

PLA-CUT 系列經濟型電漿切割機

PLA-CUT Series Economical PLASMA Cutting Machine

Digital Controlled
數位式控制

高效率
High Efficiency

高速度
High Speed

高使用率
Heavy Duty Cycle

雙火咀
Double Tip

截波式電源機
Chopper Power Supply

適用於自動化切割
Designed for CNC/
Robot Cutting Application



30年以上之豐富電漿切割經驗，提供穩定性高、切割品質佳、價格合理的電漿切割產品！



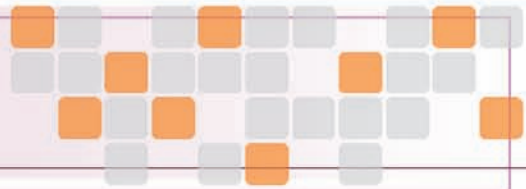
台灣電漿股份有限公司
TAIWAN PLASMA CORP.

<http://www.plasma.com.tw>



數位式電漿切割機

Digital Plasma Cutting Machine



電漿切割機較火焰切割機的優點：

- 高速的生產效率：快速的切割速度，不需預熱即可立即切割導電金屬。
- 良好的切割品質：電漿切割完成後之成品，可大幅減少或避免二次加工之工序。
- 簡易的操作程序：接上電源與氣源後，即可執行切割作業，降低技術依賴度。
- 安全的操作環境：不需使用危險氣體，僅需壓縮空氣即可替代高可燃性/助燃性氣體執行切割動作。

特點

- 針對CNC和自動切割使用，提供標準連接介面及100%的高使用率。
- 較快的切割速度：如100Amp切割9mm之碳鋼板，速度可達2000mm/分鐘。
- 雙重火咀切割：對於厚板可以直接切割，而不傷及內火咀，故可延長零件之使用壽命。
- 較省電：IGBT高頻作業，較傳統式電源機省電40%以上，並且噪音較低。
- 可依工件需要，選擇較佳的切割方式。在薄板切割時使用單一火咀切割可以得到較小的割縫；在厚板切割時使用雙重火咀可得到品質較佳的切割工件。
- 完整的保護功能：電源機本身有完整的保護功能，包括氣體異常，溫度異常，輸入電壓異常，輸出過電流異常，電極短路，引弧失敗等異常顯示保護裝置。
- 較容易切割：對於不熟悉的操作者，亦可得到良好的切割品質。(手動切割)
- 較安全的切割：輔助火咀本身無電位，在接觸切割時較為安全。(手動切割)

PLASMA Benefit VS Flame Cutting:

Much Higher Productivity: 3~5 times higher cutting speed, no pre-heat is required to cut conductive material. Piercing can be done in 1 second. (Piercing capacity depends on the plasma power supply unit.)

Wider Material flexibility: PLASMA is able to cut most all of the conductive material.

Better Cutting Quality: reduce or even eliminate second process after plasma cutting.

Safer environment: can only apply compressed air for plasma cutting. No dangerous gas is involved.

Benefits

- Design for CNC and AUTO cutting, with build-in standard CNC interface available and 100% duty cycle.
- Higher cutting speed: Compare to the conventional type, dual power tips design can increase the cutting speed. Ex: 100A cut 9mm mild steel @ 2000mm/min.
- Less consumable: While cutting thick plates, the inner tip is completely protected, and its usage life is also greatly improved.
- The machine is operated with 40% of power saving and less noise compare to conventional type.
- Special double tip design: thin plate can be cut with single tip for narrow kerf, and thick plate can be cut with dual tips for better cutting quality.
- The machine is covered under a complete protection, which includes the trouble detection of gas under pressure, over temperature, input power, output current, short-circuit of electrode and ignition fail.
- Operation easier: No stand-off cutting is required, which makes the cutting easier. (manual cutting)
- Operation safer: there is no potential on the assistance tip during cutting process, which makes a safer operation. (manual cutting)

規格表 Specification

	PLA-CUT 50	PLA-CUT 80	PLA-CUT 100
入力電壓 Input Voltage	220Vac, 3Phase, 50/60Hz //	380Vac, 3Phase, 50/60Hz //	415Vac, 3Phase, 50/60Hz
出力電流 Output Current	30~50A	30~80A	30~100A
定格入力 Input Power	10KVA	16.5KVA	18KVA
電源機型式 Power Structure	變頻式 Inverter		截波式 Chopper
開路電壓 O.C.V.	310~340Vdc		
切割槍型式 Cutting Torch Cooling	空冷 Forced Air		
切割氣體 Plasma Gas	乾淨、乾燥、無油氣之壓縮空氣 Clean, Dry and Oil-free Compressed-air		
建議之氣體供應量與壓力 Gas Requirement	200公升/分鐘 200L/min @ 5.5 Bar		
暫載率 Duty Cycle (@40°C)	100%		
引導電弧功能 Pilot Arc	有 with		
尺寸 Size	490 * 270 * 375 mm	506*383*755 mm	506*383*755 mm
重量 Weight (Kg)	50 kg	53 kg	124 kg
最大切割厚度(碳鋼) Severance Cut (MS)	20 mm	40 mm	50 mm
建議切割厚度(碳鋼) Recommend Cut (MS)	10 mm	20 mm	25 mm

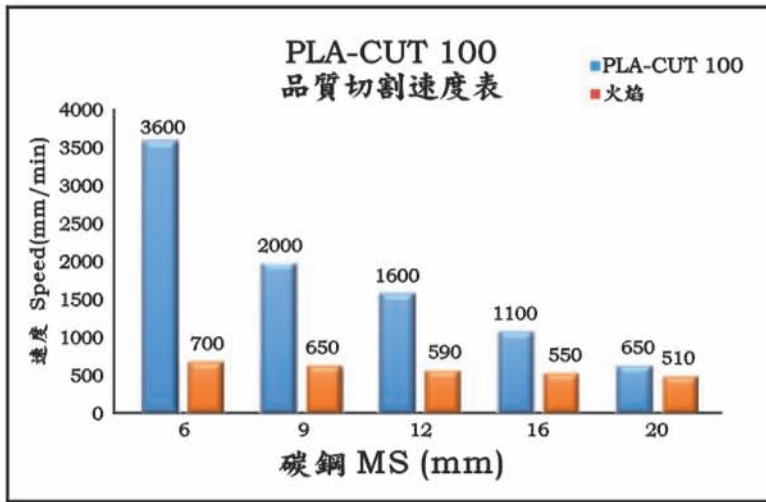
Remark:

1. 使用率數值建立在環境溫度40°C且通風良好之情況下。Duty cycle value is based on the ambient temperature less than 40°C at full power loading.
2. 本公司持續研發精進產品品質與性能，對本型錄之資料保留不進行通知之修改權力。
Our products are manufactured according to least technology, we reserve all right for products improvement.
3. 其他電源電壓可接受訂製生產。Different input voltage can be supplied on request.

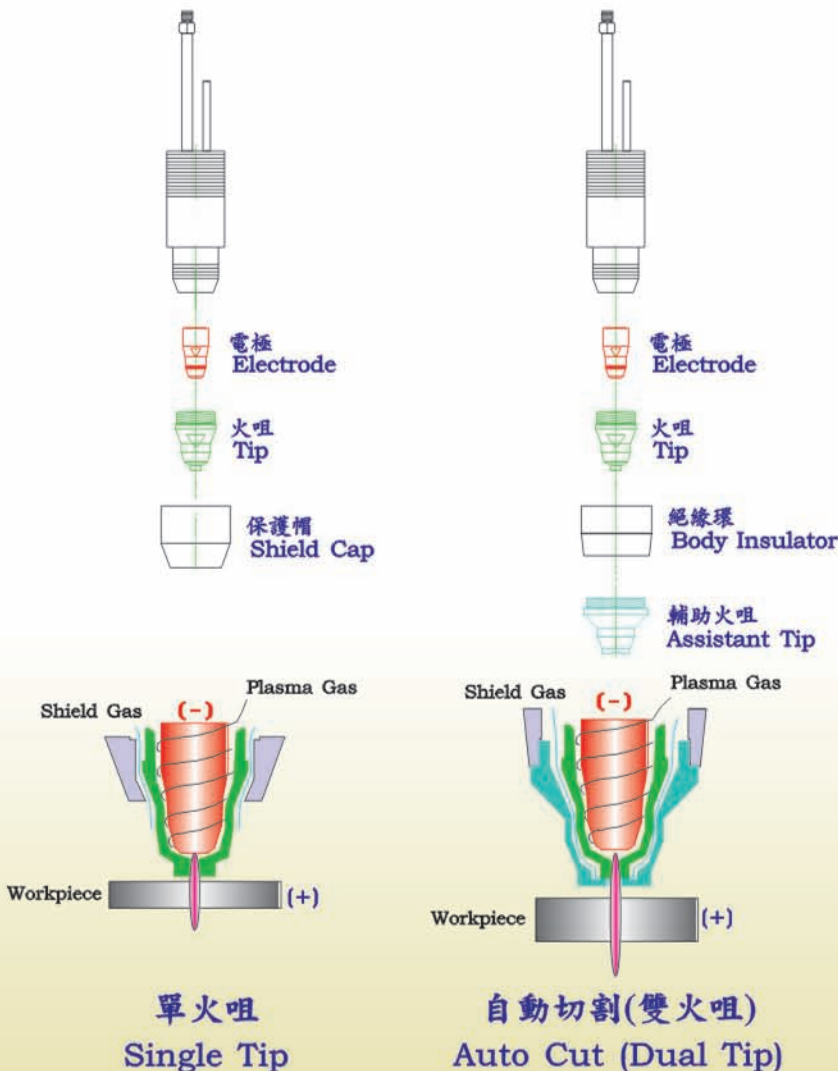
切割應用

Cutting Application

切割速度表 Cutting Speed



1HD 切割槍 Torch



切割數據 Cutting Chart

材料: 碳鋼
Material: Mild Steel

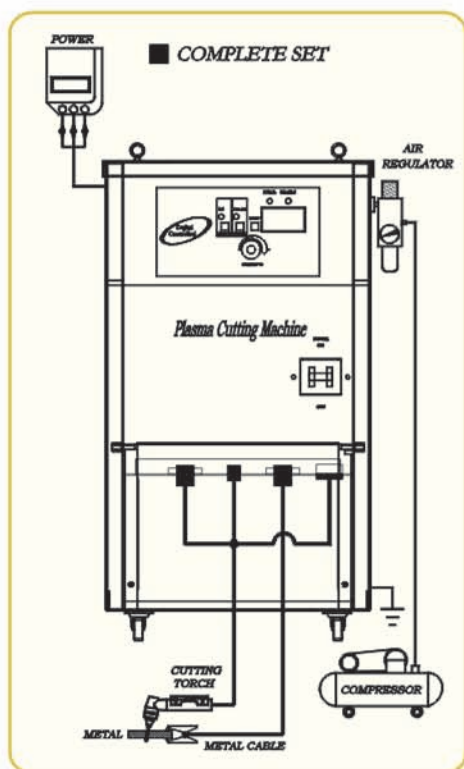
氣體 Gas	電流 Current (Amps)	厚度 Thickness (mm)	建議切割速度 Rec. cutting speed (mm/min)	最大切割速度 Max cutting speed (mm/min)	
切割氣體 Plasma Gas: 空氣 Air	40	0.5	13000	15000	
		1	9000	1100	
		1.5	7500	9000	
		2	5000	6000	
		3	2650	3500	
		4.5	1700	2200	
		6	1200	1500	
		60	2	9000	11000
			3	5200	6000
			4.5	3300	4000
			6	2150	2700
			9	1100	1400
	12		700	900	
	80	3	4800	5400	
		6	2600	3600	
		9	1500	1900	
		12	1050	1400	
		16	650	820	
		20	450	550	
	100	6	3600	4500	
		9	2000	2400	
		12	1600	1900	
		16	1100	1250	
		20	650	850	
25		450	600		
30		300	420		
40		120~150	N/A		
50		50~70	N/A		

備註: 此參考切割數據為品質切割之建議速度, 客戶可以實際需求設定更高的切割速度。

數位式電漿切割機

Digital Plasma Cutting Machine

整套配件 Complete set

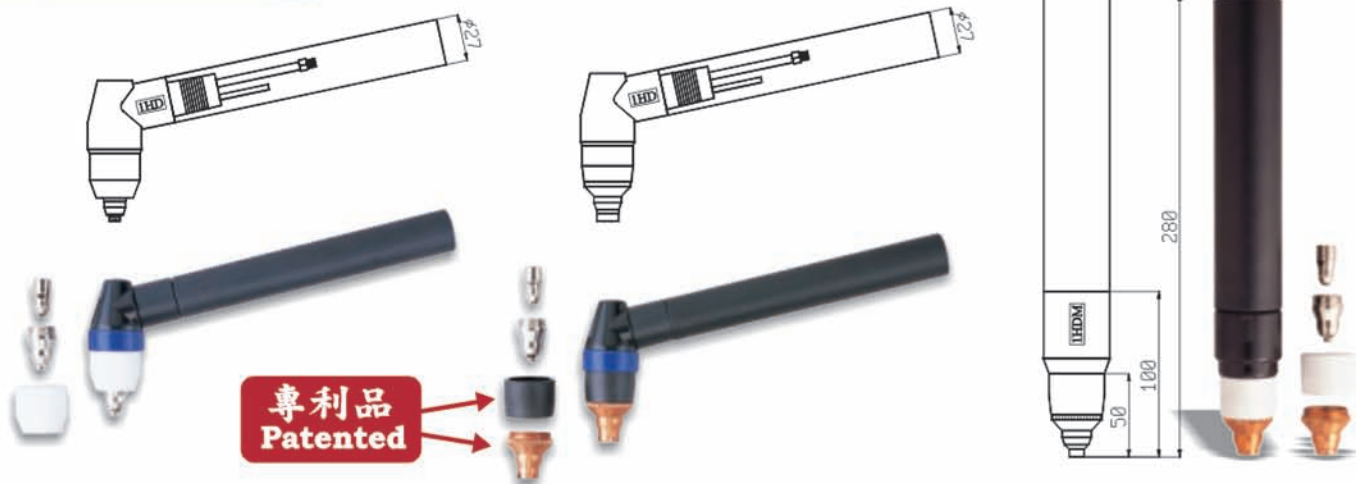


整套 Complete Set

標準配備表 Standard Attachment

品名 Description	數量 Qty
切割槍 Cutting Torch 8m	1 Set
母材線含夾 Metal Cable with Clamp	3 M
空氣調節器 Air Regulator	1 Pc
電極 Electrode	5 pcs
火咀 Tip	5 Pcs
保護帽 Shielding Cap	1 Pc

切割槍 Torch



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