

### PROCESS



Air Plasma Cutting

**5/3/1**  
INDUSTRIAL  
WARRANTY

**New!**



**N**eed to cut steel? Thinking about an oxy acetylene cutting torch to do the job? Consider a plasma cutter. This simple technology uses an electrical arc and compressed air to cut steel, aluminum, and other conductive metals.

The new AirForce™ 700i plasma cutter features an inverter design that is both lightweight and powerful. The product also features an ergonomic trigger safety,

more efficient air consumption, and economically priced consumables from a new HP-70 torch. The 700i requires 230 V/50 A input power and compressed air delivery of at least 4.8 scfm @ 90–120 psi. Maximum cutting of mild steel is 7/8 inch at 50% duty cycle for heavy duty production requirements.

Compared to the complexities of an oxy fuel cutting torch system, plasma cutting is easy:

- Cuts faster than oxy fuel
- More precise cut, thinner kerf, less slag to clean up
- Smaller heat-affected zone for less warping
- No gas pressure settings or flame tuning needed
- No preheating of metal prior to cutting

### Comes Complete with

- HP-70 hand-held torch with 16.5 ft. (5 m)
- Work clamp with 16.5 ft. (5 m) cable
- Extra consumables (2 electrodes, 2 tips and 1 air fitting)
- 10 ft. (3 m) industrial power cord with 6-50P plug

### Applications

- Maintenance
- Prototyping
- Light construction
- Body shops/fabrication

### FEATURES

### BENEFITS

<b>Wind Tunnel Technology™</b>	Prevents abrasive dust and particles from damaging internal components.
<b>Fan-On-Demand™</b>	Cooling system only operates when needed. In dirty or dusty environments, this feature reduces the amount of airborne dust/dirt pulled through the unit.
<b>Power Factor Correction (PFC) circuitry</b>	Draws up to 30% less amperage for the same cutting range as compared to the competition. PFC expands operators work area via extension cord, while minimizing nuisance circuit breaker trips caused by voltage drops.
<b>Enclosed gas/air filter/regulator</b>	Provides added protection during transportation. Standard air connection on back provides easy gas or air hookup.
<b>LVC™ line voltage compensation</b>	Provides peak performance power under variable input voltage conditions (±15%) for steady and cleaner ending cuts.
<b>Starts without high-frequency</b>	Will not interfere with or damage controls or computers.
<b>LED indicators</b>	Diagnostic lights for quick troubleshooting of pressure, power, and cup situations.
<b>Cable management strap</b>	Secures torch, work cable and power cord to make transporting easy and convenient.
<b>HP-70 torch</b>	The new HP-70 torch is designed for increased comfort, more efficient cooling and economical replacement cutting tips.
<b>Compatible with engine-driven welders</b>	Capable of cutting 3/8 to 5/8 in. mild steel when powered by an engine-driven welder with a 240 V generator power outlet of 8 kW or more.
<b>Hobart's 5/3/1 Warranty</b>	No other manufacturer offers a better warranty than Hobart does. Power source is warranted for <b>3 years</b> , parts and labor. Original rectifier parts have a <b>5-year</b> warranty and the HP torches have a <b>1-year</b> parts and labor warranty.

### SPECIFICATIONS (SUBJECT TO CHANGE WITHOUT NOTICE.)

**DC** **1** Phase

Rated Output	Max. Open-Circuit Voltage	Amps Input at Rated Output, 50/60 Hz, Single-Phase		Plasma Gas Flow/Pressure	Dimensions	Net Weight with torch	Ship Weight	
		208 V	230 V	KVA	KW			
40 A at 140 VDC, 50% Duty Cycle	400 VDC	33	30	6.8	6.6	4.8 CFM (136 L/min) at 90–120 PSI (621–827 kPa) recommended	H: 11-1/4 in. (286 mm) W: 8-1/4 in. (210 mm) D: 14-1/4 in. (362 mm)	31.4 lb. (14.2 kg) 35.8 lb. (16.2 kg)

 Certified to both the Canadian and U.S. Standards for welding and plasma cutting equipment.



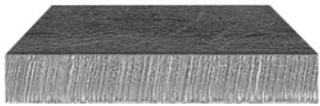
**Hobart Welders** An Illinois Tool Works Company

**Hobart Retail Sales** Phone 800-332-3281 FAX 937-332-4161  
**U.S. Distributor Sales** Phone 920-735-4576 FAX 800-637-2315  
**Canadian Sales** Phone 888-489-9353 FAX 519-421-0480  
**International Sales** Phone 920-735-4509 FAX 920-735-4125

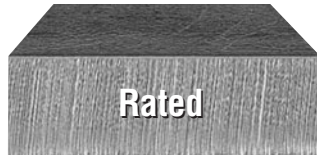
Web Site [HobartWelders.com](http://HobartWelders.com)



## MILD STEEL CUTTING CAPABILITY (Thickness to scale.)



1/4 in. (6.4 mm) at 52 IPM



5/8 in. (15.9 mm) at 9 IPM

Note: Recommended maximum piercing capacity for hand-held applications is 3/16 in. (4.8 mm).

Maximum Sever cut of 7/8 in. (22 mm).

For aluminum and other metals with high thermal conductivity, cutting capabilities will be derated as much as 30%.

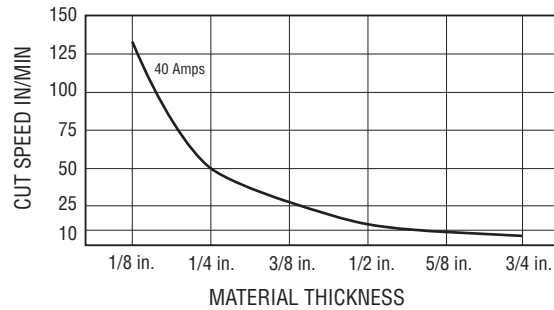
To determine the maximum rated cutting thickness of mild steel, follow the line from the 10 IPM (inches per minute) point on the cutting chart. The point at which this line intersects the cutting curve determines the maximum recommended production cutting thickness of the unit.

Note: The rating is based on 10 IPM because this is the minimum speed at which the operator achieves a smooth, steady cut when using a hand-held torch.

## Maximum Cutting Speeds at 40 Amps Output

Thickness	Approximate Travel Speeds*
1/8 in. (3.2 mm)	130 IPM (3292 mm/min)
1/4 in. (6.4 mm)	52 IPM (1321 mm/min)
3/8 in. (9.5 mm)	28 IPM (711 mm/min)
1/2 in. (12.7 mm)	14 IPM (345 mm/min)
5/8 in. (15.9 mm)	9 IPM (224 mm/min)
3/4 in. (19.1 mm)	6 IPM (163 mm/min)

\* Travel speeds are approximately 80% of maximum.



## ACCESSORIES



**HP-70 Replacement Torch**  
#244122 16.5 ft. (5 m)



**Full KVA Plug Kit**  
#119172  
240 VAC, 50 amp plug (NEMA 14-50P) to fit full KVA

receptacle with a minimum of 8 KVA generator power.



**In-Line Air Filter Kit**  
#228926

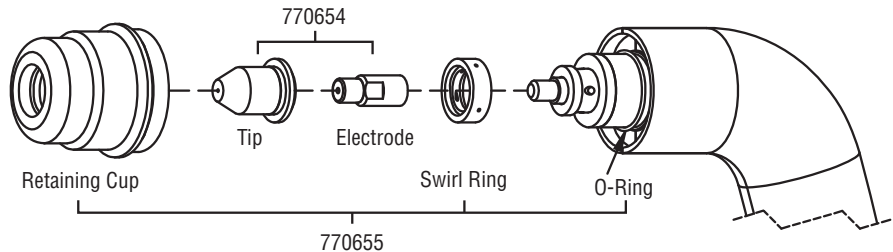
Mounts to the back of the AirForce™250ci, 500i and 700i. Includes male and female 1/4 inch NPT

quick disconnect fittings and hose for easy on/off connection. The replaceable filter element filters to .85 microns.

**In-Line Air Filter Replacement Element** #228928

Includes 1 replacement filter for in-line filter #228926.

## TORCH CONSUMABLES (Order from Hobart Service Parts.)



## ORDERING INFORMATION AND SYSTEM CHECKLIST

Power Source	Stock No.	Description	Qty.	Price
AirForce 700i	#500546	208/230 VAC, 50/60 Hz		
UPC: #715959413398; Shipping Weight: 35.8 lb. (16.2 kg); Carton Dimensions: 18-1/4 x 11-5/8 x 17 in. (464 x 295 x 432 mm); Pallet Qty: 12				
<b>Accessories</b>				
Replacement Torch	#244122	16.5 ft. (5 m) HP-70 hand-held torch		
Full KVA Plug Kit	#119172	Field		
In-Line Air Filter Kit	#228926			
In-Line Air Filter Replacement Element	#228928			
Torch Consumables		See above		

Date:

Total Quoted Price:

# HOBART

## WELDERS

## DISTRIBUTED BY: