



super fast + and Fly Piercing

Specification:

- Enable Fly Piercing(①②③)
- Globals-lead-up set to Sync. (④⑤)
- Globals-Advanced(⑥) -execution mode-superfast(⑦)
- lead-in speed lower than 2000

Material		Thickness	Code
MS Air (碳钢-空气)		3	1081

Working Lines	Accessories Lines	1 Piercing Lines	Globals Parameters

Piercing Time (sec)	Offset (mm)
0.1	6

Laser	
Power (W)	3000
Frequency (Hz)	0
Duty Cycle (%)	100

Gas	
Type	Air
Pressure (Bar)	5

Ramp	
Ramp Time (sec)	0
Step Time (sec)	0
Final Frequency (Hz)	0
Final Duty Cycle (%)	100

Focal Position (mm)	
-8	

Advanced	

Fly Piercing	
Enabled	



M

Material	Thickness	Code
MS Air (碳钢-空气)	3	1081

Working Lines

Accessories Lines

Piercing Lines

4 Globals Parameters

←

Line

→

Nozzle

Diameter (mm)	3.5
Height offset (mm)	0
Type	Booster

Lens (in)7.87

5 Lead Up

Type	Synchronous
Height (mm)	35
Minimum Distance (mm)	0

6 Advanced

Film

Piercing Offset (mm)	0
Piercing Time (sec)	0
Focal Position (mm)	0
Accessory Line	1

Working Lines

Accessories Lines

Piercing Lines

Globals Parameters

←

Line

→

Gas in Repositioning

Pressure (Bar)	5
Early Opening (sec)	1

7 Execution Mode

Superfast

Duration of Initial Gas Purge (sec)	1
-------------------------------------	---



- **Super Fast+ Attention:**

- Lead-in line must longer then 3mm, too long is not suggested, will increase the cutting time, we recommend to 3mm-4mm (so contrminal cutting is not recommended to use Super Fast+)
- About Piercing Config. The piercing offset should set to shorter then 9mm, Piercing time less than 0.1 Sec. , We usually set the offset to 6mm, Piercing time to 0.01 Sec, For thick material, we could increase the piercing time, but less than 0.1 Sec. , If the lead-in line of small hole is shorter than 3mm, we suggest offset lower than 6mm. Recommend use high pulse to piercing

Working Lines		Accessories Lines		Piercing Lines		Globals Parameters					
Piercing Time (sec)		0.1		Offset (mm)		6					
Laser		Power (W)		3000		Focal Position (mm)		-8			
Frequency (Hz)		0		Ramp		Ramp Time (sec)		0			
Duty Cycle (%)		100		Step Time (sec)		0		Final Frequency (Hz)		0	
Gas		Type		Air		Final Duty Cycle (%)		100		Advanced	
Pressure (Bar)		5									



Working Lines Accessories Lines Piercing Lines Globals Parameters

← Line 1 →

Feed (mm/min) 2000

Laser

Power (W) 6000

Frequency (Hz) 0

Duty Cycle (%) 100

Gas

Type Air

Pressure (Bar) 10

Work Positioning

Type Sensor

Offset (mm) 0.3

Focal Position (mm) X 0

Lead-in CFG:1st layer of Accessories



Attentions:

- Nozzle lowest offset;
Booster 0.3mm, Normal
0.5mm
- Synchronize Hight
recommend to 40

Lead Up

Type	Synchronous
Height (mm)	35
Minimum Distance (mm)	0

Working Lines	Accessories Lines	Piercing Lines	Globals Parameters	←	Line 1	→
---------------	-------------------	----------------	--------------------	---	--------	---

Feed (mm/min)		19000
Laser		
Power (W)	6000	
Frequency (Hz)	0	
Duty Cycle (%)	100	
Gas		
Type	Air	
Pressure (Bar)	10	

Work Positioning	
Type	Sensor
Offset (mm)	0.3
Focal Position (mm)	-1
Piercing Line	1
Lead-In Line	1
Lead-Out Line	1

Advanced

Attentions:

- Cutting Gas , Piercing Gas, Repositioning GAS, lead-in cutting Gas should set to be same

Working Lines Accessories Lines Piercing Lines

Feed (mm/min) 2000

Laser

Power (W) 6000

Frequency (Hz) 0

Duty Cycle (%) 100

Gas

Type Air

Pressure (Bar) 10

Working Lines Accessories Lines Piercing Lines Globals Parameters

Piercing Time (sec) 0.1

Offset (mm)

Laser

Power (W) 3000

Frequency (Hz) 0

Duty Cycle (%) 100

Gas

Type Air

Pressure (Bar) 10

Working Lines Accessories Lines Piercing Lines Globals Parameters

Gas in Repositioning

Pressure (Bar) 10

Early Opening (sec) 1

Working Lines Accessories Lines Piercing Lines Globals Parameters

Feed (mm/min) 19000

Laser

Power (W) 6000

Frequency (Hz) 0

Duty Cycle (%) 100

Gas

Type Air

Pressure (Bar) 10