

# 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) FLUX-CORED (FCAW)

- Easy process to learn
- Better control on thinner metals
- Cleaner welds possible with less spatter and no slag to remove

- Easy process to learn
- Great for outdoor use in windy conditions
- Deep weld penetration

### STICK (SMAW) TIG (GTAW) PLASMA ARC CUTTING

- Better suited for windy, outdoor conditions
- More forgiving when welding on dirty or rusty metal
- Affordable

- 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

- 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?

METAL TYPE	WELDING					CUTTING
	MIG	FCAW	STICK (DC)	AC-TIG	DC-TIG	PLASMA
STEEL	✓	✓	✓		✓	✓
STAINLESS STEEL	✓		✓		✓	✓
ALUMINUM	✓		✓	✓		✓
CAST IRON			✓			✓
COPPER, BRASS					✓	✓
TITANIUM					✓	✓
MAGNESIUM ALLOYS				✓		✓
ALL ELECTRICALLY CONDUCTIVE						✓
SKILL LEVEL	LOW	LOW	MODERATE	HIGH	HIGH	LOW

## HOW MUCH GENERATOR POWER DO I NEED?

Be aware that some electrical equipment requires higher startup wattage.

EQUIPMENT WATTS	Running Wattage	Starting Wattage
<b>TOOLS</b>		
Electric Hand Drill (1/2 in.)	600W	900W
Wet/Dry Vacuum (1.7 hp)	900W	2,300W
Circular Saw (7-1/4 in.)	1,400W	2,300W
Air Compressor (1 hp)	1,600W	4,500W
<b>HOME</b>		
Sump Pump (1/2 hp)	1,050W	2,150W
Furnace Fan (1/2 hp)	875W	2,350W
Central Air Conditioner (40,000 BTU)		6,000W / 7,800W
Refrigerator/Freezer	700W	2,200W
<b>FARM</b>		
Farm-Duty Motors (1-1/2 hp)	2,200W	8,200W
Washer 2 gal/min (700 PSI)	1,600W	6,100W
Portable Conveyor (1/2 hp)	1,000W	3,400W



## COMMON STICK ELECTRODES

AWS Class	Position	Polarity	Usage
6011	ALL	AC, DCEN, DCEP	All-purpose stick electrode; used for carbon and galvanized steel; 60,000 PSI tensile strength; deep penetrating and ideal for welding light to medium amounts of dirty, rusty or painted metals
6013	ALL	AC, DCEN, DCEP	Light to medium penetrating all-purpose stick electrode; for use on carbon steel; 60,000 PSI tensile strength; good for general, all-purpose applications and joints with poor fit-up
7018	ALL	AC, DCEP	Low-hydrogen electrode; for low-, medium- and high-carbon steels; 70,000 PSI tensile strength; ideal for out-of-position welding and tacking; not recommended for low-voltage AC welders
7018 AC	ALL	AC, DCEN, DCEP	Low-hydrogen electrode; for low-, medium- and high-carbon steels; 70,000 PSI tensile strength; ideal for out-of-position welding and tacking; not recommended for low-voltage AC welders; specially formulated to operate with small 208/230 volt AC welders

## 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 IronMan™ 240 has 60% duty cycle at 200 amps of DC output. At rated output, it can weld for approximately 6 continuous minutes out of 10 and then needs to cool for the remaining 4 minutes.

For applications requiring extensive arc-on 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 owners 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.

# PLASMA CUTTERS

It's easy to use an AirForce® plasma cutter to make quick, precise cuts in steel, aluminum or any conductive material.

# WELDER/GENERATORS

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

### Handler® 100 #500572



**115 VOLT**

Flux-cored

Mild Steel Thickness Range  
18 ga. 3/16 in.

Duty Cycle  
20% @ 80A

Weld Output  
30-100A

### Handler® 125 #500573



**120 VOLT**

MIG OR Flux-cored

\*Gas regulator and hose not included.

Mild Steel Thickness Range  
24 ga. 3/16 in.

Duty Cycle  
25% @ 80A

Weld Output  
25-130A

### Handler® 140 #500559



**115 VOLT**

MIG OR Flux-cored

Mild Steel Thickness Range  
24 ga. 1/4 in.

Duty Cycle  
20% @ 90A

Weld Output  
25-140A

### Handler® 190 #500554 WITH SPOOL GUN: #500554001



**230 VOLT**

MIG OR Flux-cored

Mild Steel Thickness Range  
24 ga. 5/16 in.

Duty Cycle  
30% @ 130A

Weld Output  
25-190A

### AirForce® 12ci #500564



**120 VOLT**

Rated Output  
12A @ 110 VDC, 35% Duty Cycle

Maximum Mild Steel Thickness Range  
Rated Cut (Clean/Smooth) 1/8 in. Max. Cut (Sever/Rough) 1/4 in.

### AirForce® 27i #500575



**120 or 240 VOLT**

Rated Output  
120V (15A); 20A @ 88 VDC, 60% Duty Cycle  
120V (20A); 27A @ 92 VDC, 35% Duty Cycle  
240V: 30A @ 92 VDC, 40% Duty Cycle

Maximum Mild Steel Thickness Range  
Rated Cut (Clean/Smooth) Max. Cut (Sever/Rough)

120V	240V	120V	240V
5/16 in.	3/8 in.	3/8 in.	5/8 in.

### Champion® 145 #500563



4,000 Running Watts/4,500 Starting Watts

Receptacles:  
50A, 240V 20A, 120V GFCI

Process:  
DC STICK

Duty Cycle  
30% @ 130A

Weld Output  
40-145A

10 hp Briggs & Stratton Intek™ engine. Cables not included.

Mild Steel Thickness Range  
1/8 in. 1/4 in.

### Champion® Elite 225 #500562



9,500 Running Watts/11,000 Starting Watts

Receptacles:  
50A, 240V 50A, 120/240V 20A, 120V GFCI

Process:  
DC STICK

Duty Cycle  
100% @ 225A

Weld Output  
40-225A

23 hp Kohler Command PRO™ engine. Cables not included.

Mild Steel Thickness Range  
1/8 in. 1/2 in.

### Handler® 210MVP™ #500553



**115 or 230 VOLT**

MIG OR Flux-cored

Mild Steel Thickness Range  
24 ga. 115V 1/4 in. 230V 3/8 in.

Duty Cycle  
30% @ 150A (230V), 20% @ 90A (115V)

Weld Output  
25-210A (230V), 25-140A (115V)

### IronMan™ 240 #500574 WITH SPOOL GUN: #500574001



**240 VOLT**

MIG OR Flux-cored

Mild Steel Thickness Range  
24 ga. 1/2 in.

Duty Cycle  
60% @ 200A

Weld Output  
30-280A

### Popular MIG/Multiprocess Accessories

#194776 Small Running Gear with Cylinder Rack For Handler and Multi-Handler models	#195186 Protective Cover For Handler and Multi-Handler models	#770973 Protective Cover For IronMan 240
#770971 Flow Gauge Regulator with 5' Hose	#300796 SpoolRunner™ 100 For Handler 190, 210MVP and Multi-Handler models	#770967 SpoolRunner™ 200 20-ft. (6-m) cable. For IronMan 240 only (direct connection).

\*Spool gun is highly recommended to weld aluminum.

### AirForce® 40i #500576



**120 or 240 VOLT**

Rated Output  
120V (15A); 20A @ 88 VDC, 60% Duty Cycle  
120V (20A); 27A @ 91 VDC, 35% Duty Cycle  
240V: 40A @ 140 VDC, 60% Duty Cycle

Maximum Mild Steel Thickness Range  
Rated Cut (Clean/Smooth) Max. Cut (Sever/Rough)

120V	240V	120V	240V
3/8 in.	5/8 in.	5/8 in.	7/8 in.

### Popular Plasma Accessories

#770771 For Airforce 12ci	#770966 For Airforce 27i & 40i
#770727	#770726 (Mirrored)

Protective Weatherproof Cover

Shade 5 Lens Safety glasses For all AirForce plasma cutters

### Champion® Elite 260 #500577



15% more weld output

9,500 Running Watts/11,000 Starting Watts

Receptacles:  
240V 50A 120/240V 20A, 120V GFCI

Process:  
DC STICK

Duty Cycle  
100% @ 260A

Weld Output  
40-260A

23 hp Kohler Command PRO™ engine. Cables not included.

Mild Steel Thickness Range  
1/8 in. 1/2 in.

### Popular Welder/Generator Accessories

#770714 Protective Weatherproof Cover For Champion 145	#770748 Protective Weatherproof Cover For Champion Elite 225 and 260
#195195 No. 2 Stick Cable Set 50 ft.	#193067 No. 4 Stick Cable Set 20/15 ft.

# AUTO-DARKENING WELDING HELMETS

### Pillar™ Series



6.2 sq. in. viewing area

Fundamental helmet with an expanded viewing area and long-lasting battery for all-day performance

Viewing Field 3.78 x 1.65 in. (96 x 42 mm)  
Shades Darkened State: #10, Light State: #3  
Switching Speed 1/10,000 second  
Operating Mode Weld  
Sensors 2  
Weight 16.2 oz. (459 g)

**2-YEAR WARRANTY**

### Creator™ Series



7.1 sq. in. viewing area

Versatile helmet with sensitivity and delay controls to perform in any welding environment

Viewing Field 3.82 x 1.85 in. (97 x 47 mm)  
Shades Darkened State: #9-13, Light State: #3  
Switching Speed 1/25,000 second  
Operating Modes Weld and grind  
Sensors 3  
Weight 19 oz. (540 g)

**2-YEAR WARRANTY**

### Inventor™ Series




9.3 sq. in. viewing area

High-performance helmet with large viewing area and four arc sensors for improved visibility and weld quality

Viewing Field 3.94 x 2.36 in. (100 x 60 mm)  
Shades Darkened State: #9-13, Light State: #3  
Switching Speed 1/25,000 second  
Operating Modes Weld and grind  
Sensors 4  
Weight 19.7 oz. (560 g)

**2-YEAR WARRANTY**

### Popular Helmet Accessories



#770843  
Headgear

#770274 Magnifying lens 150x diopter	
#770276 Magnifying lens 200x diopter	
#770277 Magnifying lens 250x diopter	

# MULTIPROCESS WELDER

Get MIG, DC TIG and Stick welding capabilities in one machine

### Multi-Handler® 200 #500578



**120 or 240 VOLT**

Mild Steel Thickness Range


MIG: 24 ga.	TIG: 22 ga.	Stick: 16 ga.
3/8 in.	3/16 in.	3/8 in.

Duty Cycle (240V)  
30% @ 165A MIG/TIG  
30% @ 140A STICK

Weld Output  
20-140A (120V), 20-200A (240V)

Portable, reliable performance. Ideal for fast, durable repairs.

### Stickmate® 160i DC #500570



**120 or 240 VOLT**

Maximum Mild Steel Thickness  
Ideal performance for most 6010, 6011, 6013 and 7018 rods

120V	240V
1/8 in.	3/8 in.

Duty Cycle  
20% @ 65A (120V), 30% @ 160A (240V)

Weld Output  
20-80A (120V), 20-160A (240V)

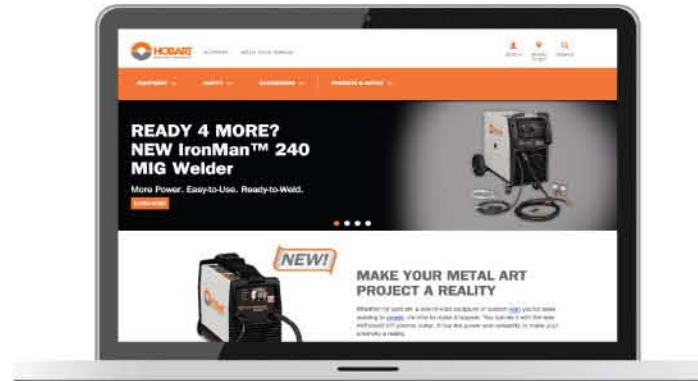
### Stick Welding Tips

- Take precautions with flying materials when chipping slag. Always wear proper personal protective equipment including safety glasses.
- Keep electrodes clean and dry — follow manufacturer's recommendations.
- Penetration: DCEN — Least penetration, AC — medium (can be more spatter also), DCEP — most penetration.

# VISIT HOBARTWELDERS.COM

Learn more about DIY projects and how to make the most of your Hobart® equipment at [HobartWelders.com](http://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: 1-800-332-3281  
Customer Support: 1-800-626-9420

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