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
- Cleaner welds possible 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 windy, 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 to fit use of a remote foot control

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

WHAT TYPES OF METAL CAN I WELD?

**METAL TYPE**
- Select the process that matches the metals you want to weld or cut.

**WELDING**
- MIG
- FCAW
- STICK (DC)
- AC-TIG
- DC-TIG

**CUTTING**
- PLASMA

**STEEL**

**STAINLESS STEEL**

**ALUMINUM**

**CAST IRON**

**COPPER, BRASS**

**TITANIUM**

**MAGNESIUM ALLOYS**

**ALL ELECTRICALLY CONDUCTIVE**

**SHEET LEVEL**
- LOW
- LOW
- MODERATE
- HIGH
- HIGH
- LOW

HOW MUCH GENERATOR POWER DO I NEED?

Be aware that some electrical equipment requires higher startup wattage.

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<th>EQUIPMENT WATTS</th>
<th>RUNNING WATTAGE</th>
<th>STARTING WATTAGE</th>
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| **TOOL**
| Electric Hand Drill (1/2 in.) | 550W | 2,300W |
| 1/2 in. Impact Wrench | 750W | 2,300W |
| Circular Saw (1-1/4 in.) | 1,450W | 2,300W |
| Air Compressor (1 hp) | 1,600W | 4,500W |
| **HOME**
| Sump Pump (1/2 hp) | 1,050W | 2,150W |
| Trash Can (1/2 gal) | 875W | 2,150W |
| Central Air Conditioner (40,000 BTU) | 6,000W | 7,800W |
| Refrigerator/Freezer | 700W | 2,200W |
| **FARM**
| Farm Duty Motors (1-1/2 hp) | 2,000W | 8,200W |
| Washing Machine (700 P.S.) | 1,500W | 6,150W |
| Power Generator (1-1/2 hp) | 2,000W | 4,200W |

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 InverTig® 240 has an 80% duty cycle at 400 amps of DC output. At rated output, it can weld for approximately 8 continuous minutes out of 10 and then needs to cool for the remaining 2 minutes.

- For applications requiring extreme arc-on time and/or welding at high amperage, choose a welder with a higher duty cycle. If a welder is operated below its rated output, the duty cycle typically increases.

- Inverters are less susceptible to over-voltage and over-current due to inverter welding systems. Refer to your manual or shop sheets for duty cycle charts and more information.