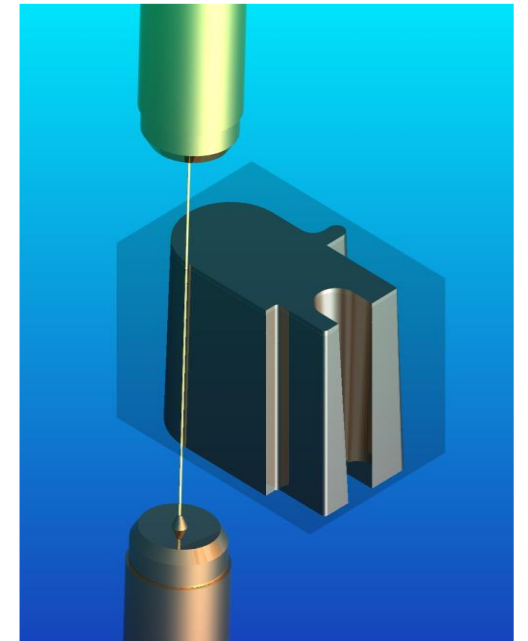


An abstract geometric wireframe structure composed of interconnected triangles and lines, rendered in a glowing cyan color against a dark blue background with a fine grid pattern. The structure is elongated and spans the width of the image, with a more complex, multi-faceted section on the right side.

# WisdomWEDM 3D Wire Cutting

## Current Industry Status (2D Wire Cutting)

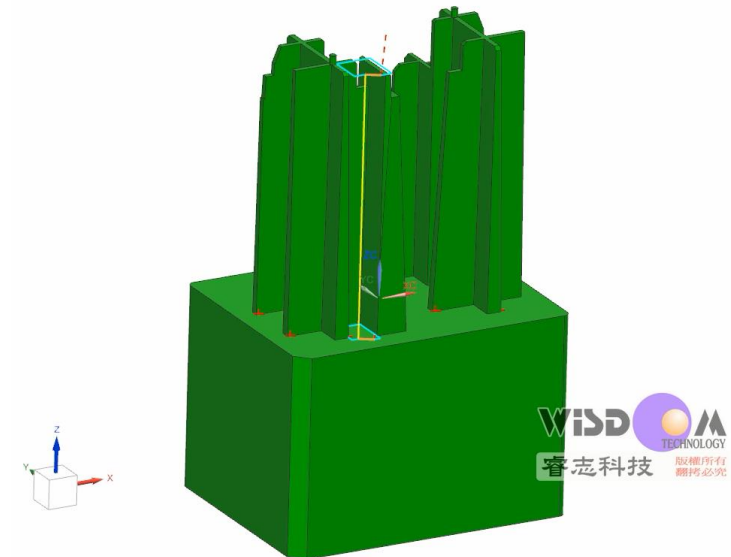
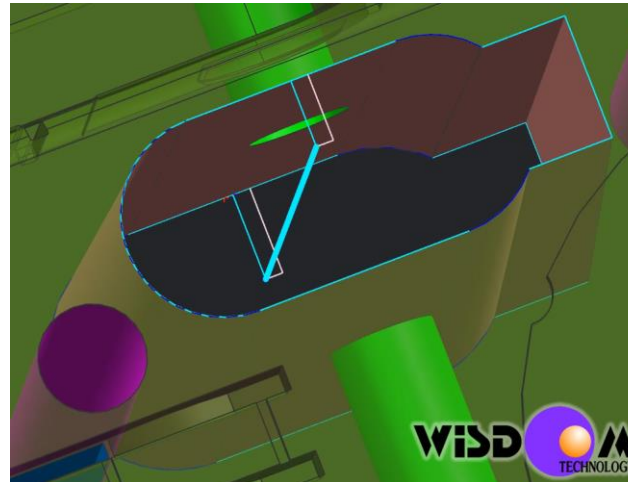
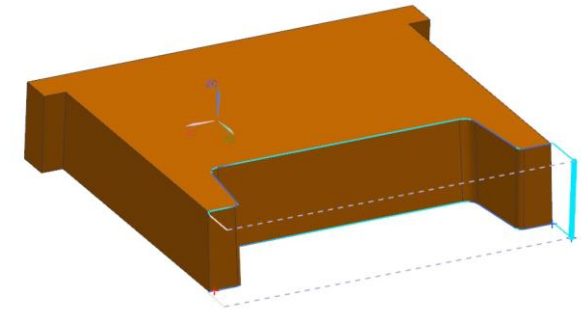
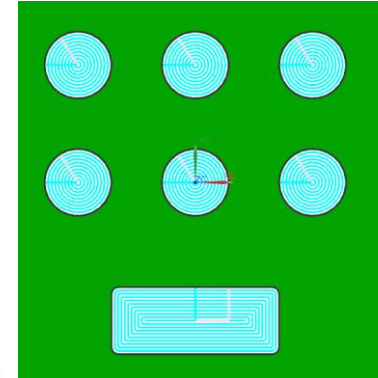
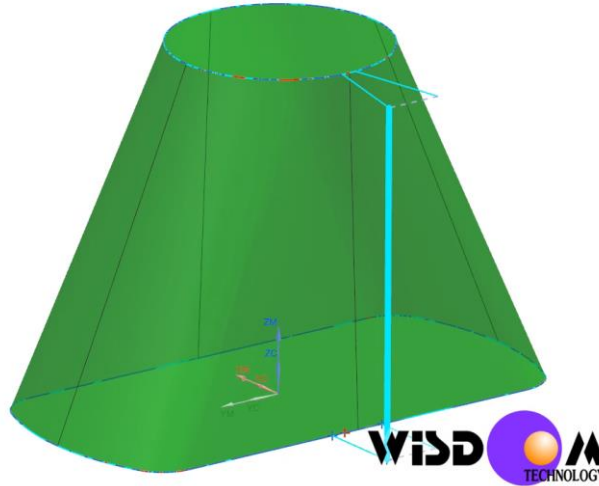
- The mold design is fully 3D, and the source of the parts drawings is 3D data.
- The 3D model needs to be manually generated into a 2D drawing.
- Complex curve (SPLINE) is difficult to process.
- It is not easy to program upper and lower special-shaped paths.
- The wire cutting parameters cannot be connected to the database, and the cutting conditions cannot be fed back.
- The threshold for automated programming is high.
- Design and processing cannot be integrated.



# WisdomWEDM - Intelligent wire cutting

## - cutting strategy

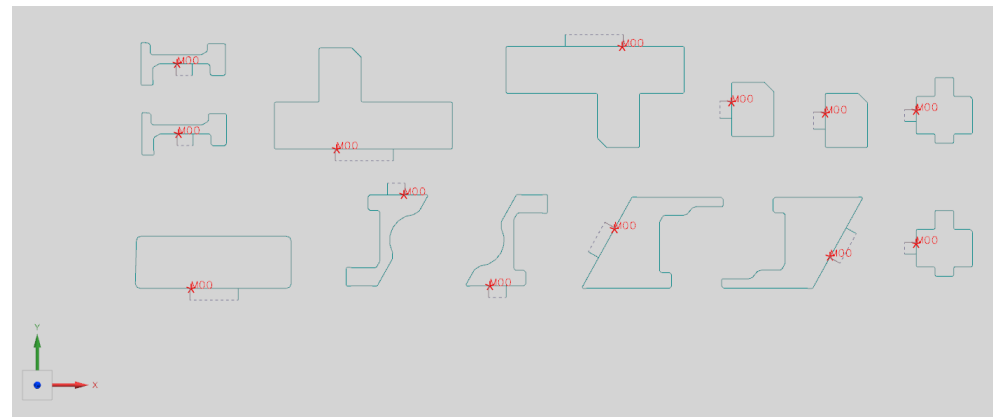
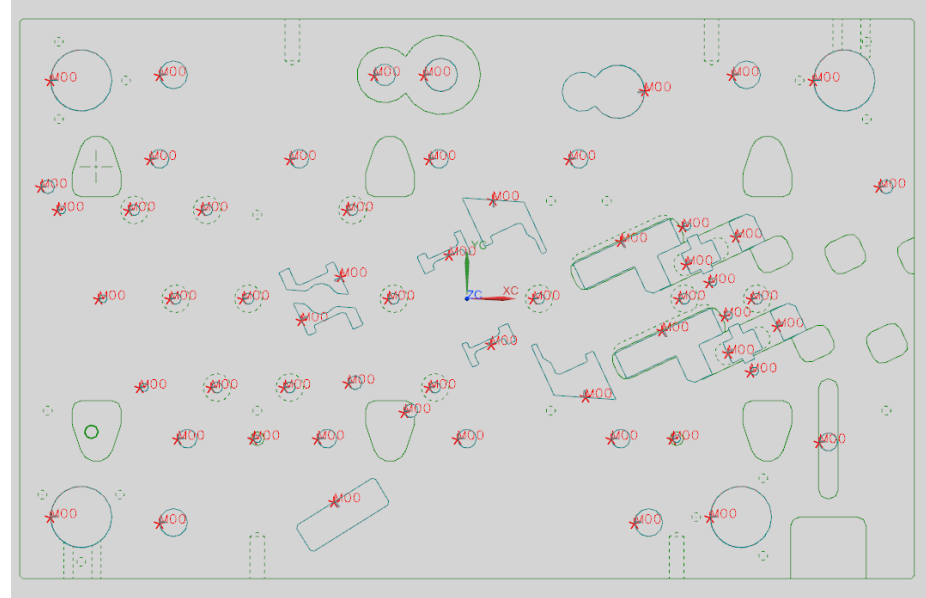
- 2D
  - No Core
  - Internal Trim
  - External Trim
  - Open Profile
  - Flow Cut
- Taper
  - No Core
  - Internal Trim
  - External Trim
  - Open Profile
  - Flow Cut
- 4D – Faces / Curves
  - Internal Trim
  - External Trim
  - Open Profile
  - Flow Cut



# WisdomWEDM - Intelligent wire cutting

## - cutting strategy

- Multi-Internal Trim(2D&Taper)
  - No Core
  - Internal Trim
- Multi-External Trim(2D&Taper)
  - External Trim





# WisdomWEDM - Intelligent wire cutting

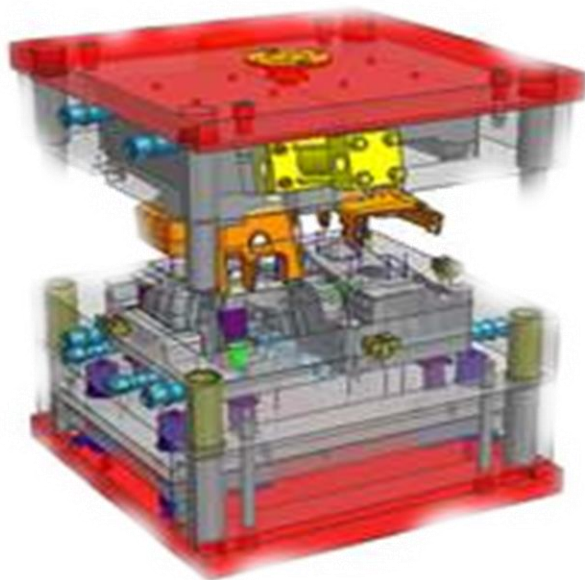
## - main feature

### Set part attribute characteristics:

- Customized part attributes
- Relevant attribute content is linked to shop document and quotation information.



設定零件屬性



設定零件屬性

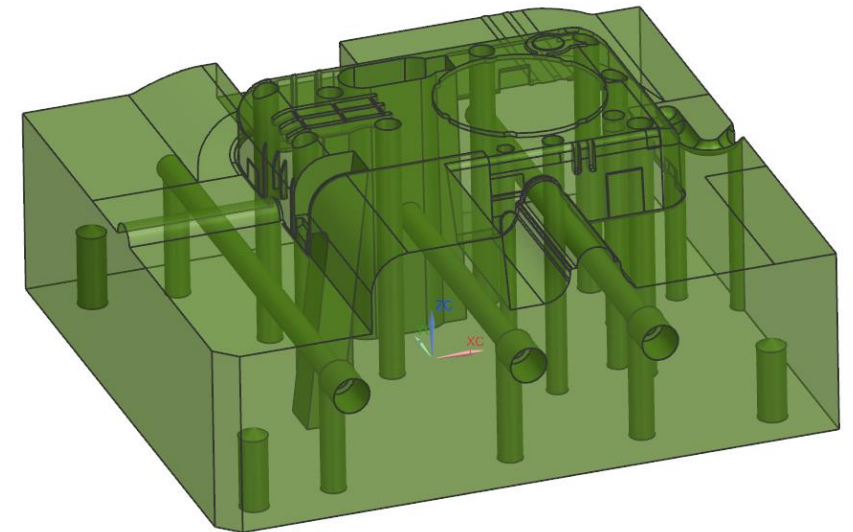
零件屬性

資料類型: 字串 吳俊宏

項次	標題	選單	屬性值
1	客戶名稱	源慶豐	
2	模具編號	其他	
3	模具名稱	其他	
4	客戶模號	其他	
5	繪圖	Jimmy	
6	設計	張三	
7	審核	韓葛亮	
8	批准	孫權	
9	經手人	林建信	

WISDOM 韋忠科技有限公司 WISDOM ENGINEERING CO., LTD.

確定 套用 取消



# WisdomWEDM - Intelligent wire cutting

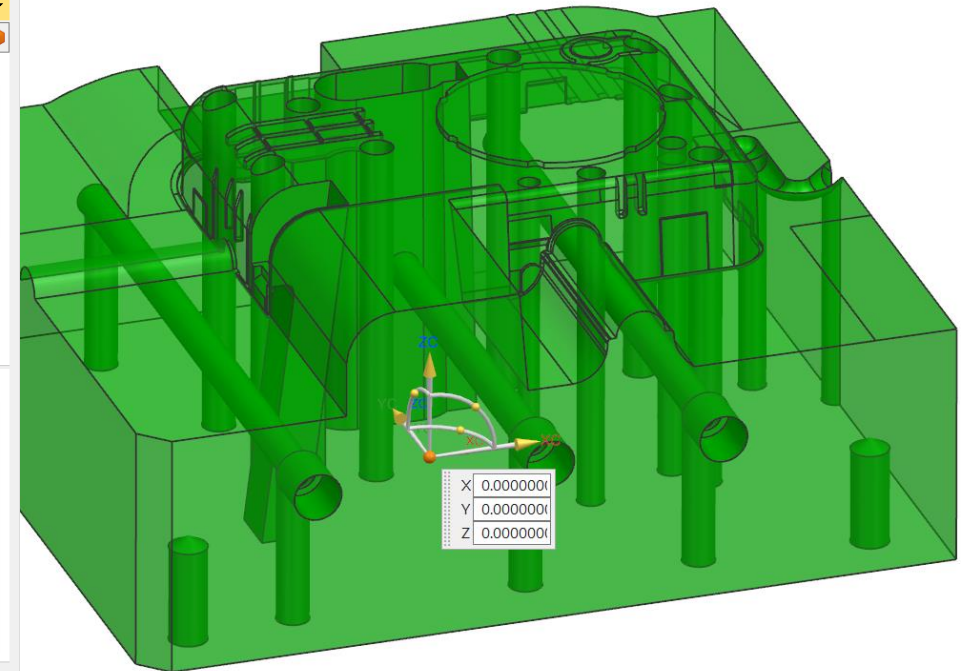
## - main feature

### Main features of workpiece setting:

- Quickly generate program name according to naming rules
- Using a dynamic coordinate system to set the program zero point
- Simplify complex curves through geometric tolerances
- Automatically calculate workpiece information
- Multiple processing parameters can be customized and applied immediately



INI  
建立工法預設

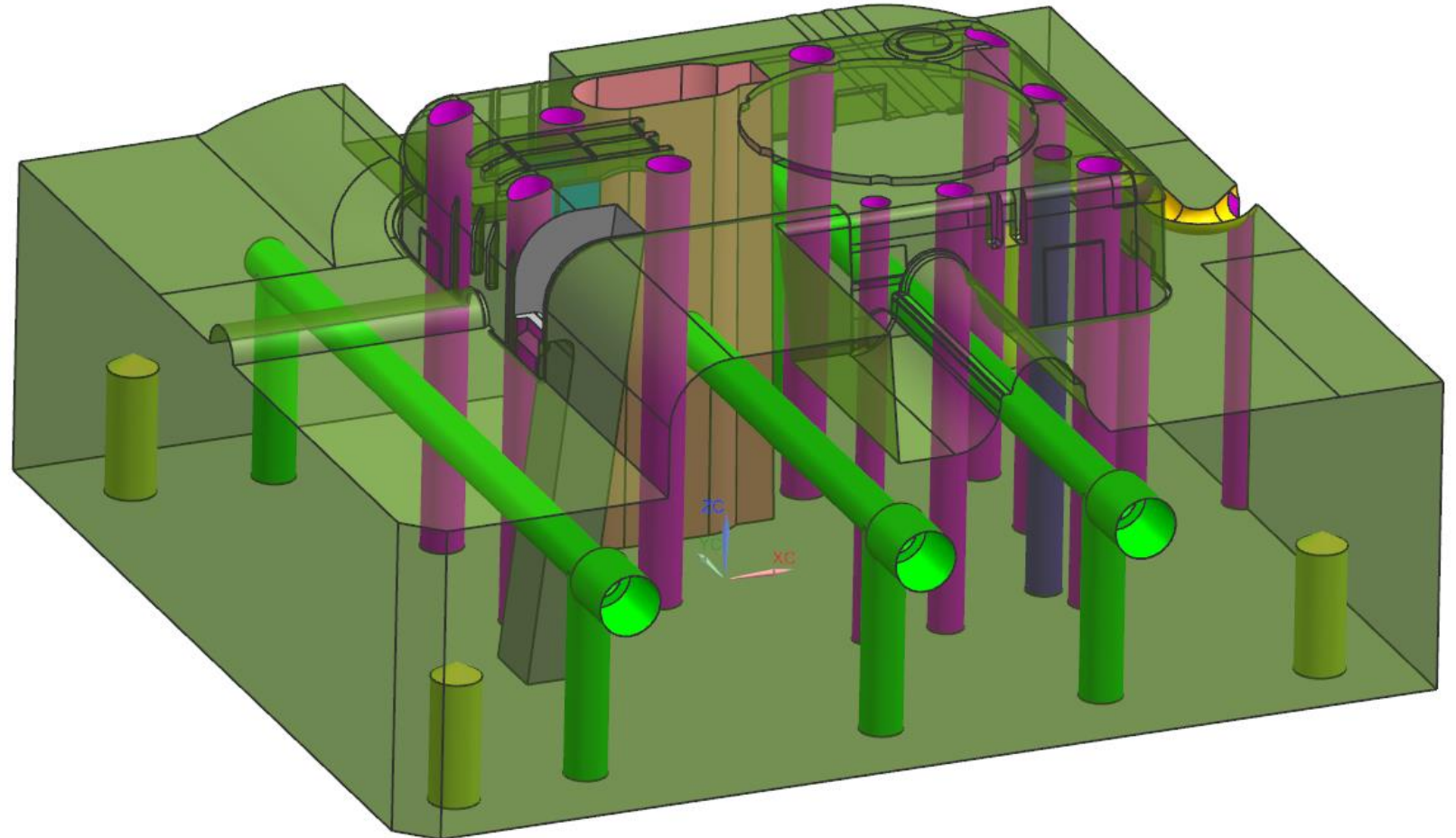


# WisdomWEDM - Intelligent wire cutting

## - main feature

### Cutting geometry selection features :

- No Core
  - face edge 、 2D curve
- 2D
  - face edge 、 2D curve
- Taper
  - face edge 、 2D curve
- 4D
  - face
  - face edge 、 2D curve
- Multi-Internal Trim
  - face edge 、 2D curve
- Multi-External Trim
  - face edge 、 2D curve

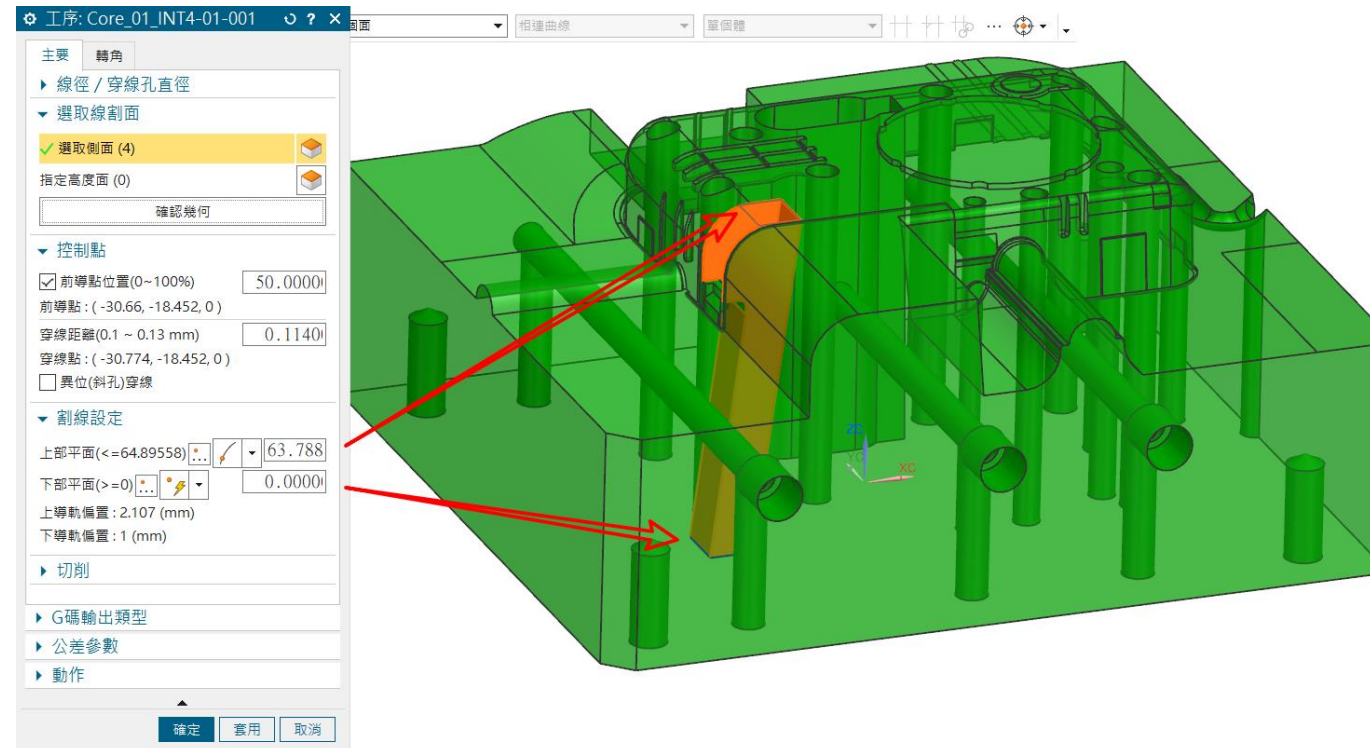


# WisdomWEDM - Intelligent wire cutting

## - main feature

### Selection and the program plan setting features:

- Supports multi-selection / automatically removes disconnected faces
- Automatically set the program plan and UV face height
- Manual adjustment of upper and lower plane heights
- Automatically adjust the height of the upper machine head according to the height of the part
- Automatically generate the threading point and the leading point based on the selected geometry
- The taper angle function supports specifying the tool path range.



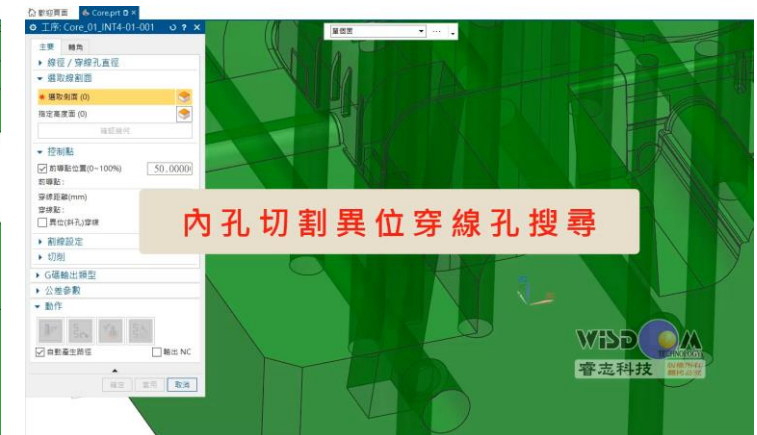
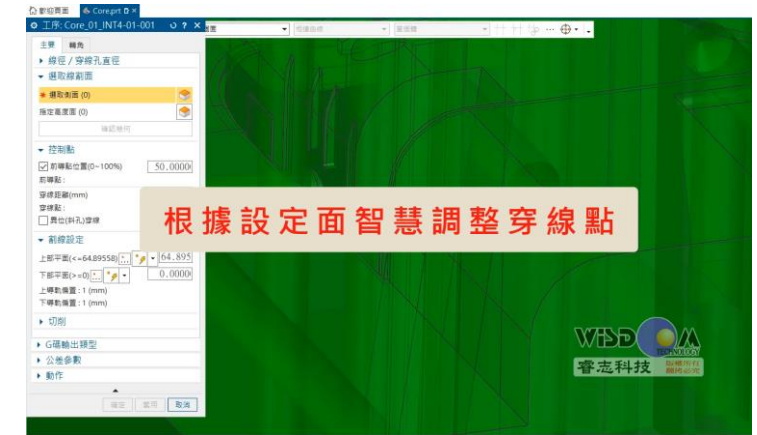


# WisdomWEDM - Intelligent wire cutting

## - main feature

### Features of searching for the threading point:

- Parametric smart search for the threading point (specify the threading point)
- Intelligently adjust the threading point according to the setting surface
- Quick preview of path
- Automatically identify the maximum threading hole diameter
- Threading hole overcut inspection
- Open profile support path trimming and extension
- Internal trim supports inclined threading search



# WisdomWEDM - Intelligent wire cutting

## - main feature

### Cutting function features:

- Complete cutting direction setting
- Definable event point types
- Internal & External Trim support cutoff & finishing cutting
- Cutoff distance setting
- Stock setting
- Wire Cutting setting (before or after separation)
- Internal trim supports overlap distance settings and tool path range

內孔 - 4軸 (面) [ Camera\_Core\_comb-core\_015\_01\_INT4-01-001 ]

線切割幾何體

- 控制點
- 進退刀設定
- 切削設定
- 凸角
- 凹角
- 插入事件
- 機械控制

切削設定

備註

切割刀數: 3

切削方向: 順割順修

暫停距離(mm): 0.5000

☒ 等距暫停

暫停類型: M00

☐ 切斷精修

反割距離(mm): 0.0000

零件餘量(mm): 0.0000

重疊位置: 全部

重疊距離(mm): 0.0000

剪線位置: 脫離後

☒ 自動產生路徑

☐ 輸出 NC

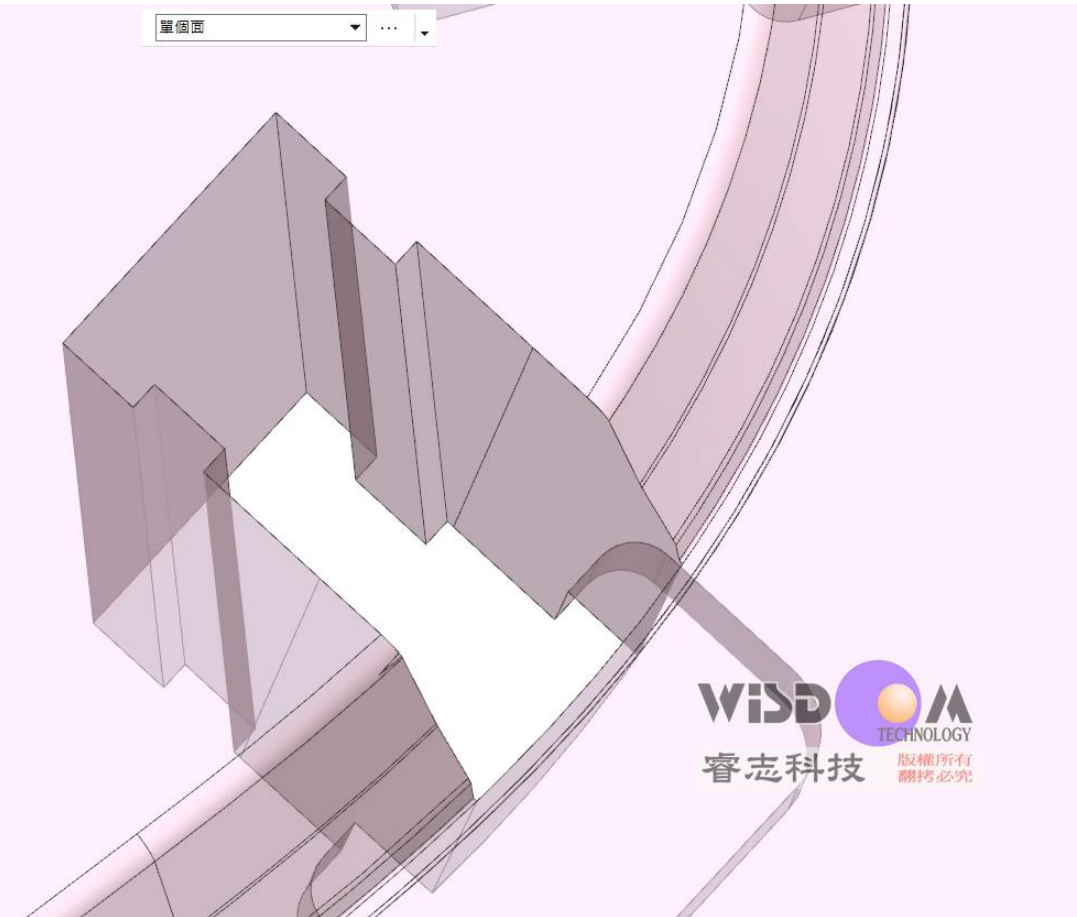
確定 套用 取消

# WisdomWEDM - Intelligent wire cutting

## - main feature

### Features of convex corner :

- Wrapping function
- Automatically generate matching radius path
- Internal trim can automatically generate matching External trim path.
- Each convex can be specified in different parameter
- Various corner wrapping forms
- Use parameters to define the convex setting value

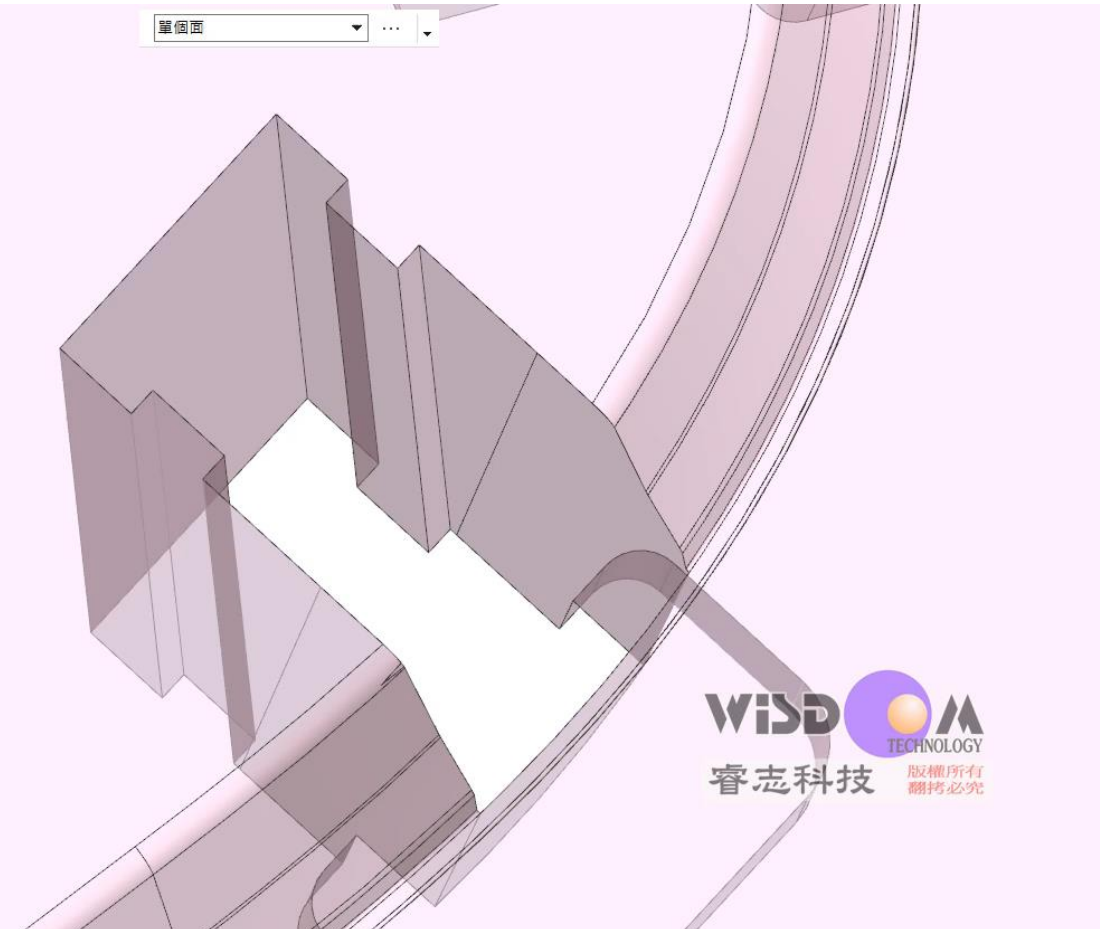


# WisdomWEDM - Intelligent wire cutting

## - main feature

### Features of concave corner:

- Support concave corner stop-second corner
- Various concave corner cutting forms
- Each concave can be specified in different parameter
- Use parameters to define cutout form settings
- Quickly define tool path range



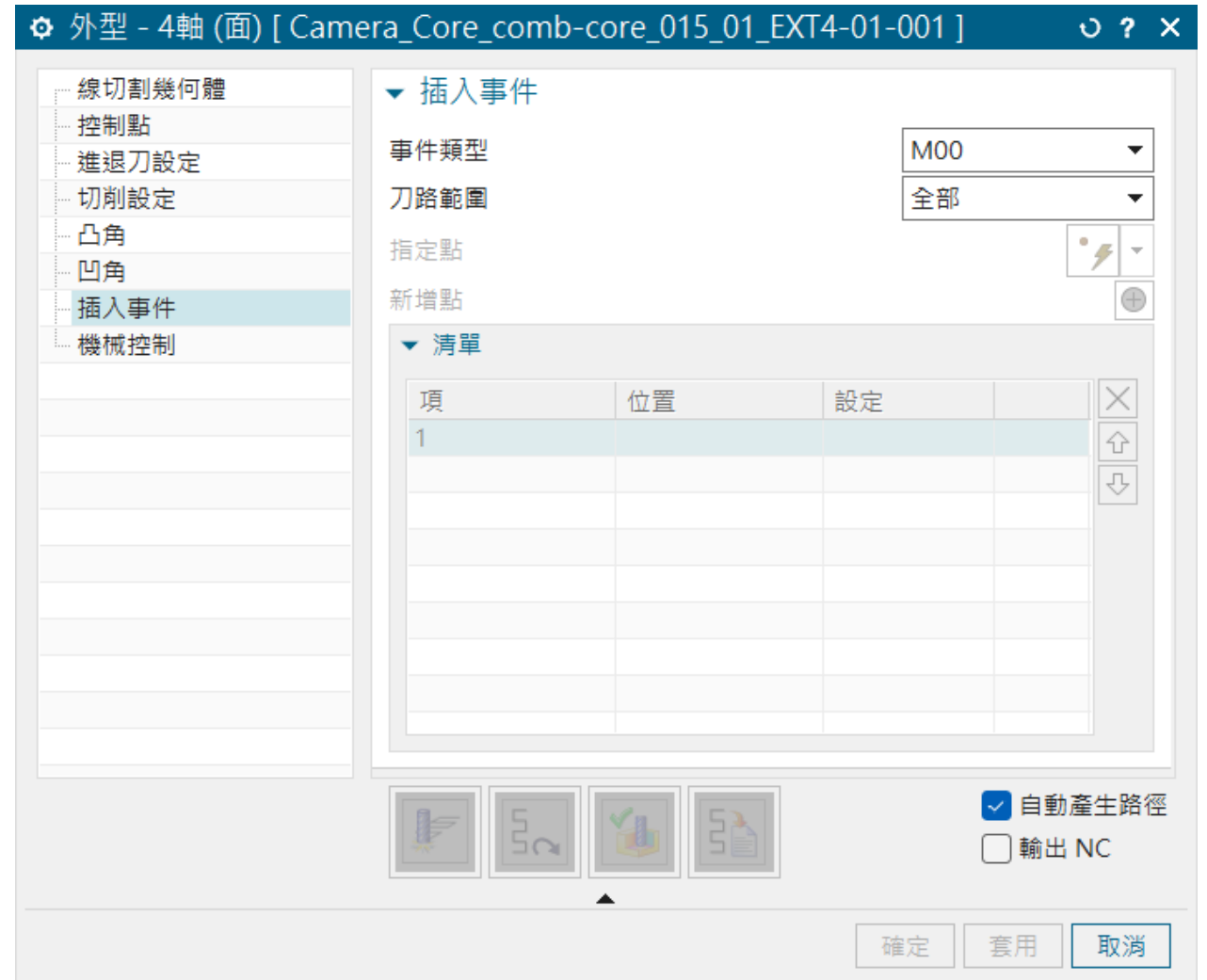


# WisdomWEDM - Intelligent wire cutting

## - main feature

### Insert event features:

- Customized event content
- Define tool path range
- Specify different event contents

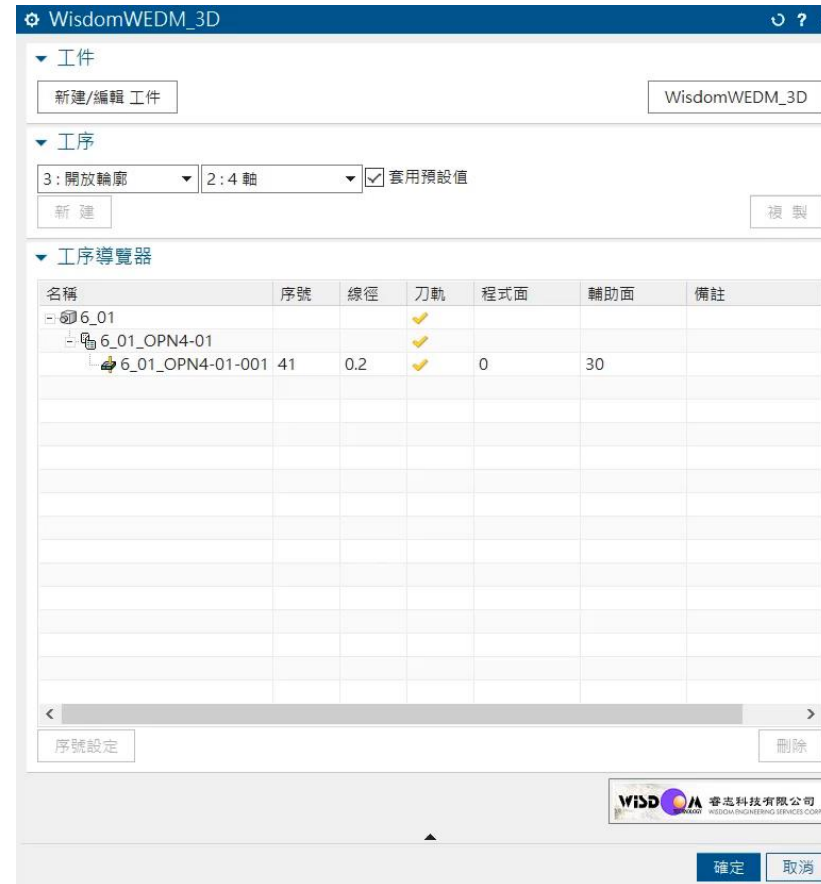


# WisdomWEDM - Intelligent wire cutting

## - main feature

### Features of path copy function:

- Point to point copy
- Circular array
- Rectangular array
- Copy path associated with original path
- The processing order of the copy path can be specified.

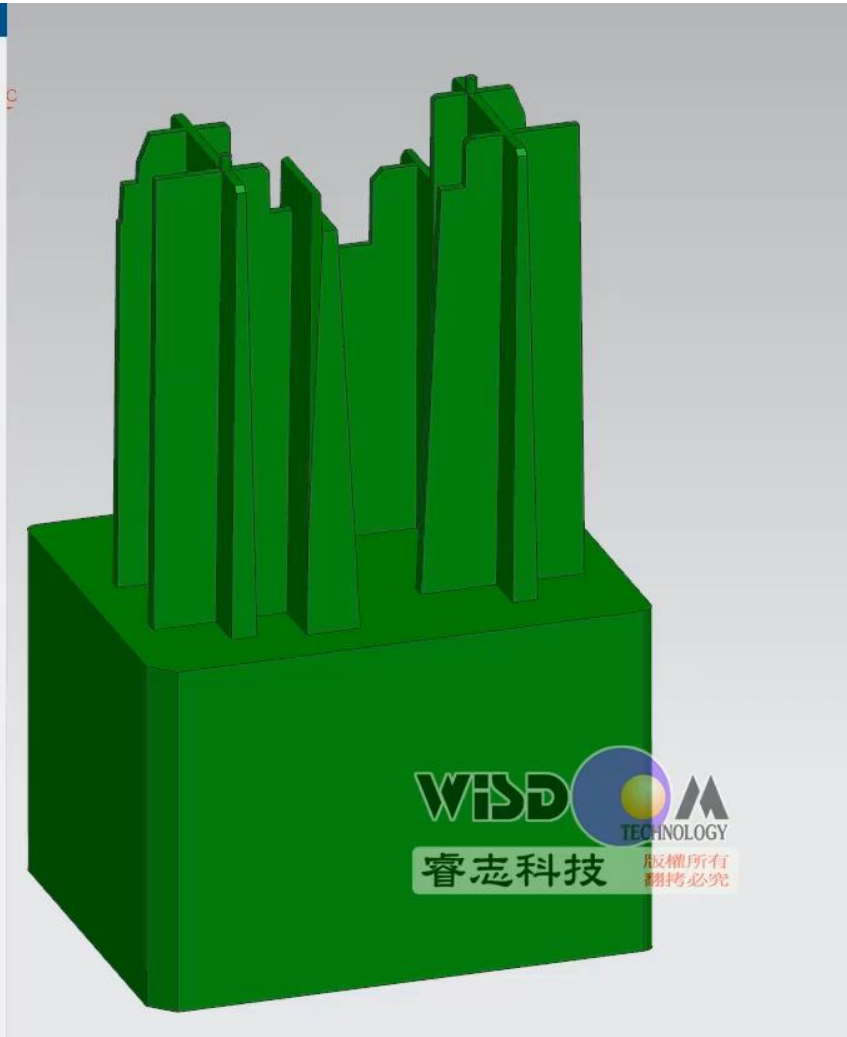
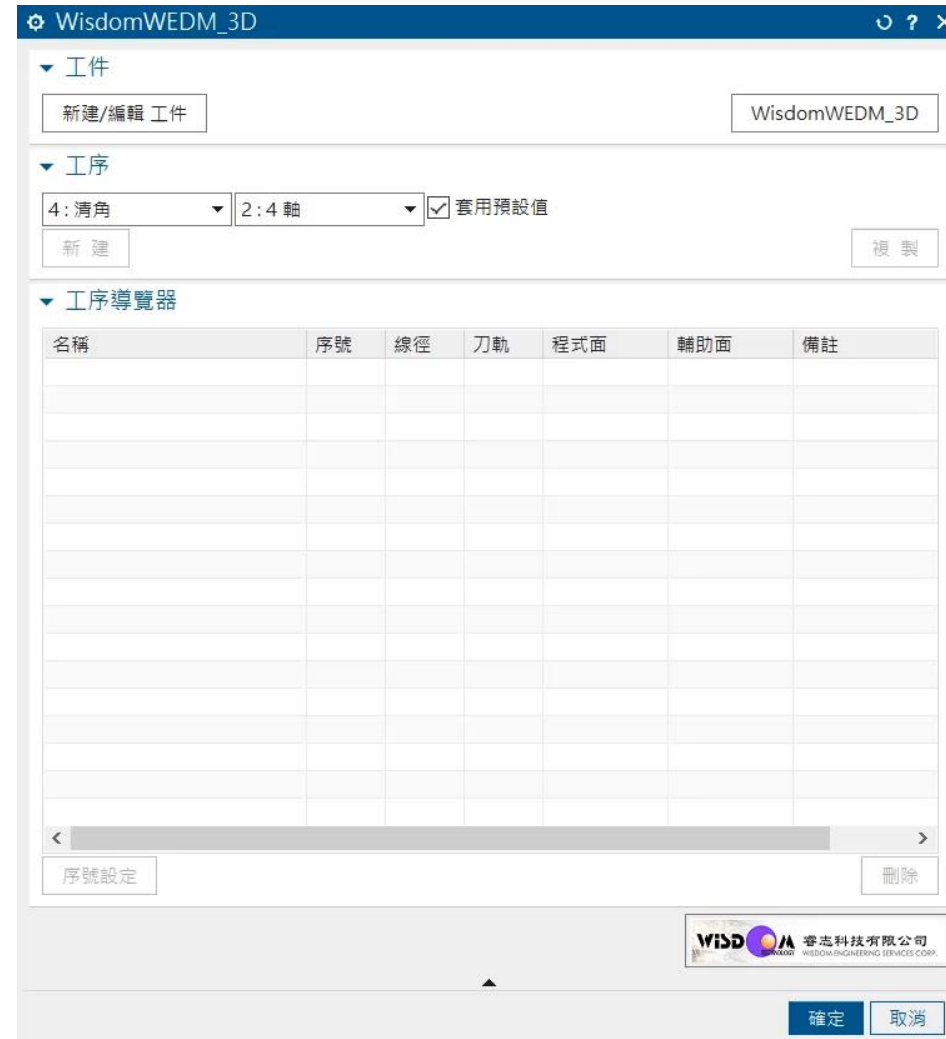


# WisdomWEDM - Intelligent wire cutting

## - main feature

### Flow cut feature:

- Directly select the area to be cleaned
- Automatically close open areas
- Automatically generate the threading hole

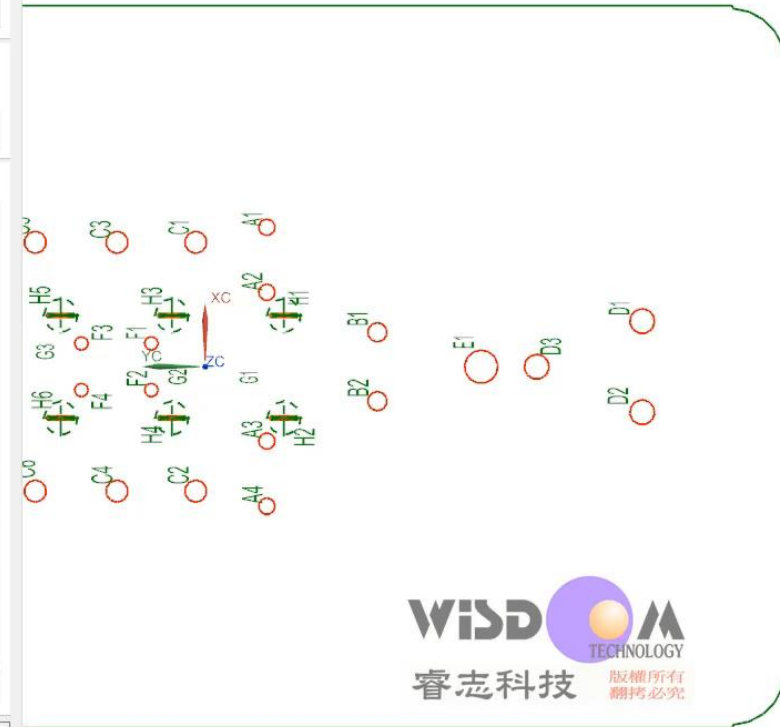


# WisdomWEDM - Intelligent wire cutting

## - main feature

### Multi-Internal & External Trim feature:

- Multiple selecting curves/edges
- Specify multiple threading points
- Intelligent identification of No core or Internal trim methods
- Smart group output based on shape and size
- Quick preview
- Automatic sorting of processing sequence



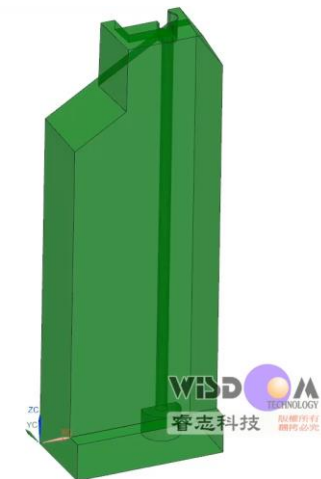
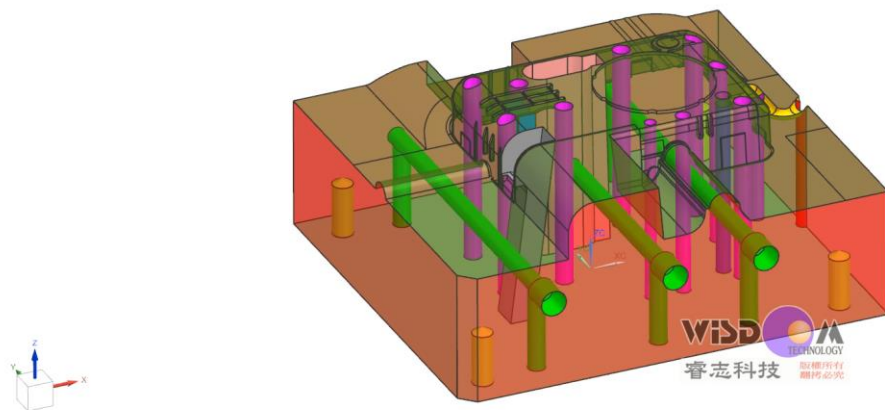


# WisdomWEDM - Intelligent wire cutting

## - main feature

### Characteristics of drawings

- Customized table content
- Customized template drawing frame
- Use colors to indicate wedm cutting methods
- Export multiple views of one part on one drawing
- Group output table content

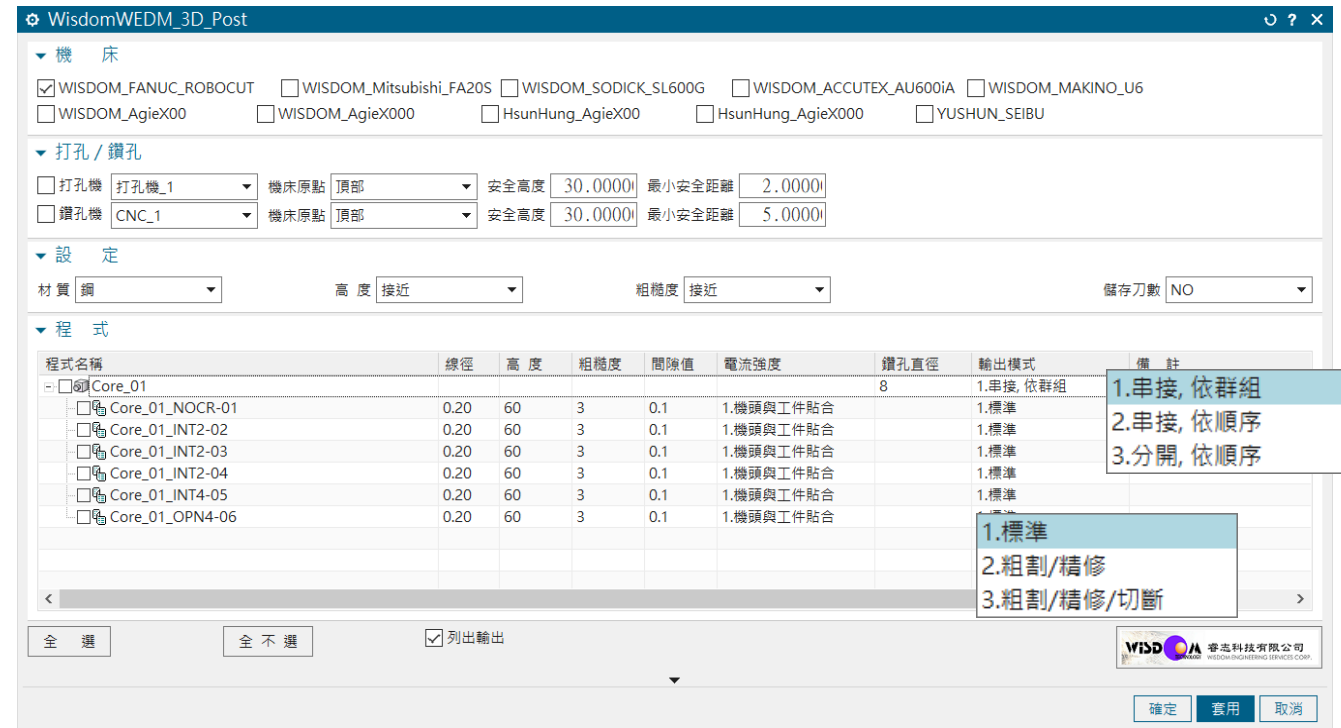


# WisdomWEDM - Intelligent wire cutting

## - main feature

### Postprocessing features

- All models in the factory are output together according to demand
- Automatically add cutting conditions according to wire cutting conditions
- Concatenation cutting parameter database
- Customized user database
- Multi-region cutting supports multiple output modes (paths do not need to be re-edited)
- Automatically classify and output threading or drilling programs according to the diameter of the threading hole
- Supports path output of fast wedm machines



# WisdomWEDM - Intelligent wire cutting (optional)

## - main feature

### Quotation Features

- Multiple sets of pricing standards can be set
- Pricing can be calculated based on different conditions
- Output billing slips and details
- Customize form content

報價單 設定報價單 對帳單

### 設定報價單

基本設定

- 單價
- 高度係數
- 角度係數
- 材質係數
- Excel標頭
- Excel項目

報價單設定檔 ini

Wisdom\_Qua

基本費用

基本費用 100.0000

架模費用 100.0000

包含引線長度倍數 1.0000

計價公式 長(單刀)x高x單價(l)

Excel 樣板檔

Wisdom\_Qua.xlsx

確定 套用 取消

### WisdomWedm\_3D報價單

工件

工件名稱	單號	出圖	計價	架模費
<input type="checkbox"/> WEDM_01				100
<input type="checkbox"/> WEDM_02				100
<input type="checkbox"/> WEDM_03				100
<input type="checkbox"/> WEDM_04				100
<input type="checkbox"/> WEDM_05				100
<input type="checkbox"/> WEDM_06				100

☐ 顯示工件資訊

報價單範本

報價單範本 Wisdom\_Qua

基本費用 100.0000

架模費 100.0000

引線長度倍數 1.0000

☒ 輸出圖面 ☒ 輸出Excel

工程圖

工程圖範本 Wisdom\_Qua\_Dr

視圖類型 正視圖

文字大小 3.0000 Arial Unicode MS

表格

標題	屬性值
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日期	\$DATE_Y4_M_D
客戶	\$WISDOM_PART_CUSTOMER
模號	\$WISDOM_PART_MOLD_NUMBER
件號	\$WEDM_3D_WP_PART_NO
圖號	\$WEDM_3D_DRAW_NAME
金額	\$WEDM_3D_TOTAL_PRICE

確定 套用 取消

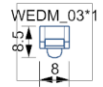

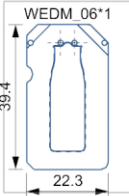
# WisdomWEDM - Intelligent wire cutting (optional)

- main feature

## Quotation Features

- Multiple sets of pricing standards can be set
- Pricing can be calculated based on different conditions
- Output billing slips and details
- Customize form content
- Automatically generate statements



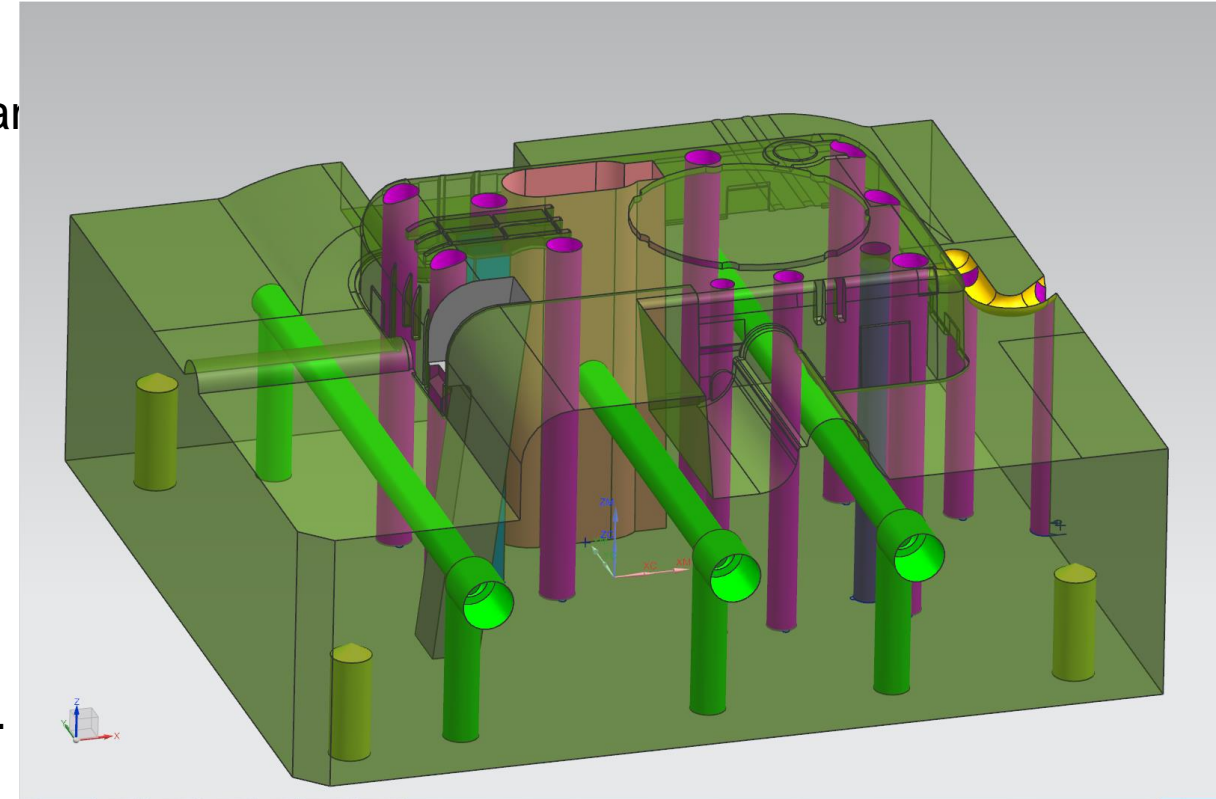
  	<p>睿志科技股份有限公司 地址：新北市新莊區新北大道三段7號18樓之6 TEL: 02-8522-8318 FAX: 02-8522-8200 <a href="http://www.wisdom.com.tw/">http://www.wisdom.com.tw/</a></p> <p>日期：2023/06/27</p> <p>客戶：睿志</p> <p>模號：</p> <p>件號：003,005,006,A1,A2,004</p> <p>圖號：WEDM_03_01</p> <p>金額：NT\$15916</p> <p>客戶簽收：</p>
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睿志科技股份有限公司						
地址：新北市新莊區新北大道三段7號18樓之6						
電話：02-8522-8318 傳真：02-8522-8200						
報價單						
睿志 台照				2023/06/27		
項次	模 號	品 名	數量	單價	總價	備註
1	D103052903	003	1	1083	1083	test
2		005	1	300	300	test
3		006	1	536	536	test
4		A1	5	2676	13380	test
5		A2	1	300	300	test
6		004	1	317	317	test
7		以下空白				
8						
9						
10						
總計新台幣NT\$=					15916	
備註：						
1. 以上報價為未稅金額。						
經手人：						



## Benefit

- A programming model that completely integrates 2D curves and 3D models.
- Reduce parameter settings significantly to avoid human errors.
- Complex curves (SPLINE) donot need to process.
- It is easy to program the upper and lower special-shaped paths based on the solid model.
- Automatically identify threading points during path generation.
- The wedm cutting parameters are connected to the database and the cutting conditions are fed back.
- Automated programming for entity feature recognition.
- Integration from design to processing.



# WEDM Machine

Post-processing output is suitable for various WEDM machines

- Agie Charmilles ( optional )
  - All Agie Charmilles EDM machines.
  - AgieVision script file formats (SBR, SBL and ISO)
  - GF script file format (MJB)
- Japanese brand WEDM machine
  - SEIBU
  - Sodick
  - MAKINO
  - Fanuc
  - Mitsubishi
  - ...
- Taiwan-made brand wire cutting machine
  - ACCUTEX
  - CHMER
  - ...
- Fast WEDM (open for customization)
- ONA



# Thank You!

Your feedback is important.