

CUT-100HD/130HD



Quick Specs



Industrial Application:

Home workshops
Metal workshops
Light fabrication
Repair and maintenance

For These materials:

Mild Steel
Brass
Stainless Steel
Copper
Aluminum

Processes: Plasma cutting

Input Power: 400V, 3-Phase

Amperage Range:

100HD: 30-100A/130HD: 30-130A

Rated Output at 40°C (104°F):

100HD: 100A@100% Duty Cycle

130HD: 130A@100% Duty Cycle

Weight: 45KG

The heavy duty plasma cutting power source

The **CUT-100HD** plasma is the largest air cooled manual system in the range. Selected with built-in CNC port it is a perfect plasma cutting power source for CNC cutting system.

The heavy duty inverter system with a duty cycle of 100% in a 40°C ambient with 100AMP output, is specifically designed for a high level applications requiring superior endurance and cutting performance,

HF or Non-HF pilot arc start system can be easily switched.

Specialist Features

- **Pilot Arc for superior arc performance and easy start.**
- **HF or Non-HF Arc ignition:** reliable plasma arc initiation without high frequency.
- **Continuous Output Control:** focus the arc for different material thickness.
- **Rapid Arc Restrike:** fast cutting through gaps, even expanded metal.
- **Powerful with heavy duty: 100A@100%, 130A@100%.**
- Recommended 20mm quality cut capacity (0.5 m/min, with optional torch).
- **2T(STD)/4T(HOLD) control mode**
- **Generator power supply friendly.**



Outstanding Quality:

- Newly designed using the latest power electronic technology for improved reliability.
- CE Certified.
- One-Year Warranty on parts.

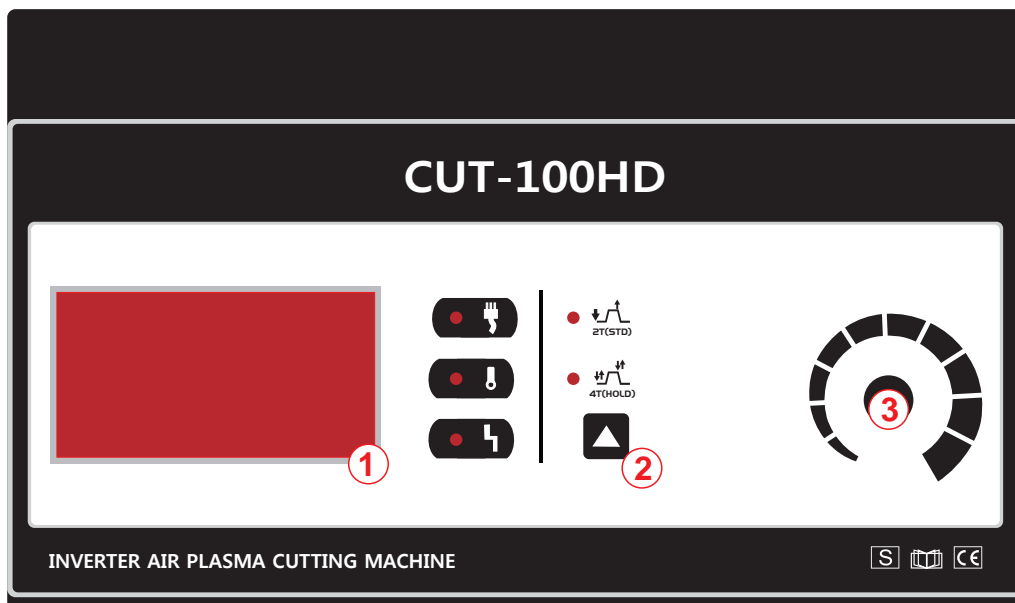


Technical specifications

Item No	CUT-100HD	CUT-130HD
Rated Input Voltage	3PH ~ 400V ±15%	3PH ~ 400V ±15%
Max. Load Power Capacity	20.5KVA	30.6KVA
Rated Output Current	30-100A	30-130A
Rated Output Voltage	140V	160V
Rated Open-circuit Voltage	350V	350V
Rated Duty Cycle (40°C, 105°F)	100% @100A	100% 130A
Power Factor	0.8	0.8
Efficiency	85%	85%
Required Air Pressure	0.4~0.6MPa	0.4~0.6MPa
Quality Cutting Capacity (Hand-held)	20mm	30mm
Max Cutting Capacity (Hand-held)	50mm	60mm
Pierce Capacity (with mechanical THC)	25mm	30mm
Dimension (LxWxH)	680X310X650mm	680X310X650mm
Weight (KG)	45KG	45KG

*Pierce rating for handheld use or with automatic torch height control

General View of Control Panel



Control Panel Parameter Values

1.Ammeter/Voltmeter Display

2.Mode 2T(STD)
4T(HOLD)

3.Encoder Control

Steel Cutting Capability (Thickness to scale.)

CUT-100HD

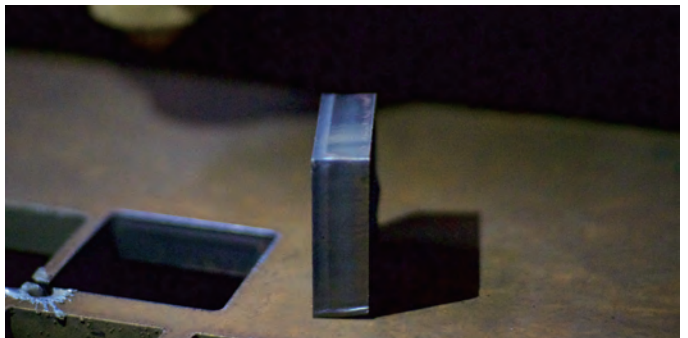
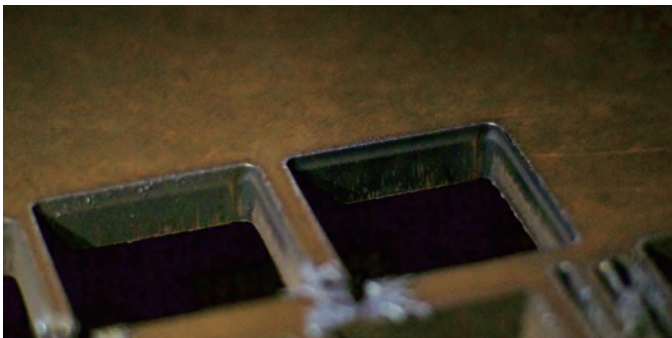
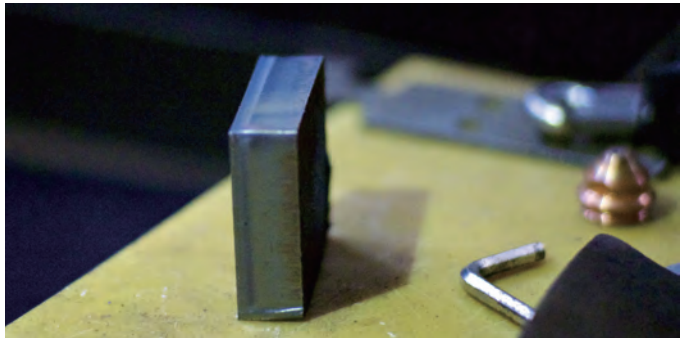
Capacity	Thickness
	Cutting
Quality Cutting Capacity (Hand-held)	20mm
Max Cutting Capacity (Hand-held)	50mm
Pierce Capacity (with mechanical THC)	18mm

*Pierce rating for handheld use or with automatic torch height control

CUT-130HD

Capacity	Thickness
	Cutting
Quality Cutting Capacity (Hand-held)	30mm
Max Cutting Capacity (Hand-held)	60mm
Pierce Capacity (with mechanical THC)	22mm

*Pierce rating for handheld use or with automatic torch height control



Video: <https://youtu.be/79WB9SiYzUY>

Maximum productivity

- Finish jobs faster with cut speeds three times greater than oxyfuel on 12 mm mild steel.
- Spend less time on grinding and edge preparation due to superior cut quality.

Easy-to-use with versatile design

- Powerful design provides exceptional portability for a 30mm rated cutting system.
- HF type or Non-HF type available:
Starts without high-frequency so it will not interfere with or damage controls or computers.
- Pilot Arc makes it easy to use – even for first time operators.

Low operating costs

- Reduce costs with long consumable life and more uptime

Rugged and reliable

- TOPWELL Certified reliability ensures performance in the most demanding environment.
- Powercool design cools internal components more effectively for long system life and improved uptime.



Accessories

For Standard accessories



PLASMA torch: STM-120
Current : 40-120 Amps
Duty Cycle: 120 Amps 60%
Gas: Air/N2
Gas Pressure: 72-87 PSI (5.0-6.0 bar)
Gas Flow: 630 SCFH (295 lpm)
Pilot : Electrode to Tip (18-22A)
Ignition: Without HF
Cooling: gas cooling



PLASMA torch: FineCUT-160A
Current: 50-160A
Duty Cycle: 160A @100%
Gas: Air/N2
Gas Pressure: 4.5-5.0 bar
Gas Flow: 300L/min
Max Pierce: 25mm
Ignition: HF
Cooling: Water-cooling



Water Cooling Unit: WC-200
Operating Voltage: 230V 50/60Hz
Rated Power: 260W
Cooling Power: 1.5KW (1L/MIN)
Maximum Pressure: 0.3MPA/60Hz
Recommended Cooling Liquid: 20%-40% ethanol/water
Tank Volume: 6.5L

PLASMA torch: STM-120



Shield Cup
Body

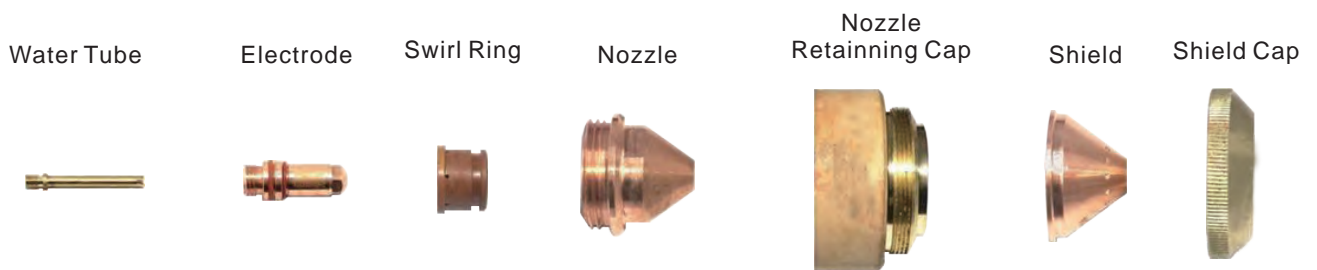
Shield Cap

Nozzle

Electrode

Swirl Ring

PLASMA torch: Fine-160A



Water Tube

Electrode

Swirl Ring

Nozzle

Nozzle
Retaining Cap

Shield

Shield Cap



1. Main Cable (Water-inlet) M16*1.5
2. Water-outlet Hose M10*1
3. Cutting Air-inlet Hose M14*1.5
4. Pilot Arc Cable