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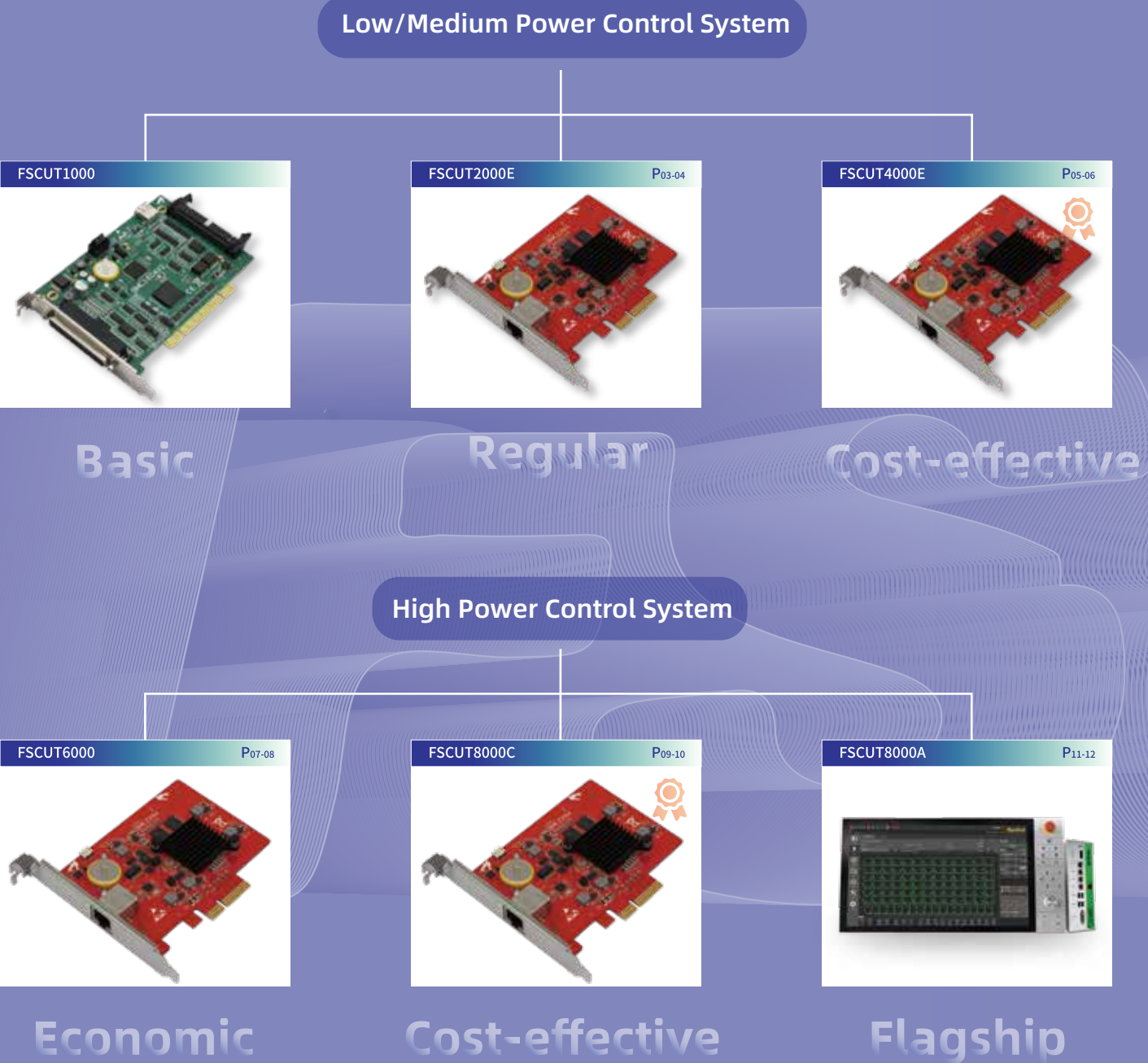
FRIENDESS

Core Technology Choose Wisely

Friendess Laser Cutting V1.3



2D Cutting Production



2D FSCUT Selection Guide

	Low/Medium Power Control System			High Power Control System		
	Basic	Regular	Cost-effective	Economic	Cost-effective	Flagship
	FSCUT1000	FSCUT2000E	FSCUT4000E	FSCUT6000	FSCUT8000C	FSCUT8000A
System	Protective Visual Monitor				★	★
	High-Speed Find Edge	★	★	★	★	★
	Vertex Marking	★	★	★	★	★
	Circle Center	★	★	★	★	★
	Nest	Simple	★	★	CypNest	CypNest
Feature	Inkjet Print	Option	★	★		
	Limitless Coil	Option	★	★		
	QR Code Import	★	★	★	★	★
	Multi-Station Machining	★	★	★	★	★
	Visual Remnant				★	★
Technique	Pierce Stage	2-Stage	3-Stage	5-Stage	9-Stage	9-Stage
	Fast Cutting		★	★	★	★
	Slag-Free Cutting				★	★
	Smooth MicroJoint		★	★	★	★
	Auto Recut				★	★
	Smart Piercing				★	★

Note: Slag-Free Cutting, Auto Recut, and Smart Piercing functions require BOCI BLT cutter.

1500W~3000W

Low/Medium Power
Control System

Regular

FSCUT2000E

Hardware

BMC228A

Master Motion
Controller

Quantity / 1



WKB

Wireless
Keyboard

Quantity / 1



BCL4566E

I/O Terminal Board

Quantity / 1



Software

CypCutE

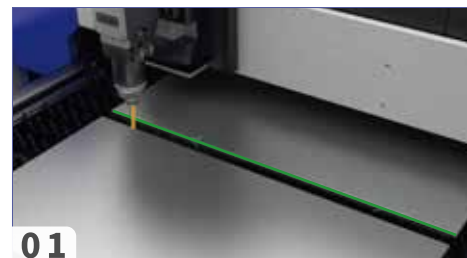
2D Cutting Software

Quantity / 1



Features

01



Quick CutOff

Quick cut off the plate and get remnant

Quick cut waste off by X/Y direction to get the remnant for reuse.

02

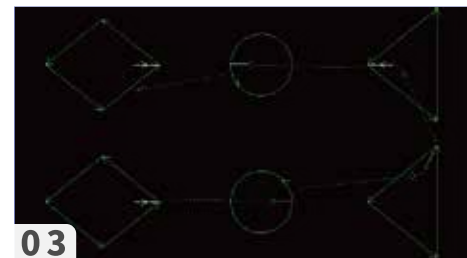


Frame Border Contour

Frame profiled

Frame profiled plate contour.

03

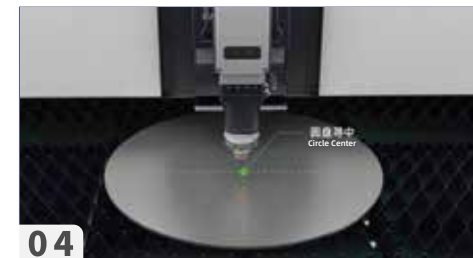


One-Path Flycut

Efficiency improved

Efficient Flycut path is supported for all figures.

04



Circle Center

Center on circular plate

Center on circular plate before machining.

05



Offline Coil Feeding (option)

Coiling, leveling, and cutting in one step

Servo motor, asynchronous motor feeding, and preprocessing supportable.

06



Avoid Collision in Travel

Mitigate the risk of collision

Adjust lift height according to part status when travel.

Apply to **1.5 ~ 3 k w** power laser cutting

1500W~8000W

Low/Medium Power Control System

Cost-effective

FSCUT4000E

Hardware

BMC2284

Master Motion Controller
Quantity / 1



WKB

Wireless Keyboard
Quantity / 1



BCL4566E

I/O Terminal Board
Quantity / 1



Software

CypCutE

2D Cutting Software
Quantity / 1



Features

01



Avoid Collision in Travel

Mitigate the risk of collision

Adjust lift height according to part status when travel.

02

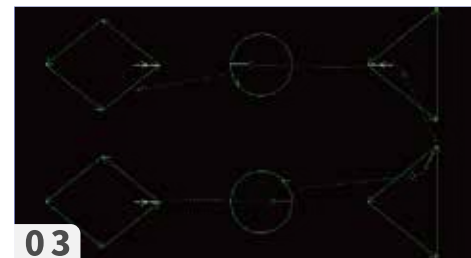


Frame Border Contour

Frame profiled

Frame profiled plate contour.

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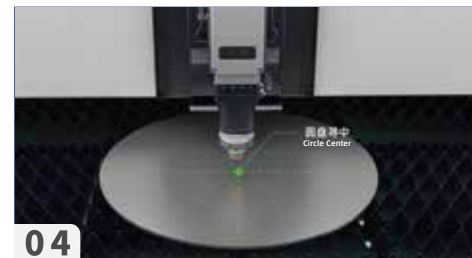


One-Path Flycut

Efficiency improved

Efficient Flycut path is supported for all figures.

04



Circle Center

Center on circular plate

Center on circular plate before machining.

05



Fast Cutting

Speed up sheet cutting

Improve efficiency on sheets by smooth piercing and fast cutting.

06



Smooth Microjoint

Batch unload, piece of cake

Smooth cutting section and easy unloading ensure high efficiency.

Apply to 1.5 ~ 8 k w power laser cutting

6000W~12000W

High Power Control System

Economic

FSCUT6000

Hardware

BMC2282

Master Motion
Controller
Quantity / 1



WKB

Wireless
Keyboard
Quantity / 1



HPL2720E

I/O Terminal Board
Quantity / 1



BCS210E

Height
Controller
Quantity / 1



Software

CypCutPro

2D Cutting Software
Quantity / 1



Features

01



Fast Cutting

Speed up sheet cutting

Improve efficiency on sheets by smooth piercing and fast cutting.

02



Flash Piercing

Speed up piercing on thick plates

Improve efficiency on thick plates by variable frequency fast piercing.

03

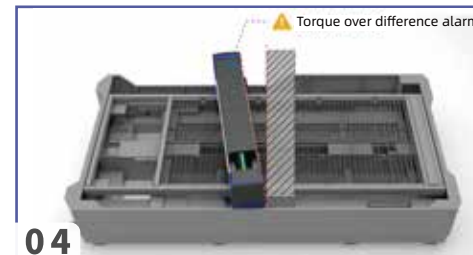


Deslag Pierce

Enhance performance on thick plates piercing

Enhance performance on thick plates piercing by removing pierce slag.

04



Dual Drive Anti-twist

Avoid axis twist

Real time monitor torque difference to avoid axis twist.

05



Self-adjust Vibration Suppression

Suppress cutter vibration in processing

Suppress cutter vibration by Z axis real time self-adjusting.

06



Smooth Microjoint

Batch unload, piece of cake

Smooth cutting section and easy unloading ensure high efficiency.

Apply to 6 ~ 12 k w power laser cutting

POWER RUN LINK SENSOR

6000W~60000W

High Power Control System

Cost-effective

FSCUT8000C



Hardware

BMC2288
Master Motion
Controller
Quantity / 1



WKB
Wireless
Keyboard
Quantity / 1



HPL2720E
I/O Terminal Board
Quantity / 1



BCS210E
Height
Controller
Quantity / 1



Software

HypCut
2D Cutting Software
Quantity / 1



CypNest
2D Nesting Software
Quantity / 1



Features

01

3-stage pierce 5-stage pierce 9-stage pierce

9-Stage Piercing

Improve piercing capability on thick plates

Support ultra thick plates piercing.

03



Smooth Microjoint

Batch unload, piece of cake

Smooth cutting section and easy unloading ensure high efficiency.

05



Cutting Path Monitor

Stable and efficient cutting

Monitor cutting quality by BLT internal sensor, real-time adjust parameters to improve performance and efficiency.

02

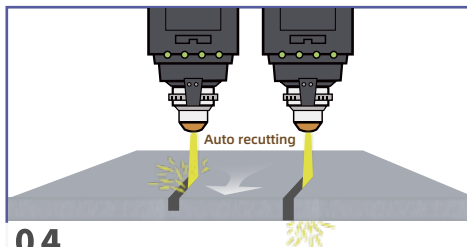


Slag-Free Cutting

Improve performance of inner and outer contour cutting

Gently end processing according to cutting techniques to get a smooth inner and intact outer.

04

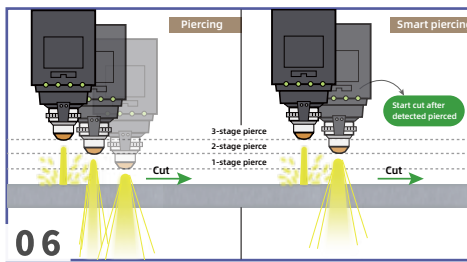


Auto Recut

Stable and efficient cutting

Automatically do recut when real-time in-head sensor detects plasma.

06



Smart Piercing

Improve piercing quality and efficiency

Faster piercing with better quality.

Apply to 6 ~ 60kw power laser cutting

6000W~60000W
High Power
Control System
Flagship
FSCUT8000A



Hardware

HypPanel

HypPanel Quantity / 1



HypTronic

HypTronic
Quantity / 1



HPL2720E

I/O Terminal Board
Quantity / 1



BCS210E

Height
Controller
Quantity / 1



WKB

Wireless
Keyboard
Quantity / 1



Software

HypCut

2D Cutting Software
Quantity / 1



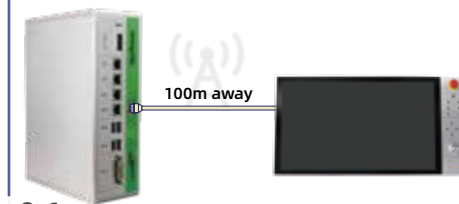
CypNest

2D Nesting Software
Quantity / 1



Features

01



BC-LINK Communication

Independently developed BC-LINK
Communication

Carry display signal, IO and USB signal to
100 meters away.

03



Smooth MicroJoint

Batch unload, piece of cake

Smooth cutting section and easy
unloading ensure high efficiency.

05



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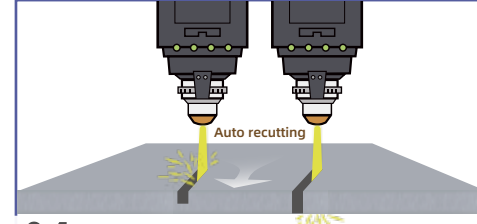


Slag-Free Cutting

Improve performance of inner and
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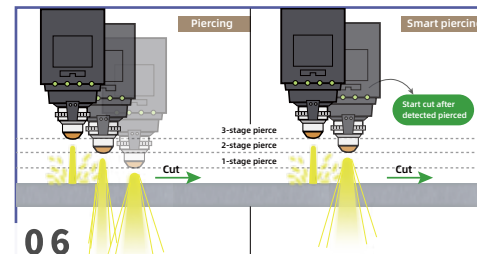


Auto Recut

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Automatically do recut when real-time
in-head sensor detects plasma.

06



Smart Piercing

Improve piercing quality and efficiency

Faster piercing with better quality.

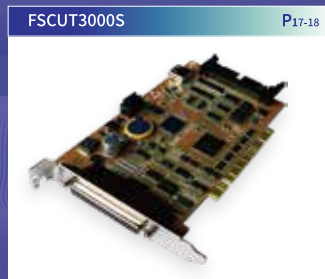
Apply to 6 ~ 60 kw power laser cutting

3D Cutting Production

Professional

Regular

Economic



3D FSCUT Selection Guide

		Economic	Regular	Professional	
		Entry	Classic	Cost-effective	Flagship
		3000DE	3000S	5000B	5000A
System	EtherCAT	★		★	★
	Follow Control	★		★	★
	Dodge	Option	★	★	★
Software	Auto Feeding	Option	★	★	★
	Chuck Size	Option	★	★	★
	Fly Cut	★	★	★	★
Advanced	3-Chuck				★
	7-Axis Pulling				★
	Bevel Cutting	Option			★
	4-Chuck				★
	Saw Blade Machine			★	★

Economic Tube Cutting FSCUT3000DE

(A/H Single Chuck)

Entry

Hardware

BMC2283
Master Motion
Controller

Quantity / 1



WKB
Wireless
Keyboard

Quantity / 1



BCL4566E
I/O Terminal Board

Quantity / 1



Software

TubePro

3D Cutting Software

Quantity / 1



Features



Sort by Side

Decline rotations, improve efficiency

By comparison, sorting by sides effectively decline the rotations.



Bevel Cutting (option)

Facilitate welding process

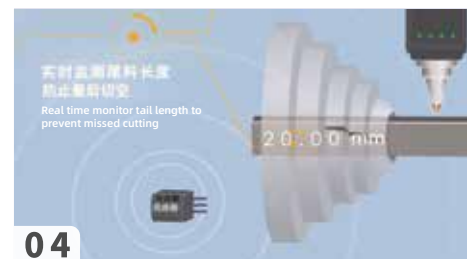
Saddle, K-shaped, Y-shaped, V-shaped, and X-shaped bevel supported.



Centering Wheel

Keep stable cutting

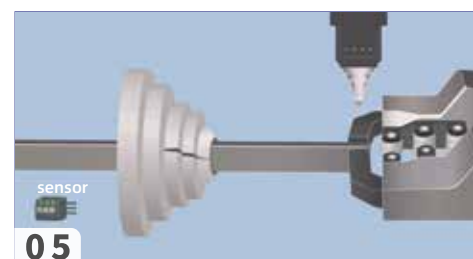
Tubes well clamped by centering wheel, kept stable to be cut precisely.



Missed Cutting Prevention

Real time monitor tail length to prevent missed cutting

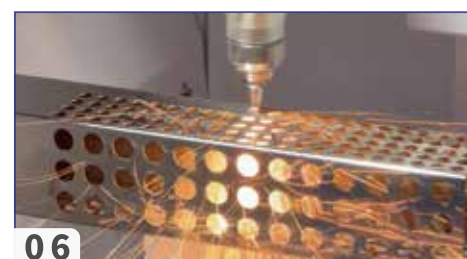
Real time monitor tailing length by sensor to prevent missed cutting.



Single-Chuck Smart Pulling

Self-adapted tube length to pull material flexibly

Balance clamp length and vibration for best and efficiency performance.



Flycut

Generate flycut line to cut efficiently

Less cutting speed changes when cutting intensive figures.

Apply to **single-chuck pulling** tube cutting machine

Regular Tube Cutting

Classic

FSCUT3000S

Hardware

BMC1805
Motion Control
Card
Quantity / 1



WKB
Wireless
Keyboard
Quantity / 1



BCL3766
I/O Terminal Board
Quantity / 1



Software

TubePro
3D Cutting Software
Quantity / 1



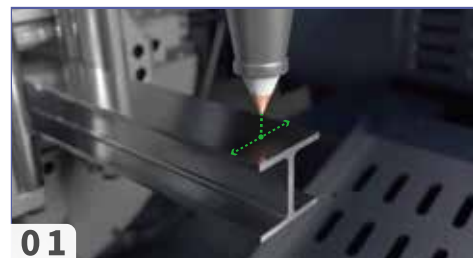
CypTubeRevo
Revolution Cutting Software
Quantity / 1



CypCut
2D Cutting Software
Quantity / 1



Features



Special Steel Centering

Realize precise cutting of special steel

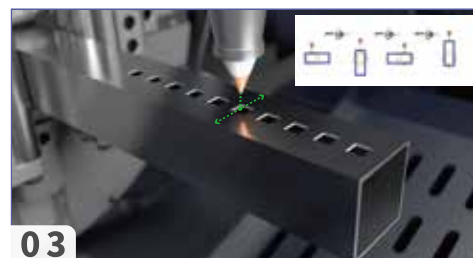
Capable of centering L-shaped, U-shaped, H-shaped steel.



Square/Rectangle Profile Offset

Effectively offset regular cutting margin

Four sides with the same margin can be adjusted, allowing raw material size more flexible.



Single Side Centering

Increase precision of hole on tube

Increase cutting precision of hole on tube.



Quick Align

Use cutter to align tube front end, reduce waste

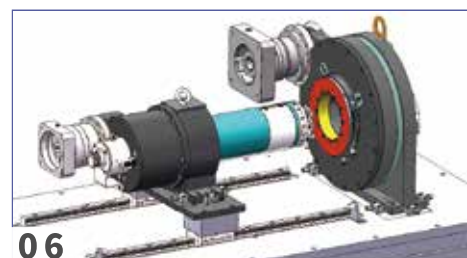
Use cutter to align tube front end, save time and material.



Slow Start/End

Smoothen tube section

Avoid starting burnt point on opposite side and ending bump formed by early falling.



Pause PLC Resume

Enhance automation, decrease waste

Loose middle chuck when cutting end to extend Y axis move distance and save material.

Apply to standard bi-chuck tube system

Professional Tube Cutting

FSCUT5000B

Cost-effective

Hardware

CypTronic-Pro

Bus Host Station
Quantity / 1



WKB

Wireless Keyboard
Quantity / 1



BCL4516E

I/O Terminal Board
Quantity / 1



BCS210E

Height Controller
Quantity / 1



Software

TubePro

3D Cutting Software
Quantity / 1



Tubest

3D Nesting Software
Quantity / 1



Features

01



Communicate with external PLC by Modbus

Transfer data by Modbus

Communicate with loading machine by Modbus to read tube length and auto load.

02

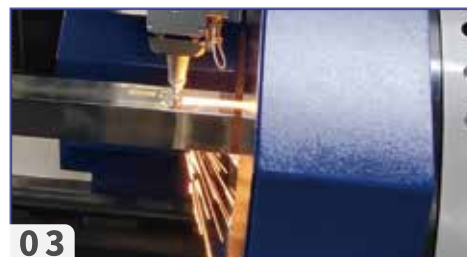


Axis and Tube Length Measurement

Measure tube length with machine

Measure tube length with loading machine for auto loading.

03



Dodge

Enhance cutting performance, save material

Dodge by moving cutter or chuck, reducing waste.

04



Following Holder

Hold tube still, improve cutting accuracy

Move holder up and down as tube rotating to keep it supported, reduce error caused by tube shaking.

05



Dual Y Axis Cutting

Cut hole on heavy tube by moving cutter

Improve cutting precision of holes on heavy tubes.

06



Script

Greatly strengthen system suitability

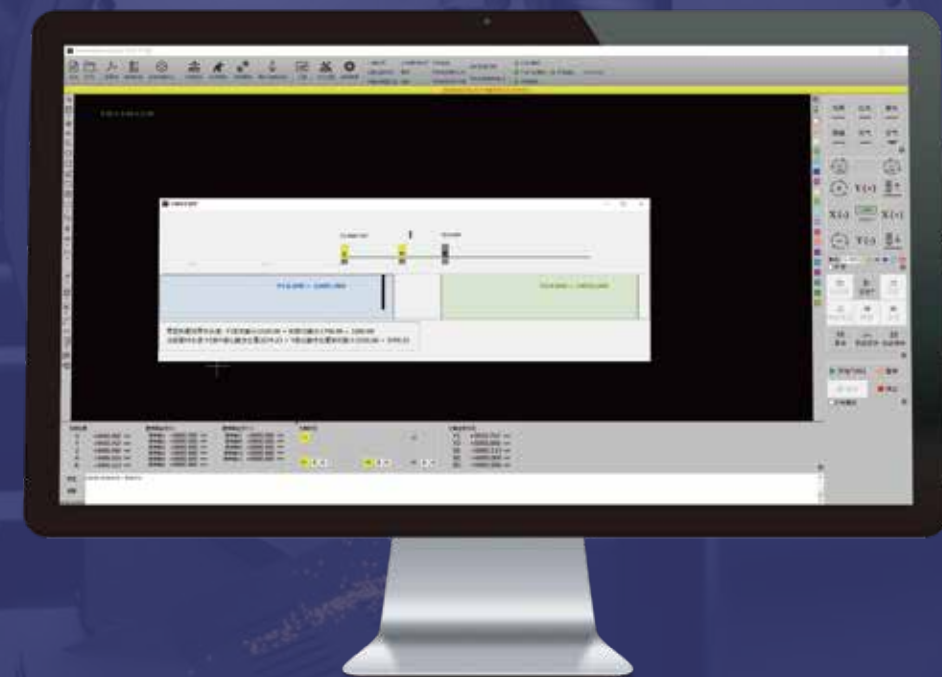
Write your own code to execute complex action, increase automation.

Apply to EtherCAT system for extruded tube cutting

Professional Tube Cutting

Flagship

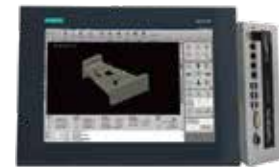
FSCUT5000A



Hardware

CypTronic-Pro

Bus Host Station
Quantity / 1



WKB Wireless Keyboard

Quantity / 1



BCL4516E

I/O Terminal Board
Quantity / 1



BCS210E

Height Controller
Quantity / 1



Software

TubePro

3D Cutting Software
Quantity / 1

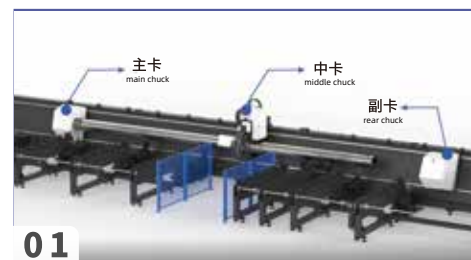


TubesT

3D Nesting Software
Quantity / 1



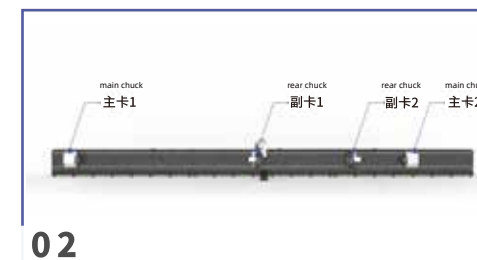
Features



3-Chuck Cutting

Suit for full stroke 3-chuck cutting machine

Support 3 chuck full stroke moving, improve accuracy by preventing tube shaking.



4-Chuck Cutting

Support 4-chuck dual chuck pulling

Support 4-chuck heavy tube cutting, loading and unloading.



7-Axis Pulling

Support 3-chuck dual chuck pulling

Dual pulling main chuck added on 2-chuck machine, easy to unload.



Following Holder

Hold tube still, improve cutting accuracy

Move holder up and down as tube rotating to keep it supported, reduce error caused by tube shaking.



Bevel Cutting

Support bevel parts cutting

Matched with drawing generated by nest software to cut bevel part.



Saw Blade Machine

Pierce and saw through profiled tube

Laser + Saw Blade two in one, pierce and cut off the same time.

Apply to EtherCAT system for extruded tube cutting

Applications

Applications

Shipyards



High-speed Trains



Automotive



Pylons



Sheet Metal



Steel Structure



Furniture

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WhatsApp



Youtube



Website



Twitter

Empower your factory with intelligence.

