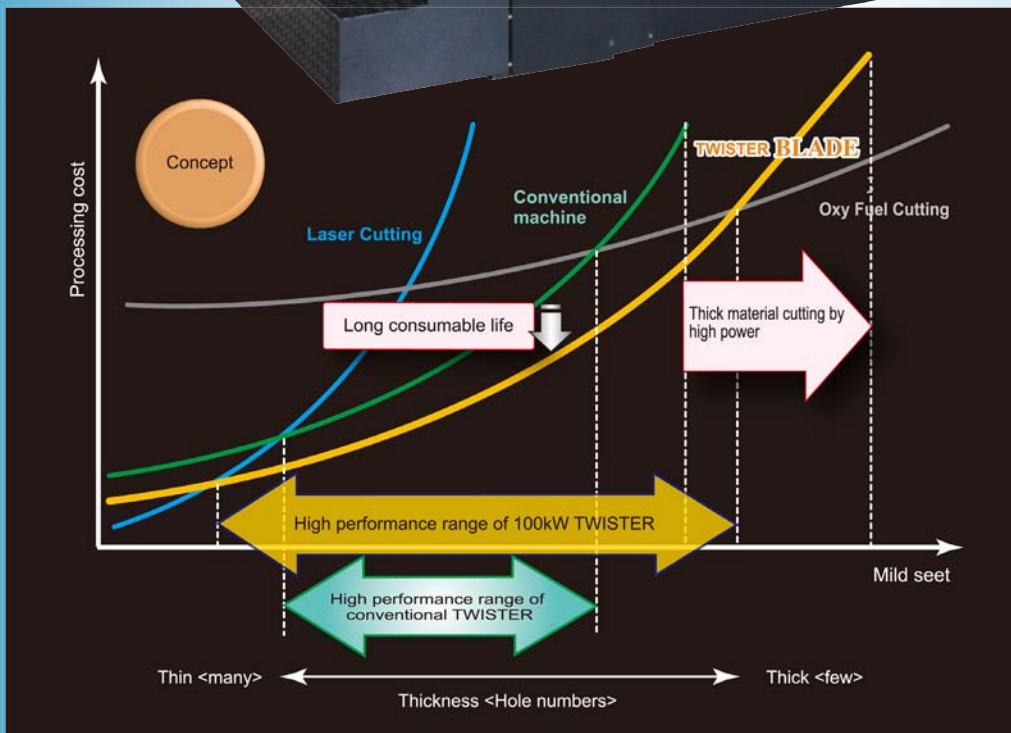


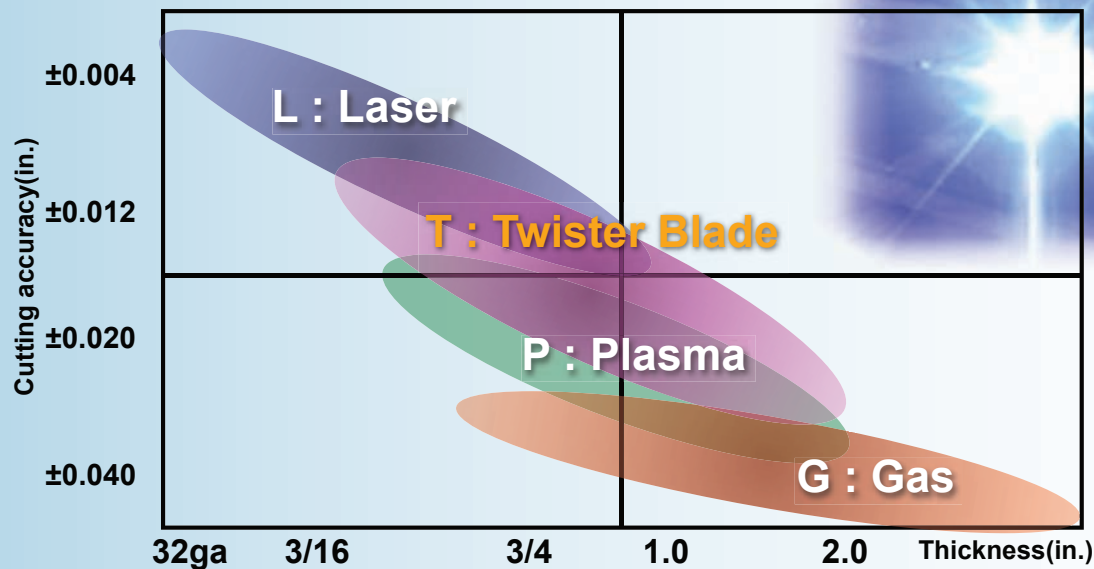
# TFPL TWISTER BLADE SERIES



**TWISTER**

**KOMATSU**  
TOMORROW'S TECHNOLOGY TODAY

# TWISTER BLADE SERIES



The high quality cutting machine "Twister Blade" Features lower cost and higher performance and high productivity far exceeding laser.

Compared to laser cutting, the Twister Blade achieves overwhelmingly superior productivity and major cost advantages when cutting steel plate from 0.25in.-2.00in.

Mild Steel 2.0in. 31.5in./min



# Samples



Twister Cutting  
Material: Mild Steel  
Thickness: 2.0in.



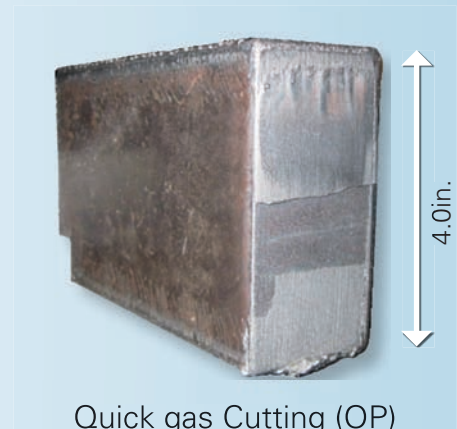
Twister Cutting  
Material: Mild Steel  
Thickness: 1.25in.



Twister Cutting  
Material: Mild Steel  
Thickness: 1.0in.



Twister Cutting  
Material: Mild Steel  
Thickness: 0.875in.



Quick gas Cutting (OP)  
Material: Mild Steel  
Thickness: 4.0in.

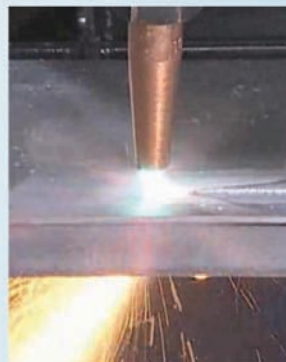
## Standard Equipment



Stainless Steel 0.500in.

- Stainless Quick Silver

## Optional Equipment



Cutting surface

- Quick Gas Torch

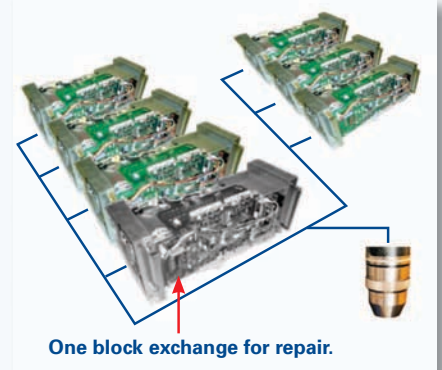
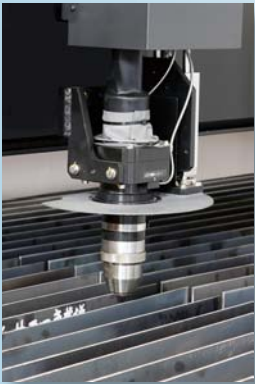


# TWISTER BLADE SERIES

## New development 100kW TWISTER TORCH & POWER UNIT.

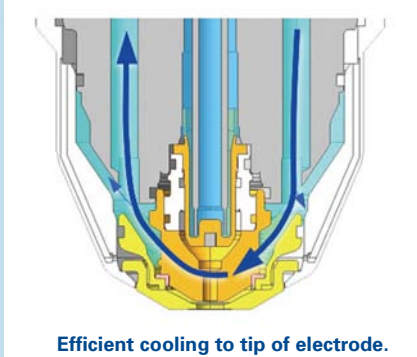
The world's largest class 525A power unit achieves 2 inches thickness mild steel cutting.

- Dual-cooling system (Patent pending) cools nozzle and electrode individually. Thus, the life of consumable parts become 3 times longer than conventional machine.
- Modular power (US Patent No.8723072) supply unit increase s reliability. Even one power block module failed the remaining could output 450A. No down time.

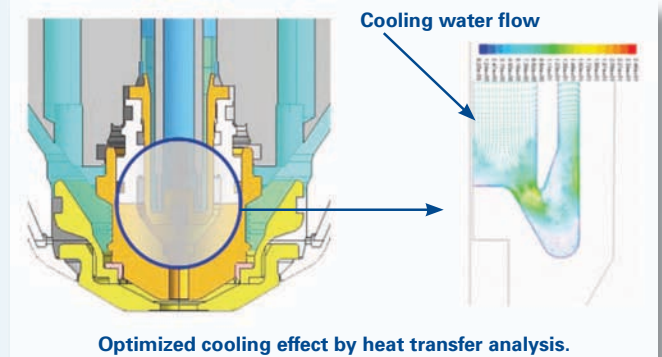


## New nozzle and electrode design capable of 525A (100kW).

- Rise of nozzle temperature decreased by 50% of conventional model at 500A.
- Improvement of coolant flow rate and velocity. (2.5 times higher than conventional model)



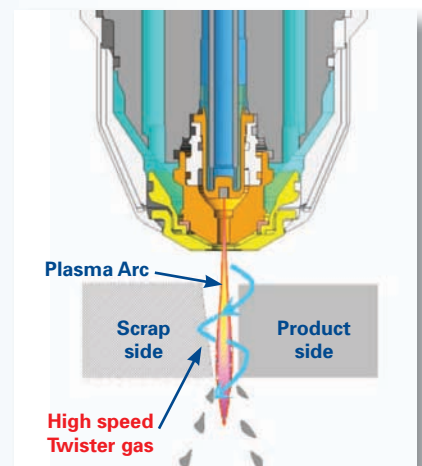
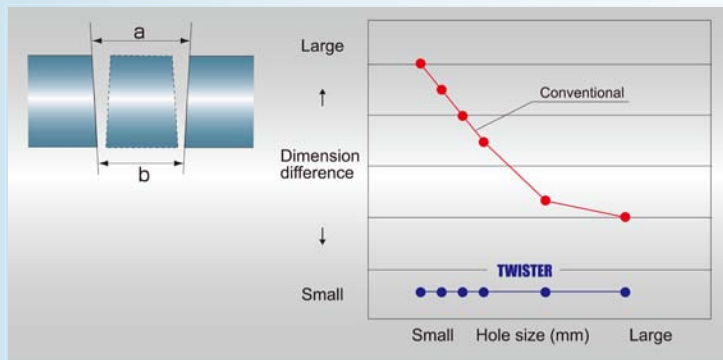
Efficient cooling to tip of electrode.



Optimized cooling effect by heat transfer analysis.

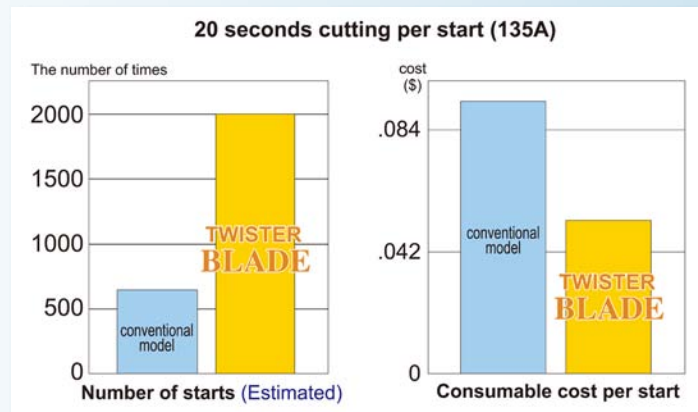
## Disparity between upper and lower hole size reduce thanks to "Twister" gas flow control.

- The Twister gas control system ensures optimum gas flow based on configuration. This has reduced the disparity between upper and lower hole size. (US Patent No.6222154)



## Consumable life is greatly improved.

Long consumable life of the world highest level.

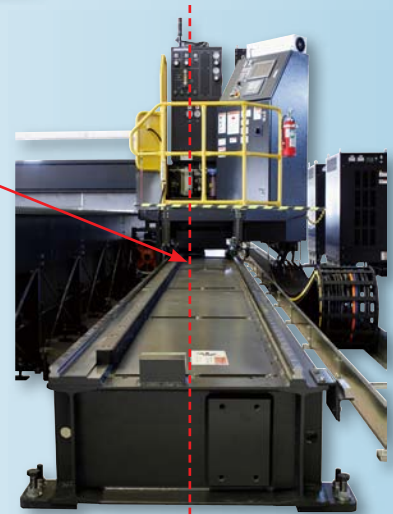


## Improved cutting accuracy and quality

- Most suitable balance of Y-carriage can be realized. It is possible to make high quality and accuracy cutting.

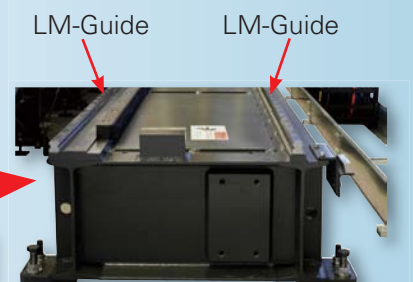
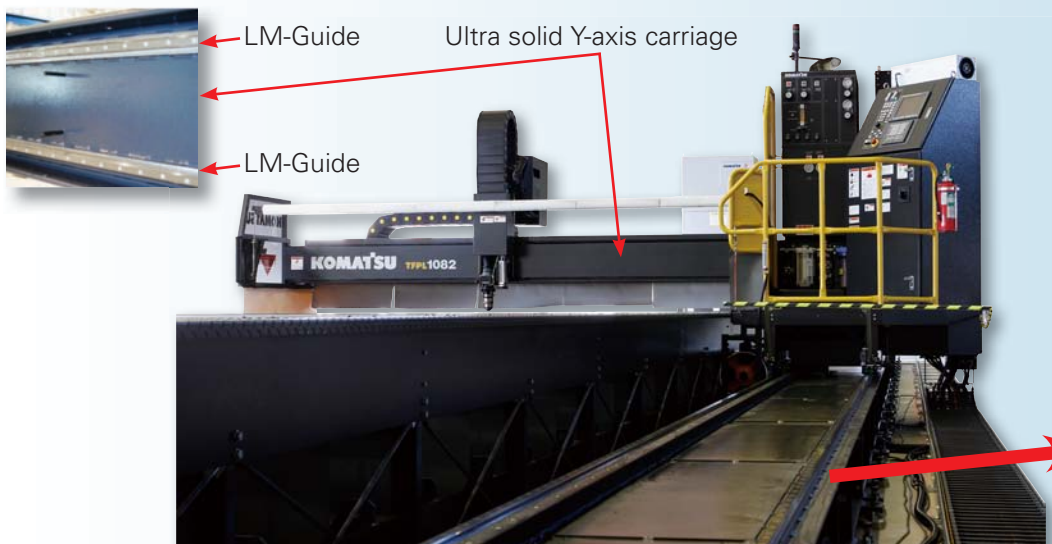


The Center of gravity be set on the X-axis Rack and Pinion



## Improved cutting accuracy and quality

Adoption Ultra solid Linear Guide and Carriage. It is possible to maintain high accuracy cutting.





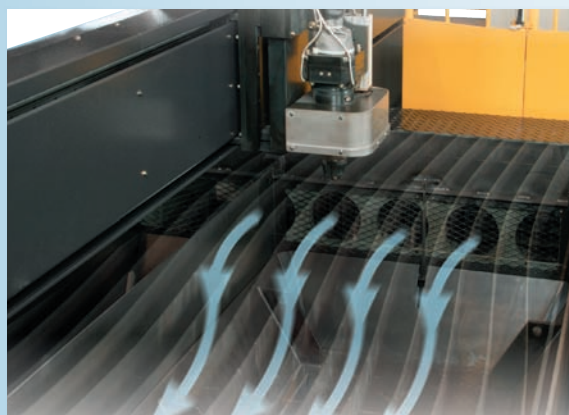
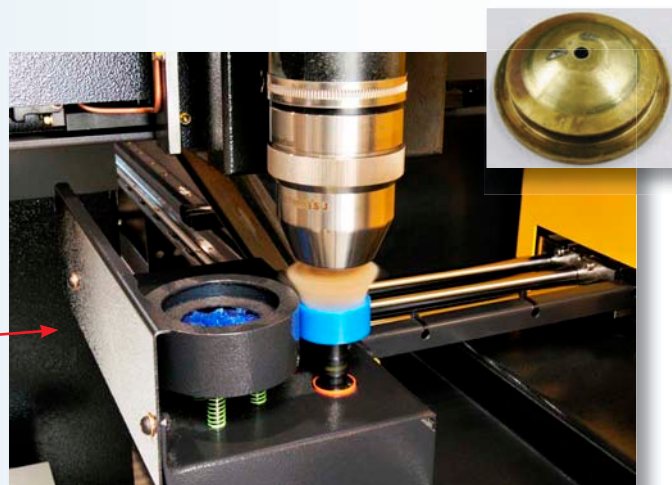
# TWISTER BLADE SERIES



## Automatic cleaning during cutting



Auto torch cleaner on board. Cleans the spatter and dust automatically.



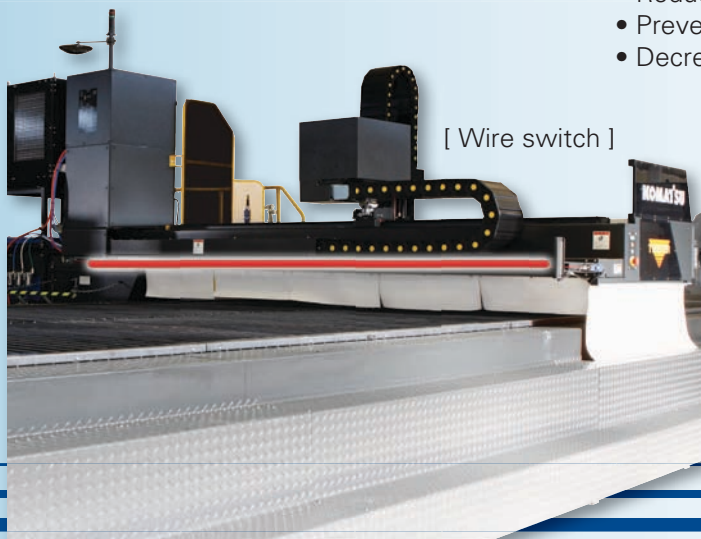
## Clean working environment (Zoned push pull system)

- Up flow of smoke has reduced by a push-pull dust collecting system and changeover dust collecting area.

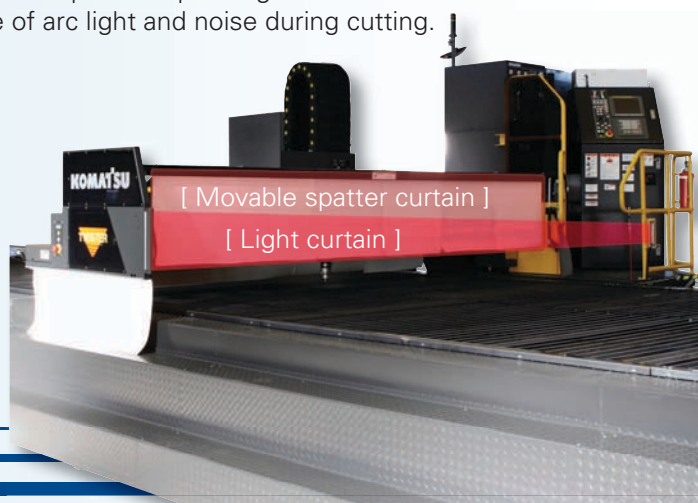
## Clean and safe working environment

Twister Blade achieves safe working environment without loss of operation efficiency.

- Reduce traverse speed.
- Prevention of spatter at piercing.
- Decrease of arc light and noise during cutting.



[ Wire switch ]



[ Movable spatter curtain ]

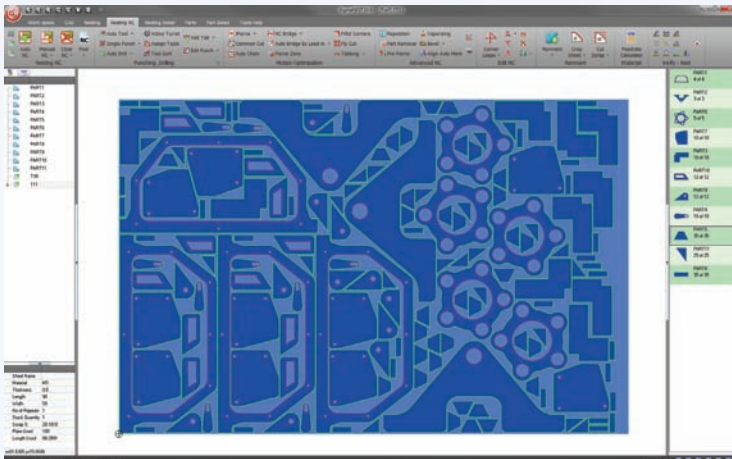
[ Light curtain ]

# SIGMANEST or Rasor Nest Software

## SigmaNEST®: Nest with the BEST™

Powered by the industry's newest and most advanced CAD/CAM nesting engine, SigmaNEST delivers measurable and sustained results. SigmaNEST ensures superior material utilization, machine motion optimization, and part quality balanced with cutting speed, work flow integration, material handling, accurate estimates and information management.

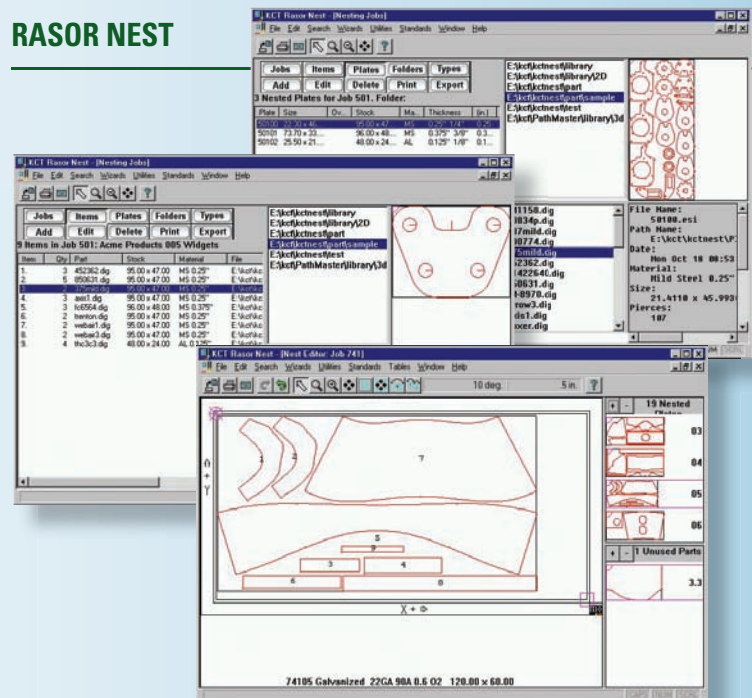
The leading CAD/CAM nesting system for plasma, laser, punch, oxyfuel, waterjet, router, knife, tube/pipe and combination cutting machines, SigmaNEST is scalable to meet your growing needs and flexible enough to program multiple machines.



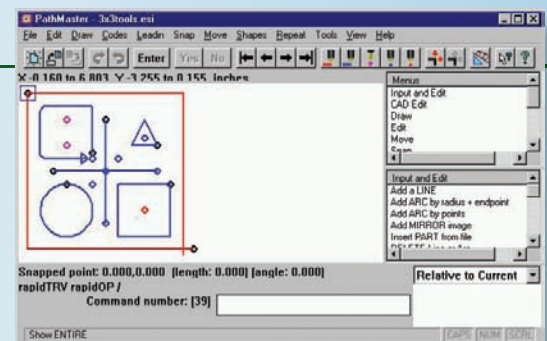
This software package is available for Windows98SE up to Windows 7 computers. The Rasor™ Nest Application V4.0 automatically groups NC part files together (nest) into one or more files to more efficiently use material. It can be used with the Rasor Rev controller files, the original Rasor NC files, PathMaster files, Twister NC Files, or KPCL NC Files.

Also included are a Nest Editor and an NC Converter. The Nest Editor allows manual modification of nested plate files. The NC Converter converts between some NC and CAD file formats and can be used as a post processor for Twister and Rasor products.

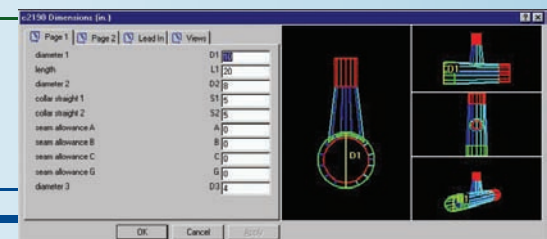
## RASOR NEST



## PATHMASTER



## SOFTOOL 3D LIBRARY



## Main Specification

Item			30kW series		100kW series	
			TFPL308*	TFPL301*	TFPL108*	TFPL101*
Twister output power		kW	30		100	
Twister power unit rated utilization		%	100			
The maximum cutting thickness	(Mild steel-Oxygen cutting)	in.	1.0		2.0	
	(Stainless steel-Oxygen cutting)	in.	0.75		1.25	
	(Almina-Oxygen cutting)	in.	0.625		0.625	
Max pierce thickness (Mild Steel)		in.	1.0		2.0	
Cutting area dimension (X-Y)	X-axis	in.	244, 484.25, 590.5, 787.375, 1063			
	Y-axis	in.	98.375	122	98.375	122
Stroke	X-axis	in.	267.75, 511.75, 630, 826.75, 1102.375			
	Y-axis	in.	102.375	126	102.375	126
	Z-axis	in.	9.5			
Traverse speed	X-axis	IPM	787			
	Y-axis	IPM	1575			
	Z-axis	IPM	787			
Driving Method	X, Y-axis		Rack & Pinion + Linear guide			
	Z-axis		Ball-screw + Linear guide			
Positioning repeatability		in.	±0.004/12			
Smallest input increment		in.	±0.00004			

## NC specification

Type	Fanuc 0iMD
Screen	10.4 inch color liquid crystal
Tape memory length	4199.5 ft. (512KB)
Number of control axes	3 axes (X, Y, Z)
Number of simultaneously control axes	Max. 3 axes
Programming input/output method	CF card and USB memory
Programming entry number	400
Programming editing function	Alter/Insert/Delete/Copy

## Main Function & Options

• standard      ◦ optional

Item	30kW	60kW (Option)	100kW
100kW Twister torch	—	•	•
100kW electrode and nozzle	—	•	•
100k W power supply (Power block)	—	—	•
60kW power supply (Power block)	—	•	—
30kW Twister torch	•	—	—
30kW electrode and nozzle	•	—	—
30kW power supply	•	—	—
Stainless Steel nitrogen cutting function	• (Max. 0.625 in.)	• (Max. 1.0 in.)	• (Max. 1.0 in.)
Auto programming device	◦		
USB memory drive	•		
Quick silver	• (Max. 0.625 in.)	• (Max. 0.785 in.)	• (Max. 1.0 in.)
Argon marking	•		
Quick gas torch	(Piercing)	◦ (Max. 2.0 in.)	◦ (Max. 3.0 in.)
	(Edge cutting)	◦ (Max. 3.0 in.)	◦ (Max. 4.0 in.)
Torch cleaner	•		
Electrode damage detector	•		