Spark Your IMAGINATION.

It’s time to stop thinking about that project — and start working on it. Do some research. Reach out for advice and tips. Get the right equipment. Hobart Welders can help with it all. Whether you’re just starting out or have been welding for years, if you’ve got the drive — we’ve got your back.

It’s time to Spark Your IMAGINATION.

HOW DO I CHOOSE A WELDING PROCESS?

- **MIG (GMAW)**
  - Easy process to learn
  - Better control on thinner metals
  - Clean welds with less spatter and no slag to remove

- **FLUX-CORED (FCAW)**
  - Easy process to learn
  - Great for outdoor use in windy conditions
  - Deep weld penetration

- **STICK (SMAW)**
  - Better suited for winds, outdoor conditions
  - More forgiving when welding on dirty or rusty metal
  - Affordable

- **TIG (GTAW)**
  - Provides highest quality and most precise welds
  - Highly aesthetic weld beads
  - Allows adjustment of heat input while welding by use of a remote foot control

- **PLASMA ARC CUTTING**
  - Easy to learn and perform
  - Cuts any electrically conductive metal
  - Narrow and precise cut
  - Small heat affected zone, which helps prevent warping or paint damage

WHAT TYPES OF METAL CAN I WELD?

Select the process that matches the metals you want to weld or cut.

<table>
<thead>
<tr>
<th>METAL TYPE</th>
<th>WELDING</th>
<th>CUTTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEEL</td>
<td>MIG</td>
<td>FCAW</td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>FC</td>
<td>STICK (DC)</td>
</tr>
<tr>
<td>Aluminum</td>
<td>AC-TIG</td>
<td>DC-TIG</td>
</tr>
<tr>
<td>Cast Iron</td>
<td>Plasma</td>
<td>Plasma</td>
</tr>
<tr>
<td>Copper/Brass</td>
<td>Plasma</td>
<td>Plasma</td>
</tr>
<tr>
<td>Titanium</td>
<td>Plasma</td>
<td>Plasma</td>
</tr>
<tr>
<td>Magnesium Alloys</td>
<td>Plasma</td>
<td>Plasma</td>
</tr>
<tr>
<td>All Electrically Conductive</td>
<td>Plasma</td>
<td>Plasma</td>
</tr>
</tbody>
</table>

| SKILL LEVEL | LOW | LOW | MODERATE | HIGH | HIGH | LOW |

HOW MANY GENERATOR WATTS DO I NEED?

Be aware that some electrical equipment requires higher startup wattage.

<table>
<thead>
<tr>
<th>EQUIPMENT</th>
<th>WATTS</th>
<th>RATING</th>
<th>STARTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Hand Drill (3/8 in.)</td>
<td>400W</td>
<td>500W</td>
<td>500W</td>
</tr>
<tr>
<td>Wet/Dry Vacuum (1.5 hp)</td>
<td>500W</td>
<td>500W</td>
<td>500W</td>
</tr>
<tr>
<td>Drywall Sander (2 hp)</td>
<td>3,000W</td>
<td>3,000W</td>
<td>3,000W</td>
</tr>
<tr>
<td>Air Compressor (5 hp)</td>
<td>5,000W</td>
<td>5,000W</td>
<td>5,000W</td>
</tr>
<tr>
<td>Grindstone (1/2 hp)</td>
<td>1,000W</td>
<td>1,000W</td>
<td>1,000W</td>
</tr>
<tr>
<td>Power Propane Tank</td>
<td>30,000BTU</td>
<td>30,000BTU</td>
<td>30,000BTU</td>
</tr>
<tr>
<td>Central Air Conditioner (60,000 BTU)</td>
<td>10,000W</td>
<td>10,000W</td>
<td>10,000W</td>
</tr>
<tr>
<td>Refrigerator/Freezer</td>
<td>700W</td>
<td>700W</td>
<td>700W</td>
</tr>
<tr>
<td>Farm Duty Motors (0.5/2 hp)</td>
<td>2,000W</td>
<td>2,000W</td>
<td>2,000W</td>
</tr>
<tr>
<td>Washing Machine (170 PSO)</td>
<td>2,000W</td>
<td>2,000W</td>
<td>2,000W</td>
</tr>
<tr>
<td>Portable Compressor (1/2 hp)</td>
<td>1,000W</td>
<td>1,000W</td>
<td>1,000W</td>
</tr>
</tbody>
</table>

MIG VS. FLUX-CORED

Hobart’s Handler® series of wire feed welders are designed for easy operation with professional results.

- **MIG (GMAW)**
  - Use solid wire and shielding gas (required)
  - Better control with thin metals
  - Cleaner welds
  - Welds stainless and aluminum

- **FLUX-CORED (FCAW)**
  - Use flux cored wire (no gas required)
  - Great for outdoor use
  - Deep weld penetration
  - Welds steel including dirty, rusted or painted

WHAT SHOULD I KNOW ABOUT DUTY CYCLE?

Duty cycle is the amount of time during a 10 minute period that the welder can continuously operate at its rated output without causing heat damage to the system. For example, an Handler® 230 has 60% duty cycle at 275 amps of DC output. At rated output, it can work for approximately 6 continuous minutes out of 10 and needs to cool for the remaining 4 minutes. For applications requiring extensive on-off time and/or welding at high amperages, choose a welder with a higher duty cycle. If a welder is operated below its rated output, the duty cycle typically increases. Ambient temperature and ventilation can increase or decrease duty cycle. Refer to owner’s manual or spec sheets for duty cycle charts and more information.
**MIG WIRE FEED WELDERS**

Easy to use. Ready to take on all kinds of work. There’s a Hobart® MIG or flux-cored wire welder that’s a great fit for you — and almost any project you can imagine.

- **Handler® 100**
  - 115V or 230V
  - Duty Cycle: 20% @ 175A
  - Weld Duty: 25-135A

- **Handler® 125**
  - 115V or 230V
  - Duty Cycle: 20% @ 225A
  - Weld Duty: 25-135A

- **Handler® 140**
  - 115V or 230V
  - Duty Cycle: 20% @ 325A
  - Weld Duty: 25-135A

- **Handler® 190**
  - 240V
  - Duty Cycle: 20% @ 500A
  - Weld Duty: 25-135A

- **IronMan® 250**
  - 115V or 230V
  - Duty Cycle: 20% @ 300A (200A),
  - 40% @ 150A (125A)
  - Weld Duty: 25-135A

- **IronMan® 335**
  - 115V or 230V
  - Duty Cycle: 20% @ 400A (300A),
  - 40% @ 200A (150A)
  - Weld Duty: 25-135A

**Plasma Cutters**

It’s easy to use an AirForce® plasma cutter to cut through aluminum or any conductive material.

- **AirForce® 12ci**
  - 120V
  - Cut Thickness: 1/8" in 10 s, 1/4" in 30 s

- **AirForce® 27i**
  - 240V
  - Cut Thickness: 3/8" in 10 s, 1/2" in 30 s

- **Champion® Elite 225**
  - 240V
  - Cut Thickness: 1/2" in 10 s, 3/8" in 30 s

**WELDER/GENERATORS**

Get reliable AC auxiliary power and DC stick welds anywhere, any time.

- **Champion® 145**
  - 120V
  - 5,000 Running Watts / 6,500 Starting Watts

- **Champion® 1450**
  - 120V
  - 5,000 Running Watts / 6,500 Starting Watts

**TIG WELDER**

The EZ-TIG™ 165i has a single-knob control, so it’s simple to set up and easy to make the precise TIG welds you need.

**STICK WELDERS**

Stickmate® welders. Portable, reliable performance. Ideal for food, durable repairs, and more.

- **Stickmate® 160i DC**
  - 120-240V
  - Weld Duty: 20% @ 160A (120A),
  - 40% @ 80A (60A),
  - Weld Duty: 25-135A

- **Stickmate® 210i DC**
  - 240V
  - Duty Cycle: 10% @ 325A
  - Weld Duty: 25-135A

**AUTO-DARKENING WELDING HELMETS**

Fundamentally honest with an advanced technology and color-stable battery for all-day performance.

- **Pillar® Series**
  - Suitable for all work.

- **Creator® Series**
  - Suitable for high-mix work.

- **Inventor® Series**
  - Suitable for low-mix work.

**Common Stick Electrodes**

- **MS Code**
  - **1001** ALL AC, ECON, DCP, E7018
  - **1003** ALL AC, ECON, DCP, E7018
  - **7018** ALL DC, E7018
  - **7018** ALL DC, E7018

**Stick Welding Tips**

1. Use recommended cable lengths:
   - 12 ft. for 1/16-in. electrodes.
   - 20 ft. for 5/32-in. electrodes.

2. Use recommended electrode holder:
   - 400 series/1100 series/1300 series.

3. Use recommended arc length:
   - 1/8-in. electrode: 1/4-in. arc length.

**VISIT HOBARTWELDERS.COM**

Learn more about DIY projects and how to make the most of your Hobart® equipment at HobartWelders.com

- **Owner’s manuals**
- **News/new products**
- **Sales and service locator**
- **Product spec sheets**
- **Buying guides**
- **Video library**

- **Product registration**
- **Weld Talk Forum**
- **Welding 101 (E-learning)**
- **Full Product Line**
- **5/3/1 Industrial warranty**

Technical Help: 1-800-332-3218
Customer Support: 1-800-426-0420

All items shown in image are included with product.