

ISO 9001 Registered

CAT. NO. KF29807A



# SUPER PLASMA D-12000

Transistor Controlled  
Super Plasma Cutting  
Machine



DAIHEN Corporation



# SUPER PLASMA D-12000

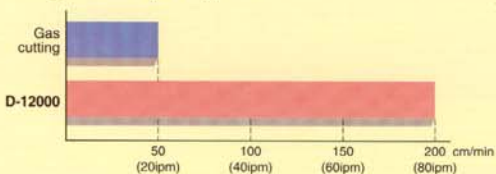
*High Per*

- High Power and 100% Duty Cycle for Precision High Speed Cutting
- Max Cutting Capacity 60mm (2.4in)

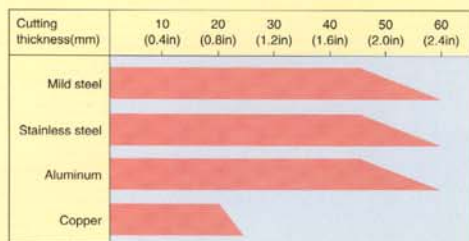
Compared with gas cutting, the D-12000 can cut 16mm (0.64in) plate 4 times faster. It will also cut 25mm (1in) plate to give a high quality precise finish.

## ◆ High Speed Cutting

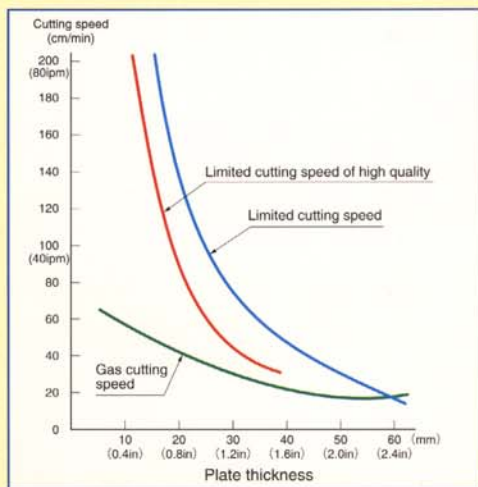
Comparison of Cutting Speed of D-12000 and gas cutting on 16mm (0.64in) plate



## ◆ Max Cutting Capacity is up to 60mm(2.4in)



## LIMITED CUTTING SPEED



## ◆ Surface finish resembles that produced by gas cutting



Right angle cut on 25mm (1in) plate

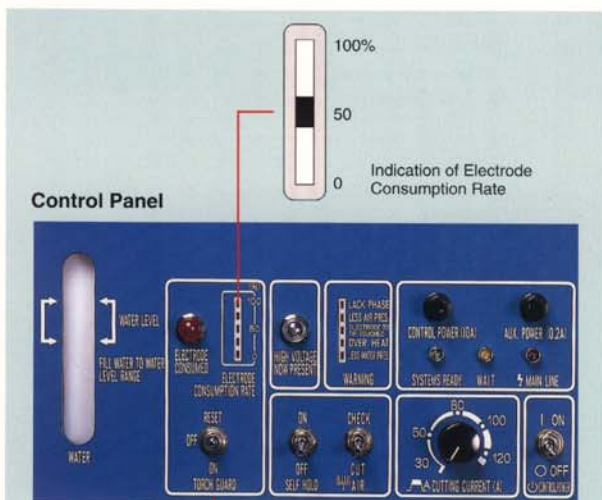


Angle cutting

## ◆ High Speed/Low Cost Cutting

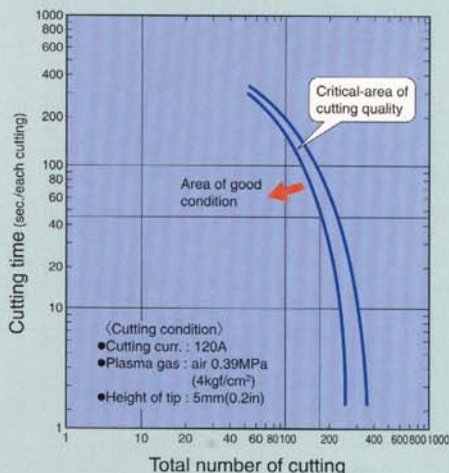
Reduce operating expenses significantly by capitalizing on high cutting speeds and long consumable parts life.

# Performance At Low Cost!!



## Built in "TORCH GUARD" function monitors tip & electrode consumption.

- (1) When consumption of electrode and tip reaches 95%, indicator lamp display changes to flashing display.
- (2) The consumption rate of tips and electrodes are displayed by integrating cutting time and numbers of arc starts. (not detect current value)
- (3) Machine will automatically shut down in the "area of good condition" of the drawing.



## ● 100m (330ft) of plate can be cut with only one Electrode and Tip.

Durability of the newly designed Electrode has greatly increased, resulting in less frequent replacement.

## The Torch gives a high efficiency cutting and a wide operation range.

### ● Operating Area Increased 9 Times

Optional 30m (100ft.) cable length gives an operating area 9 times that of a conventional plasma cutting machine.

Our newly developed High Frequency Generator makes "First-Time-Starting" possible even at this long cable length.

### ● The new cooling system design allows parts change without the possibility of fluid leakage.

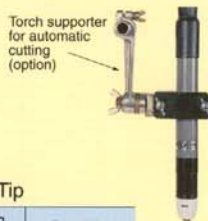
#### Short Handle Torch CTW (M) (L)-1201



#### Long Handle Torch CTZW (M) (L)-1201



#### Straight type Torch for automatic applications CTPW(M) (L)-1201



#### Selection of Cutting Tip

Plate thickness (mm)	Cutting current(A)	Parts No.
~3.2 (0.13in)	30	*H839K03
~9.0 (0.36in)	50	*H839K02
~12 (0.48in)	80	*H839K01
~60 (2.4in)	120	H839G03

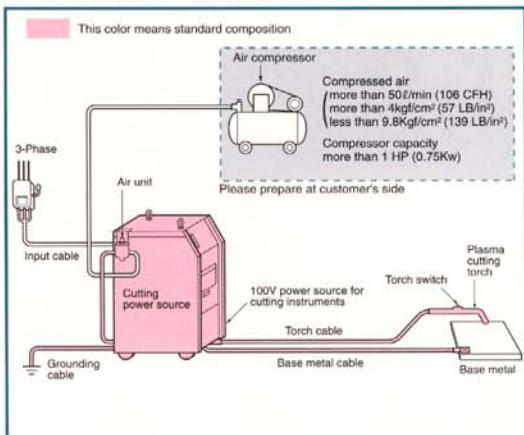
\* shows option

## User-friendly Design

1. Abnormal function detector
2. Double safety function indicated by buzzer
3. With new cooling system, there is no fluid leakage
4. AC 100V power source for automatic cutting instruments
5. "SELF HOLD" function



## CONNECTION DIAGRAM



## SPECIFICATIONS

Model		Super Plasma D-12000	
● Cutting power source	Model	TRC-121	
Input voltage	V	Indicate input voltage when ordering	
Rated frequency	Hz	50 / 60	
Phase	—	3-phase	
Rated input	KVA	28.3 (27.5KW)	
Rated output current	A	120	
Rated output voltage	V	200	
Output current range	A	30~120	
Rated duty cycle	%	100	
Dimensions(W×D×H)	mm	450×780×775 (18×31.2×31in)	
Mass	kg	176	
● Cutting torch	Model	CTW(M) (L)-1201 CTZW(M) (L)-1201	CTPW (M) (L)-1201
Rated current	A	120	
Rated duty cycle	%	100	
Cooling system	—	Water-cooled	
Cable length	m	10 *1(20) *1(30)	
Using gas	—	Compressed air	
Shape of cutting torch	—	Short handle type Long handle type	Straight type

\*1 Option

## STANDARD ACCESSORIES

### For cutting power source

Description	Qty
Air unit	1
Hose band	1
Pilot lamp	1
Base metal cable 1.5m (5ft)	1
Glass enclosed fuse 10A	1
Glass enclosed fuse 0.2A	1
Bolt for input cable M6	3
Bolt for output terminal M8-20	1
Grounding cable 2m (6.6ft)	1
Cartridge fuse C-3	2

### For cutting torch

Description	Qty
Shield cup H839G02	1
Tip H839G03	4
Electrode H839M00	4
Wrench H758H01	1
*1 Torch guide H775G00	1

\*1 Standard accessory for CTZW(M) · L-1201 long handle torch

In accordance with DAIHEN's policy to make continuing improvements, design and/or specifications are subject to change without notice and without any obligation on the part of manufacturer.

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## OPTIONAL ACCESSORIES

### ① Super Coolant

Super Coolant is special mixed with nonfreezing liquid and pure water. It will prevent from scale and freezing.

Use	Parts No.	Capacity
General use (-10°C ~ +90°C)	2670-033	10ℓ
Cold Area (-30°C ~ +90°C)	2670-034	10ℓ



### ② Tip for thin plate and average thick plate

Description	Part No.	Remarks
Tip (30A)	H839K03	Use less than 30A of cutting current
Tip (50A)	H839K02	Use less than 50A of cutting current
Tip (80A)	H839K01	Use less than 80A of cutting current

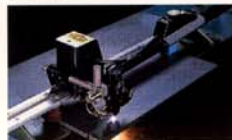
### ③ Automatic Cutting Instruments



Linear cutting attachment  
CRC-301



Circle cutting attachment 100M  
CRC-304



Automatic cutting guide  
CRC-305



Full automatic carriage  
CRC-401

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