintenance; additionally, it enables you to monitor and manage cost of the gouging project/job.

The heavy duty remote pendant is enclosed in a splash-proof panel to operate in high humidity/outside conditions and is designed to withstand high impact.

The Arcair-Matic N7500 can be used with CC/CV power supplies available in the industry. It utilizes the contactor in the welding power supply unit thereby eliminating the need for the external contactor used in prior models.

The multi input voltage platform enables use in all markets around the world, servicing both US (110VAC) and International (220VAC).

The N7500 is equipped with important safety features that will shut down the system if it senses no current or low voltage. These functions ensure optimum groove quality and prevent damage to the equipment and work.
**EASY TO USE**

All functions can be controlled, from determining gouge parameters, start/stop function, travel delay, and the capability to manually feed or retract the electrode in the torch head. The operator can view the amperage and voltage during gouging sequence easily while maintaining the electrode on the weld seam that's being back gouged.

The Remote Pendant provides complete control where it needs to be... in the operator's hands.

**VERSATILITY**

A single electrode contact shoe assembly accepts the entire range of Arcair Jetrods® Jointed electrodes from 5/16" (7.9 mm) through 3/4" (19.1 mm).

**IMPROVED PRODUCTIVITY**

Faster metal removal over any other conventional means in today's market. A gouge depth of 1.5 times the diameter can be achieved in a single pass while providing a machine-like U or V-shaped groove.
## Order Information

**Complete N7500 Gouging System**
Includes Remote Pendant, Control Box and Torch Head
(Part No. 65-991-015)

### System Cable Assembly Options*

<table>
<thead>
<tr>
<th>110V AC Power Supply Cable</th>
<th>Motor Cable Assembly</th>
<th>DC Power Cables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part No.</strong></td>
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<tr>
<td>96-130-304</td>
<td>96-130-335</td>
<td>96-130-254</td>
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<tr>
<td>96-130-305</td>
<td>96-130-336</td>
<td>96-130-256</td>
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<tr>
<td>96-130-337</td>
<td>96-130-337</td>
<td>96-130-300</td>
</tr>
<tr>
<td>96-130-338</td>
<td>96-130-338</td>
<td>** NOTE:** Minimum 2 Power Cables Required</td>
</tr>
<tr>
<td>10 ft (3 m)</td>
<td>3 ft (0.9 m)</td>
<td>4 ft (1.2 m)</td>
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<tr>
<td>14&quot; (0.36 m)</td>
<td>15 ft (5 m)</td>
<td>15 ft (5 m)</td>
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<tr>
<td>15 ft (5 m)</td>
<td>25 ft (8 m)</td>
<td>25 ft (8 m)</td>
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<tr>
<td>25 ft (8 m)</td>
<td>50 ft (15 m)</td>
<td>50 ft (15 m)</td>
</tr>
</tbody>
</table>

### Pendant Cable Assembly

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>96-170-069</td>
<td>14&quot; (0.36 m)</td>
</tr>
<tr>
<td>96-170-070</td>
<td>15 ft (5 m)</td>
</tr>
<tr>
<td>96-170-071</td>
<td>25 ft (8 m)</td>
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<tr>
<td>96-170-072</td>
<td>50 ft (15 m)</td>
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</table>

### Power Supply Communication Cable Assembly

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>96-130-339</td>
<td>15 ft (5 m)</td>
</tr>
<tr>
<td>96-130-340</td>
<td>25 ft (8 m)</td>
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<tr>
<td>96-130-341</td>
<td>50 ft (15 m)</td>
</tr>
</tbody>
</table>

### Air Hose Assembly

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>94-395-051</td>
<td>4 ft (1.2 m)</td>
</tr>
<tr>
<td>94-395-049</td>
<td>15 ft (5 m)</td>
</tr>
<tr>
<td>94-395-048</td>
<td>25 ft (8 m)</td>
</tr>
</tbody>
</table>

*Must be ordered separately*

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**N7500 Assembly Set-Up**

- **Power Supply**
  - Input: 110V or 220V
- **Communication Cable**
  - Connects Power Supply to Control Box
- **Air Hose**
  - Connects to Remote Pendant Cables
- **Remote Pendant**
- **Remote Pendant Cables**
  - Connects to Motor Pendant and Power Supply
- **Motor Pendant**
  - Connects to Torch Head
- **Torch Head**
- **Ground Cable**
  - Connects to Work Piece
- **Control Box**
  - Viewed from Cabinet Right Side
- **Signal Wire**
- **Air Inlet**
- **Mounting Fixture**
- **DC Power Cable**
- **AC Power Cable**
  - Connects to Control Box Input