

Arc Writer

A Dual Gas, Variable Output Power, Plasma Marking, Scoring and Punching System

■ SUPERIOR MARKING

- High speed marking or scoring on mild steel, stainless steel, aluminum and other metals up to 300 inches per minute (7.5 m/min).
- Creates punches or dimples for drill starts.
- Variable power output lets you control width and depth of mark, score or dimple.

■ OPTIMIZED DESIGN

- Optimized electrode design maximizes consumable life to reduce operating cost.
- Switch between light or heavy marking or scoring without changing consumable parts.
- Torch design allows fast, easy change of consumables.
- Contact start torch feature eliminates radio frequency noise problems.
- Pneumatic cap sensor provides operator safety.

■ FLEXIBLE OPERATION

- Dual-gas torch design allows for the separation of plasma and shield gases which maximizes process flexibility.
- CNC machine interface for automated system control of all functions, including active current control.
- Allows customized lead lengths up to 100' (30 m).
- Easily applied to any X-Y motion control system.
- Use as a stand-alone system or mount alongside plasma cutting tools on the same torch station.
- Divided arc voltage signals available for active-torch height control.

■ MAXIMUM RELIABILITY

- Heavy duty, chopper power supply provides 100% duty cycle.
- Backed by Hypertherm warranty: Two years on power supply. One year on torch.

■ OUTPERFORMS POWDER AND INK MARKING DEVICES

- Ability to mark on wet or oily plate.
- No powder clogging problems, works in humid environments.

The ArcWriter is a dual gas, variable output power, plasma marking, scoring and punching system designed to leave temporary or permanent identification marks on metal surfaces. The system includes a power supply, torch and lead set, optional power supply mounted current control and optional arc voltage control module.





Light Scoring and Marking



Heavy Scoring and Marking



Punch Mark or Dimple

ArcWriter Standard System Components

- Dual-gas mechanized marking torch
- Power supply
- Leads
- Arc voltage control board (optional)
- Current control panel (optional)
- Mounting and stand-off accessories (optional)

Performance Data

■ Light Marking

Will be clearly visible on the surface of the freshly marked plate. There will be from very little to no depth to the mark, allowing it to be covered or removed by secondary operations when desired.

Width 0.020-0.040 inches (0.5-1.0 mm)
 Depth Less than 0.001 inch (0.03 mm)
 Travel Speed 100-300 inches per minute (3-7m/min)

■ Heavy Marking and Scoring

Will be clearly visible on the surface of the freshly scored plate. Dimensional characteristics of the score are controlled by adjusting current, gas type and marking speed. Will have very little to no cross along-side the intended mark.

Width 0.020-0.040 inches (0.5-1.0 mm)
 Depth 0.003-0.010 inches (0.08-0.25 mm)
 Travel Speed 100-300 inches per minute (3-7m/min)

■ Punch Mark or Dimple

Will be round with dimensional characteristics controlled by adjusting current, gas type and dwell time.

Diameter 0.040-0.060 inches (1.0-1.5 mm)
 Depth 0.020-0.040 inches (0.5-1.0 mm)
 Dwell Time 300-1000 msec,
 typically less than 1 second

Specifications

Power Supply	
Electrical	
Rated OCV	235 VDC at rated input voltage
Output Current	4-19 amps, adjustable in 1-amp increments
Output Voltage	120 VDC
Duty Cycle at 40° C	100% (19 amps, 120 VDC)
Input Voltage	200 V, 3PH, 50-60 Hz 208 V, 3PH, 60 Hz 240 V, 3PH, 60 Hz 400 V, 3PH, 50-60 Hz 440 V, 3PH, 60 Hz 480 V, 3PH, 60 Hz 600 V, 3PH, 50-60 Hz
Dimensions and Weight	
Depth	28.2 inches (716 mm)
Width	12.6 inches (321 mm)
Height	18.7 inches (475 mm)
Weight	100 pounds (55 kg)
Gas Requirements	
Plasma Gas	Air or H5 (Premixed industrial grade gas containing 5% Hydrogen and 95% Argon)
Shield Gas	Air
Gas Quality	
Air	Clean, dry and oil-free
H5	5% Hydrogen, 95% Argon premixed
Flow Rates and Pressures	
Plasma Gas	60 scfh (28 l/min) @ 100 psi (6.9 bar) supplied to power supply pressure regulator
Shield Gas	300 scfh (141 l/min) @ 100 psi (6.9 bar) supplied to power supply pressure regulator
Plasma Torch	
Type	Dual Gas, Mechanized
Gas	Plasma and Shield (refer to gas requirements)
Starting Method	Contact start
Cap Sensor	Pneumatic
Dimensions and Weight	
Diameter	1.5 inches (38.1 mm)
Length	11 inches (280 mm)
Weight	1.5 pounds (0.8 kg)

For additional information, call:
TOLL-FREE IN THE USA & CANADA: 1-800-643-0030

HYPERTHERM®

The World Leader in Plasma Cutting Technology™

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