

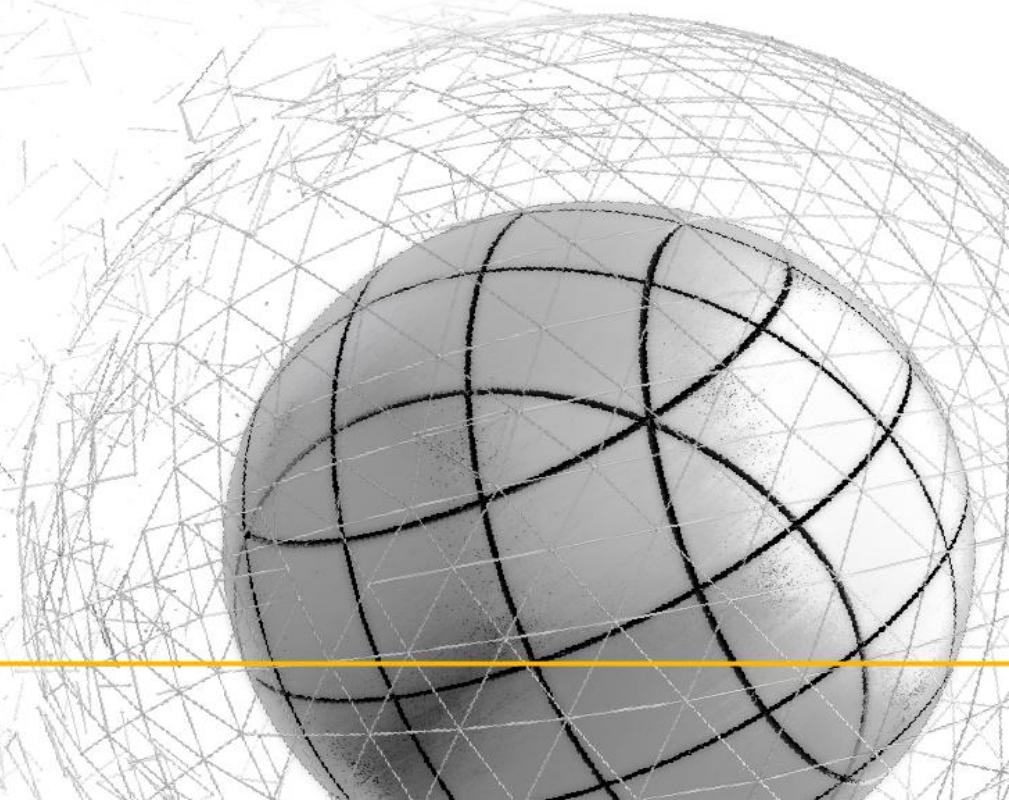
The MIDAS logo icon is a blue square composed of a 3x3 grid of smaller squares, with the top-right square missing.

MIDAS
MESH FREE

沈約翰

support@midasuser.com.tw

Simple, but Everything.



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- GUI/Start Page
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MeshFree Environment

- Installation
- GUI/Start Page
- License
- Language(中/英切换)

資源下載

MeshFree

NFX

CFD

FEA NX

GTS NX

MESHFREE

下載主程式與Patch時，請注意版本差異

MIDAS軟體下載

檔案下載

MIDAS軟體下載

MeshFree-MESHFREE2025R2主程式

檔案下載

MIDAS軟體下載

MeshFree-MeshFree 2025R2更新檔_20251024

Name	Date modified	Type	Size
ISetupPrerequisites	5/28/2025 9:36 AM	File folder	
Language	5/28/2025 9:36 AM	File folder	
0x0409	5/28/2025 9:35 AM	Configuration sett...	22 KB
data1	5/28/2025 9:35 AM	Cabinet File	3,750 KB
data1.hdr	5/28/2025 9:35 AM	HDR File	1,686 KB
data2	5/28/2025 9:36 AM	Cabinet File	2,257,668 KB
ISetup.dll	5/28/2025 9:36 AM	Application extens...	568 KB
layout.bin	5/28/2025 9:36 AM	BIN File	10 KB
setup	5/28/2025 9:36 AM	BMP File	616 KB
setup	5/28/2025 9:36 AM	Application	788 KB
setup	5/28/2025 9:36 AM	Configuration sett...	5 KB
setup.inx	5/28/2025 9:36 AM	INX File	250 KB
setup.isn	5/28/2025 9:36 AM	ISN File	83 KB

MeshFree資訊



midas MeshFree (V450, Release No. 1) 64bit (May 28 2024)

Easy-Fast Solution for True Analysis-driven Design

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License

<http://www.MidasUser.com/>

OK

Link:
<https://www.midasuser.com.tw/SolidSimulation/download>

The screenshot shows a web browser window titled "midas MeshFree - Start Page". The browser's taskbar at the top left contains icons for "新檔案" (New File), "開啓檔案" (Open File), "授權" (License), and "MeshFree資訊" (MeshFree Information). The browser's address bar shows "midas MeshFree - Start Page".

The web page has a header with the MIDAS logo and "EN" on the left, and "MIDAS Account" on the right. The main content area is divided into two sections:

- If you are a licensed user:** This section features a dark button labeled "Global Technical Support Center". Below it is a "NEWS" section with three items:
 - Gen 2021 (v3.1) Installation available. (Sep.02,2021) **N**
 - Civil 2022 (v1.1) Installer available (Oct. 08, 2021) **N**
 - nGen 2022(v1.1) installer available (Aug. 09, 2021) **N**
- If you are new to MIDAS solution:** This section contains five buttons for different solution types: "Bridge", "Geotechnical", "Building", "Mechanical", and "Cad".

The browser's status bar at the bottom shows "Start Page" on the left, a warning icon and text: "> The maintenance period is 21 days left." on the left, and the coordinates "-1.5979, -1.0029, -1.3866" on the right.

許可證註冊

web認證
 硬體鎖
 Network (FlexNet Manager)

許可認證

ID

密碼

金鑰號

註冊

新增新帳戶

使用代理伺服器

Lock Option

You can select your desired program options.

(0/3)TWENMEC

Option

CAD Interface

0/3 <input checked="" type="checkbox"/> IGES	0/3 <input checked="" type="checkbox"/> STEP
0/3 <input checked="" type="checkbox"/> SolidEdge	0/3 <input checked="" type="checkbox"/> UG/NX
0/3 <input checked="" type="checkbox"/> Pro/E	0/3 <input checked="" type="checkbox"/> SolidWorks
0/3 <input checked="" type="checkbox"/> Inventor	0/3 <input checked="" type="checkbox"/> CATIA v4,5

Analysis

0/3 <input checked="" type="checkbox"/> Linear Static	0/3 <input checked="" type="checkbox"/> Modal
0/3 <input checked="" type="checkbox"/> Heat Transfer	0/3 <input checked="" type="checkbox"/> Nonlinear Static
0/3 <input checked="" type="checkbox"/> Linear Dynamic	0/3 <input checked="" type="checkbox"/> Fatigue
0/3 <input checked="" type="checkbox"/> Topology Optimazation	

Update

> The maintenance period is 21 days left.
> The maintenance period is 21 days left.

The screenshot displays the MIDAS MeshFree software interface. The main window shows the 'Start Page' with a message for licensed users and a 'Global Technical Support Center' button. A 'NEWS' section lists updates for Gen 2021, Civil 2022, and nGen 2022. A 'File' menu is open, showing options like 'New File', 'Open', 'Save', and 'Exit'. The 'Language' option is highlighted, and a language selection dialog is shown with '繁體中文' (Traditional Chinese) selected.

File Menu Options:

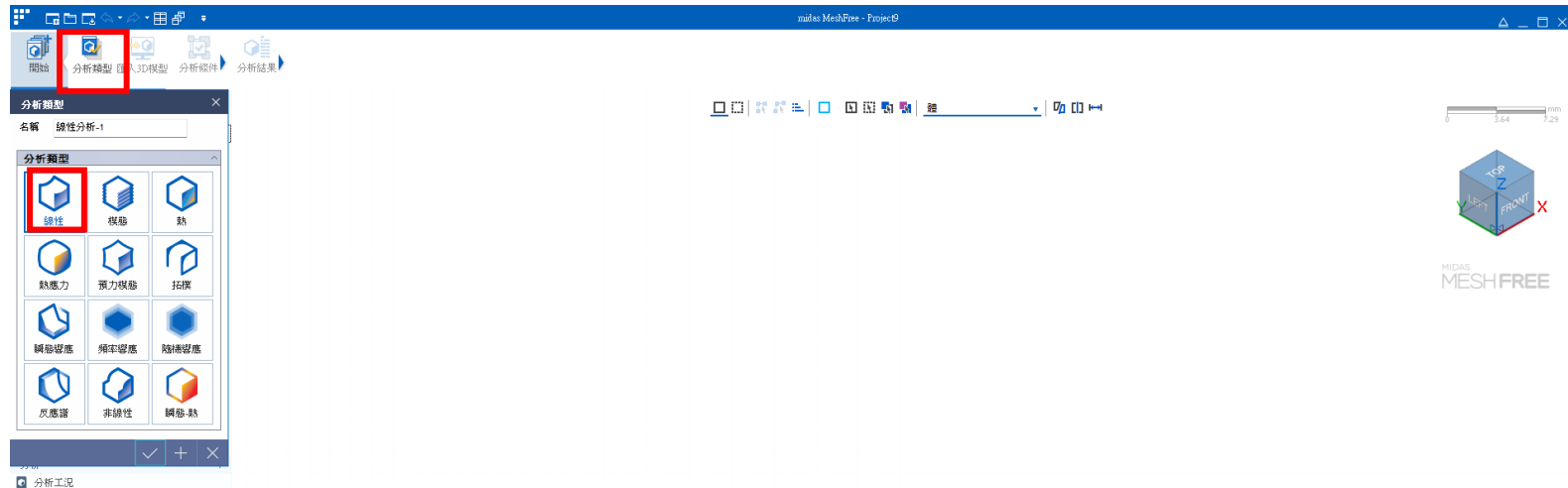
- 新文件 (New File): 新增一個新項目 (Add a new project)
- 開啟 (Open): 開啟備份的項目文件 (*.mef) (Open backup project file)
- 儲存 (Save): 將當前的工作儲存到項目文件 (*.mef) (Save current work to project file)
- 另存新檔... (Save As...): 將您的工作儲存到另一個項目文件 (*.mef) (Save work to another project file)
- 屏幕截圖和存檔 (Screenshot and Save): 截取當前作業屏幕, 並將其儲存為圖像文件 (Capture current work screen and save as image file)
- 垂直並排視窗 (Vertical Split View): 將視窗按相同大小的畫面排列顯示 (Arrange windows by same size display)
- 重疊視窗 (Overlapping View): 重疊視窗 (Overlapping view)
- 設置 (Settings): 軟體操作設置 (Software operation settings)
- MeshFree 產品信息 (MeshFree Product Information): MeshFree 產品版本和授權資訊 (MeshFree product version and license information)
- 語言 (Language): 更改操作語言 (Change operation language)
- 離開 (Exit): 儲存你的工作並退出程序 (Save your work and exit program)

Language Selection Dialog:

- 簡體中文 (Simplified Chinese)
- 英文 (English)
- 繁體中文 (Traditional Chinese) - Selected

System Tray:

- The maintenance period is 21 days left.
- The maintenance period is 21 days left.



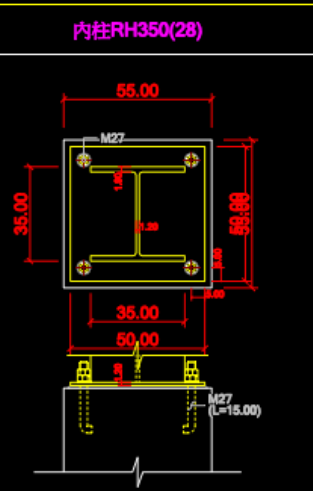
新增分析類型。
當有多組分析類型,MeshFree將採最後一個分析類型作為邊界條件預設

MIDAS SYSTEM INTEGRATION

MIDASIT <http://www.midasuser.com>

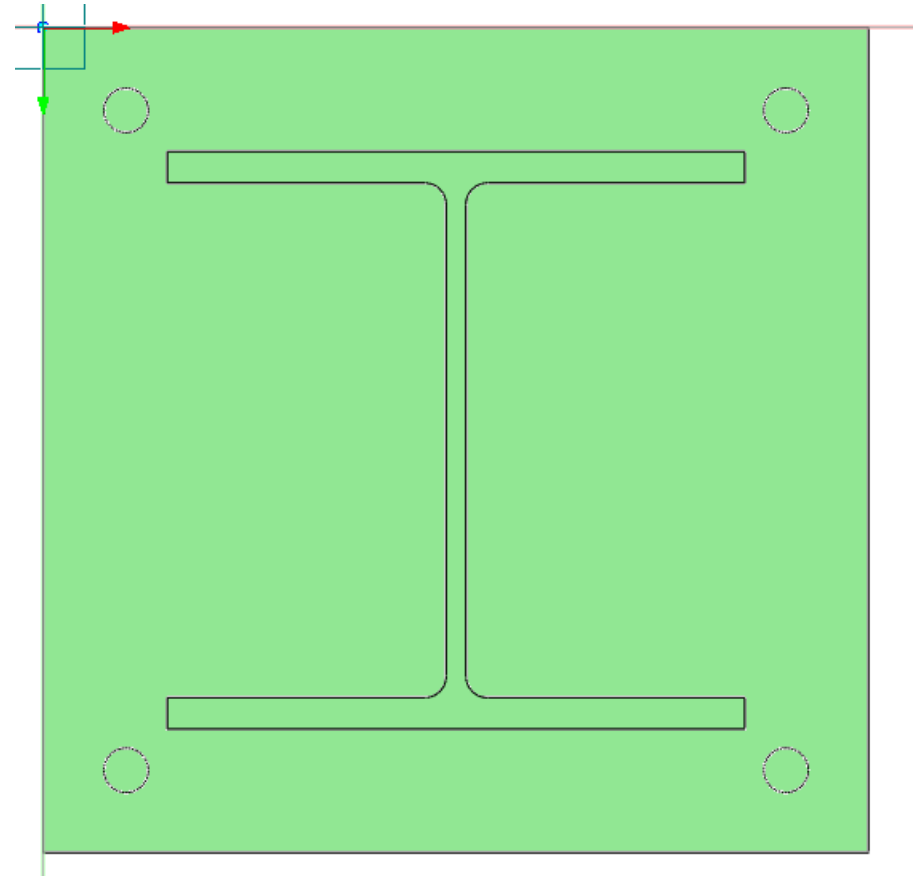
STEEL BASE PLATE LIST

内柱RH350(28)

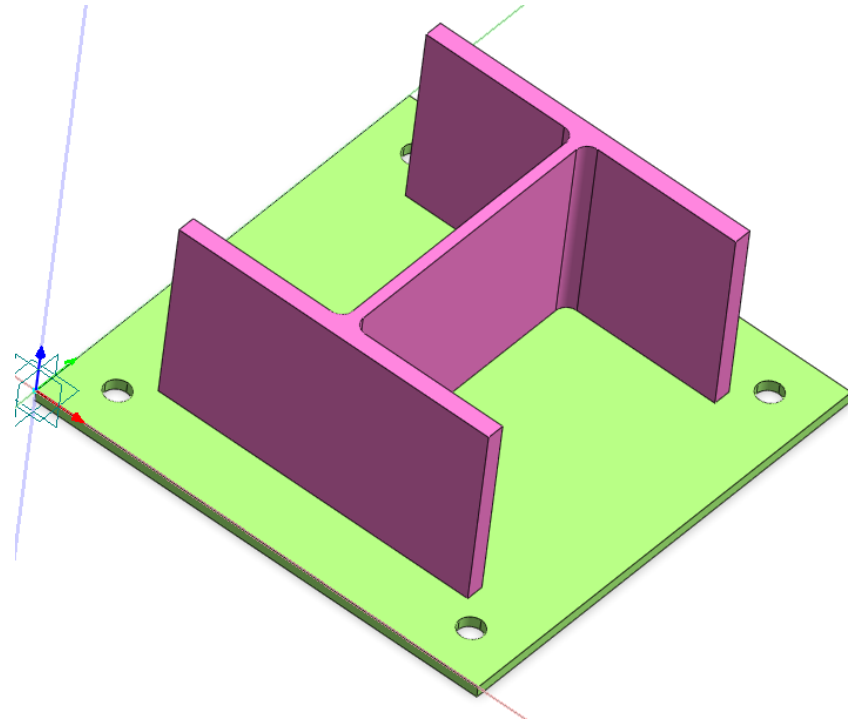
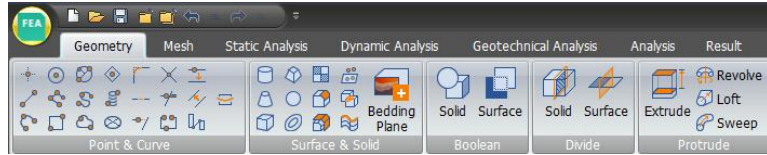


RIB PL	-
WING PL	-
BASE PL	50.00x50.00x1.200t (SS400)
ANCHOR	4-M27 (SS400, L=15.00)
ANCHOR	Cast-In-Place Hooked Bolt-L

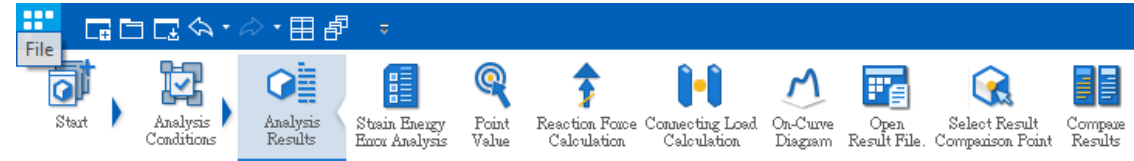
DESIGN+ MODEL



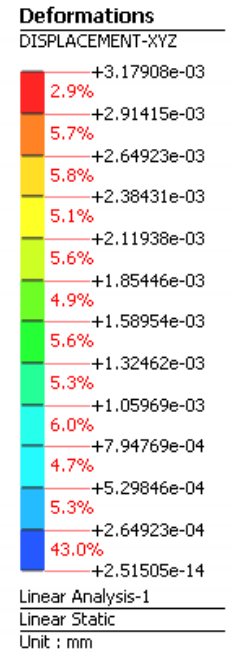
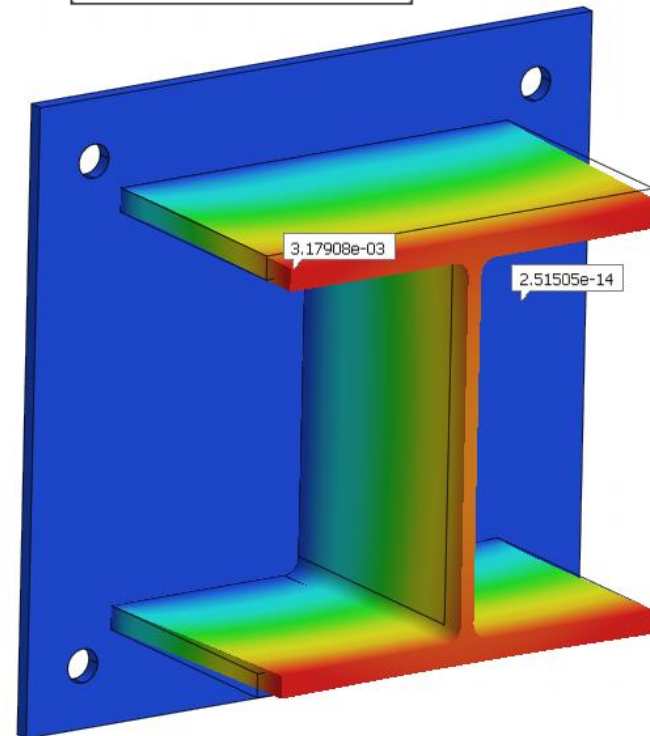
FEA NX MODEL (2D)



FEA NX MODEL (3D)

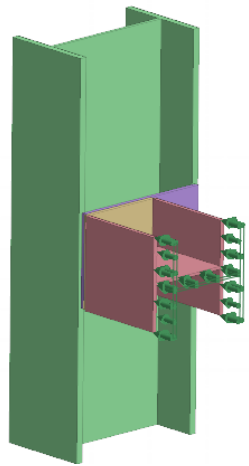


Analysis Case
Result

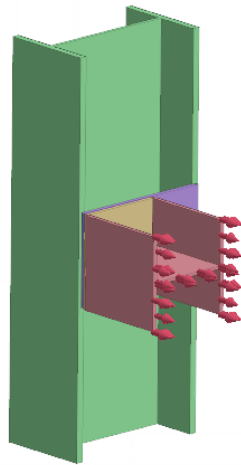


MESHFREE RESULTS

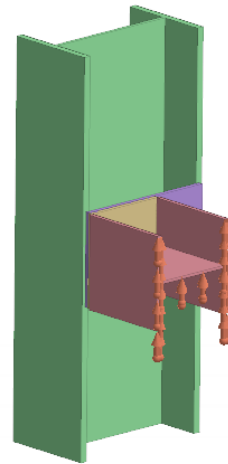
CASE 1: 格點尺寸和載荷類型



Pressure



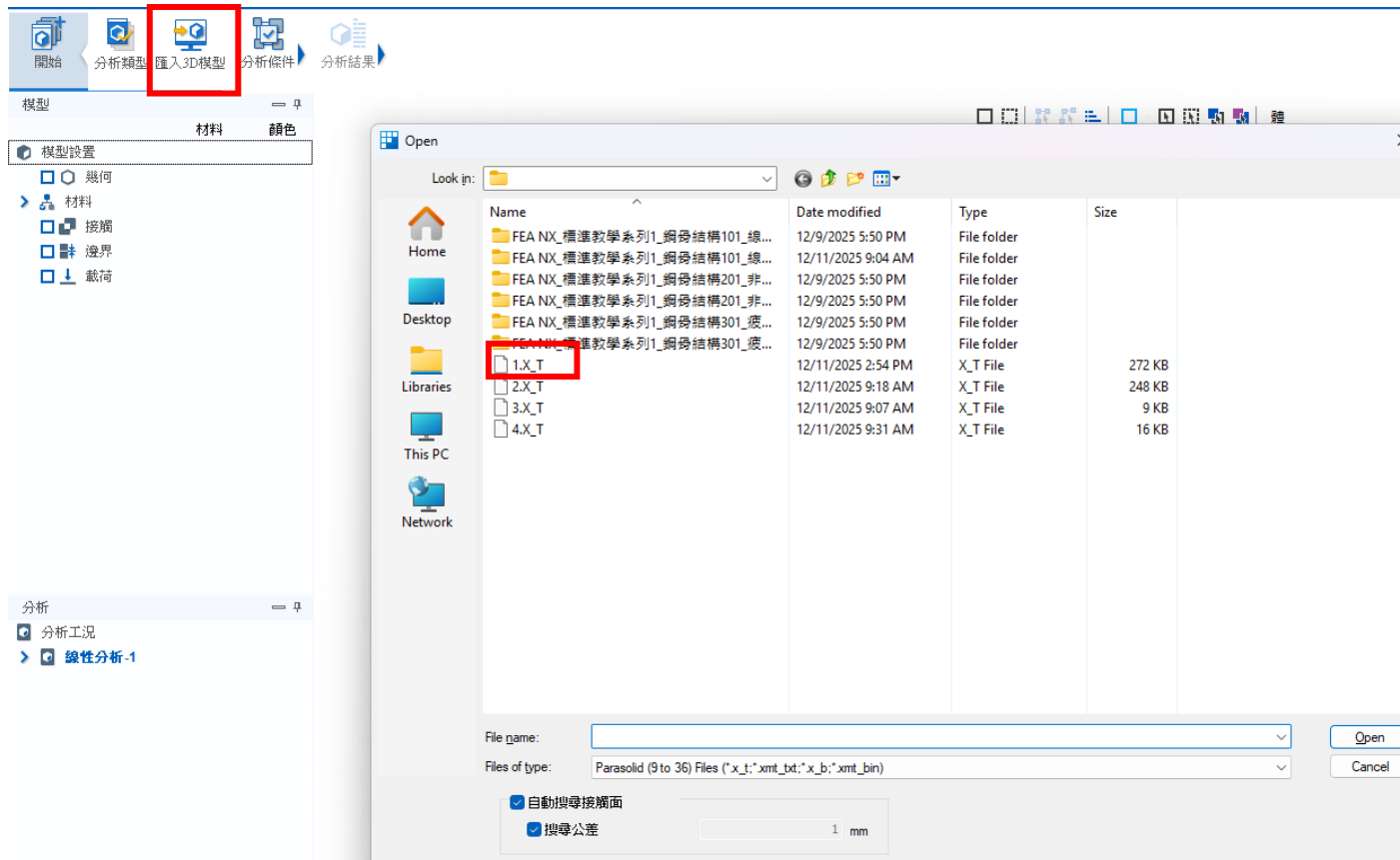
Force

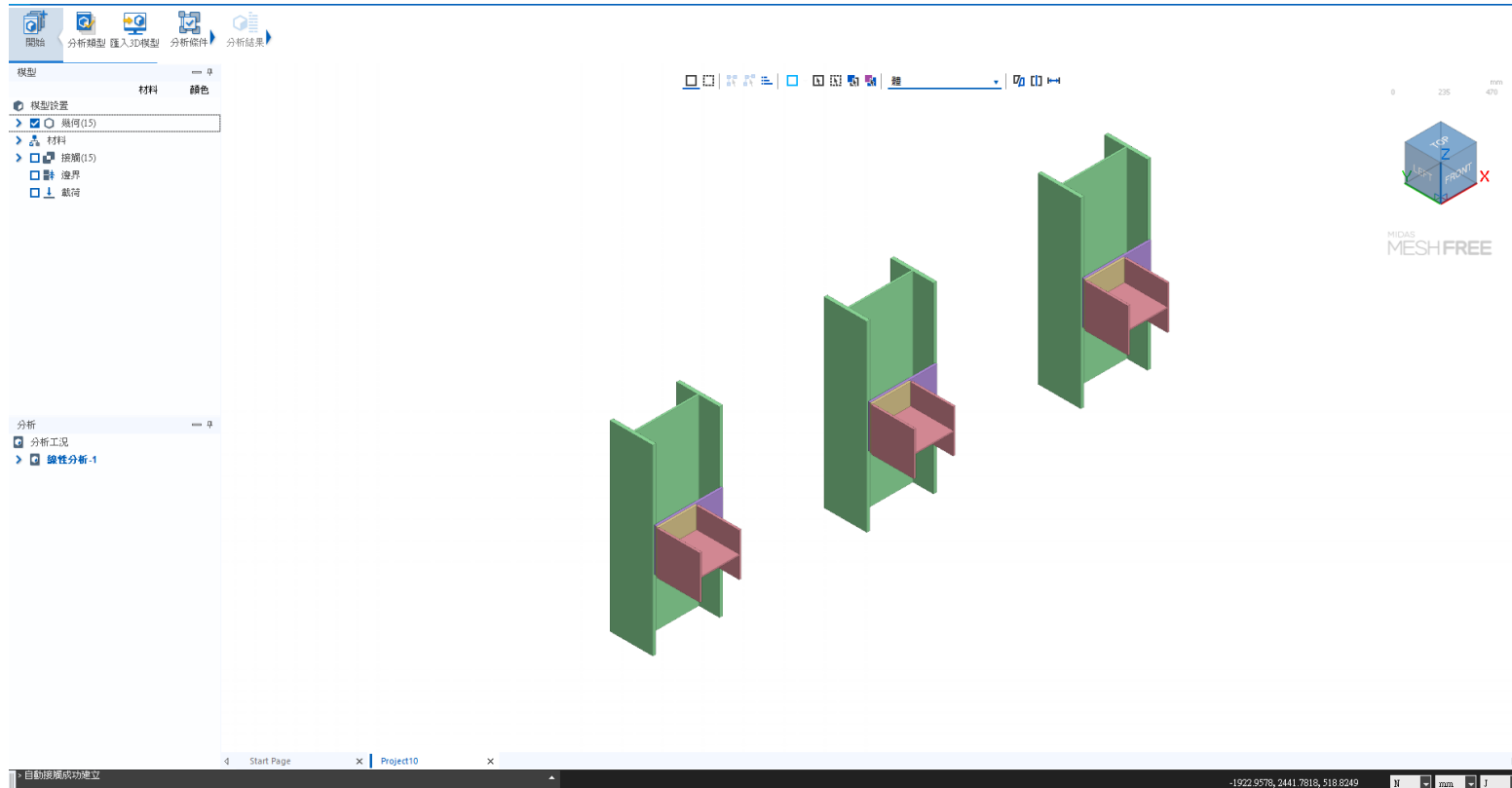


Displacement

CASE OVERVIEW/HIGHLIGHTS

1. Material
2. Boundary Conditions
3. Load Type
4. Weld Contact
5. Grid Size





模型設置

- 幾何
- 材料
- 接觸(20)
- 邊界(1)
- 載荷(2)

新增(等向性-彈塑性)
 新增(等向性-超彈性)
 新增(正交性-線彈性)

CNS(S) 名稱 CNS(S)_SS490 顏色 座標系 無

彈塑性 熱

結構

彈性模量 205940 N/mm² 熱膨脹 膨脹係數 1.1e-005
 泊松比 0.3 參考溫度 0 [°C]
 質量密度 7.85e-006 kg/mm³

計算安全係數

失效理論 無

拉伸 0 N/mm² 壓縮 0 N/mm²

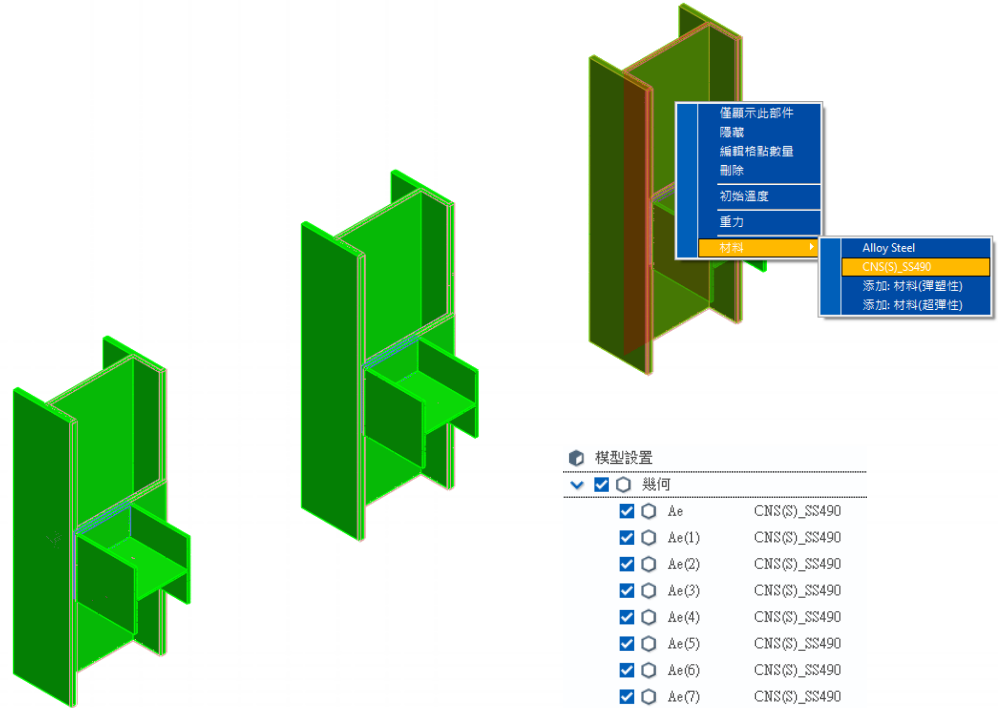
彈塑性

塑性硬化曲線 無 函數
 應力-應變曲線 無 函數
 硬化法則 等向性
 綜合硬化因子(0.0-1.0) 0
 理想塑性
 屈服應力 0 N/mm²

一般

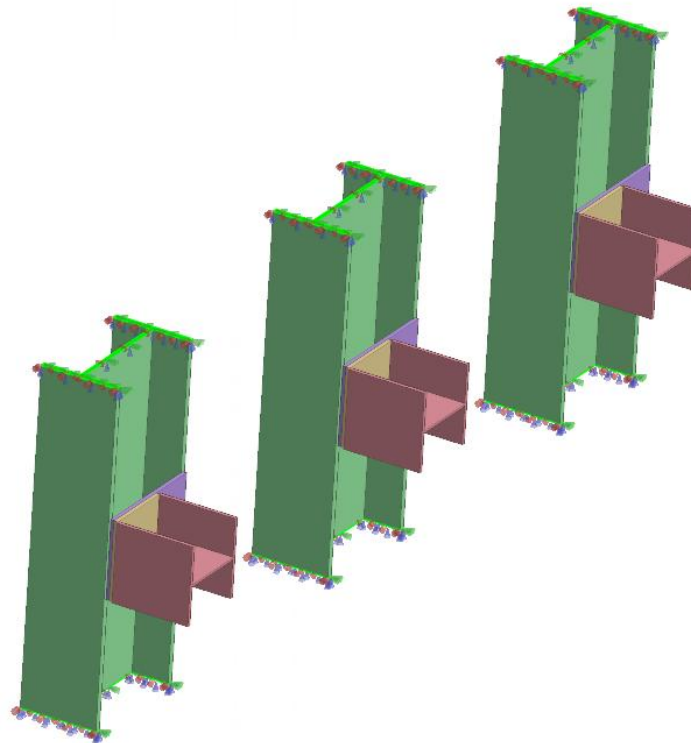
質量比例阻尼 0 1/sec
 剛度比例阻尼 0 sec
 結構阻尼係數 0

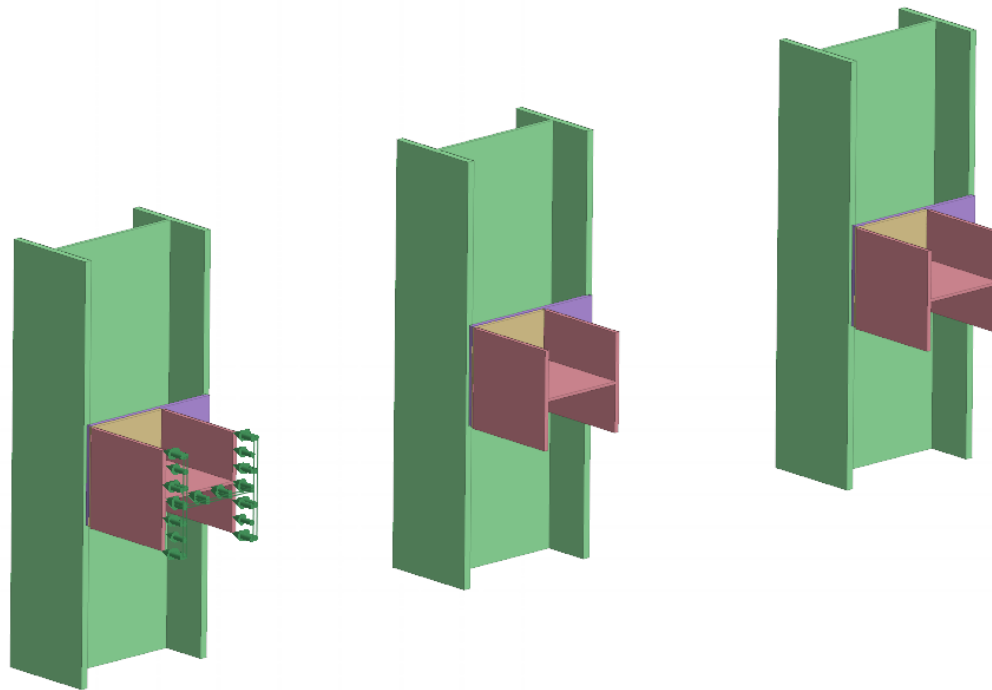
載入 編輯



模型設置

- 幾何
- Ae CNS(S)_SS490
 - Ae(1) CNS(S)_SS490
 - Ae(2) CNS(S)_SS490
 - Ae(3) CNS(S)_SS490
 - Ae(4) CNS(S)_SS490
 - Ae(5) CNS(S)_SS490
 - Ae(6) CNS(S)_SS490
 - Ae(7) CNS(S)_SS490
 - Ae(8) CNS(S)_SS490
 - Ae(9) CNS(S)_SS490
 - Ae(10) CNS(S)_SS490
 - Ae(11) CNS(S)_SS490
 - Ae(12) CNS(S)_SS490
 - Ae(13) CNS(S)_SS490
 - Ae(14) CNS(S)_SS490







力

↓ ↓ ↓

名稱 力-1

負載

類型 集中載荷

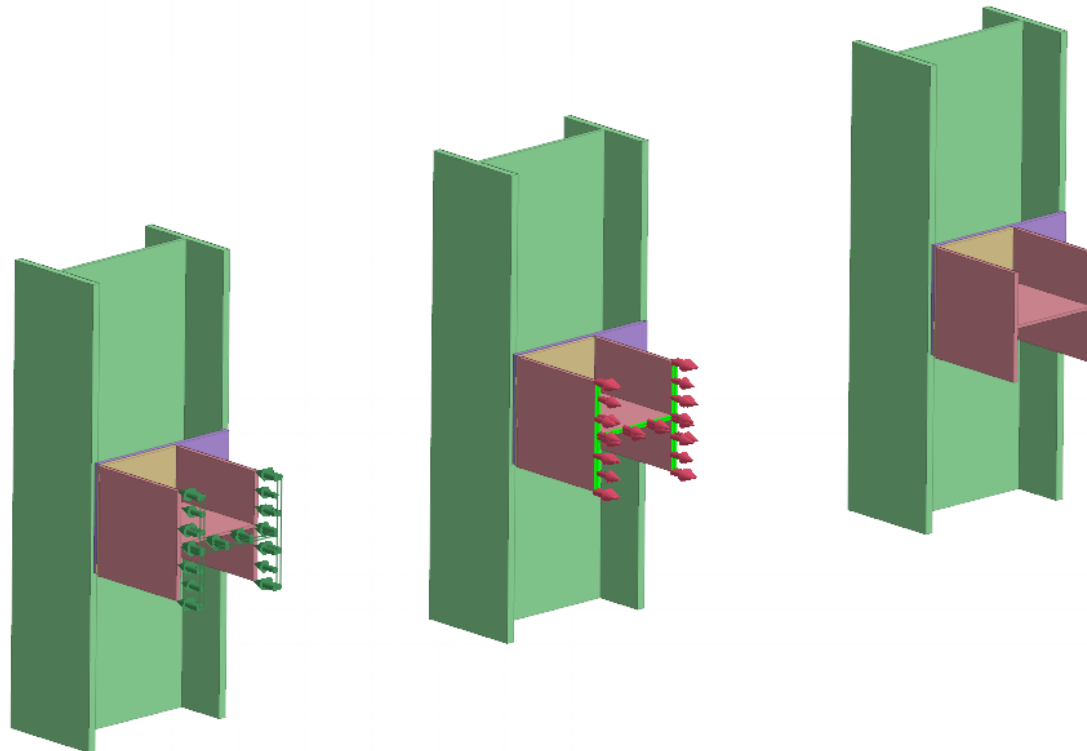
合計 個別

? 已經選取 1 個幾何特徵

方向

X	0 N
Y	-50000 N
Z	0 N

↻ ✓ + ✕





位移 [X]

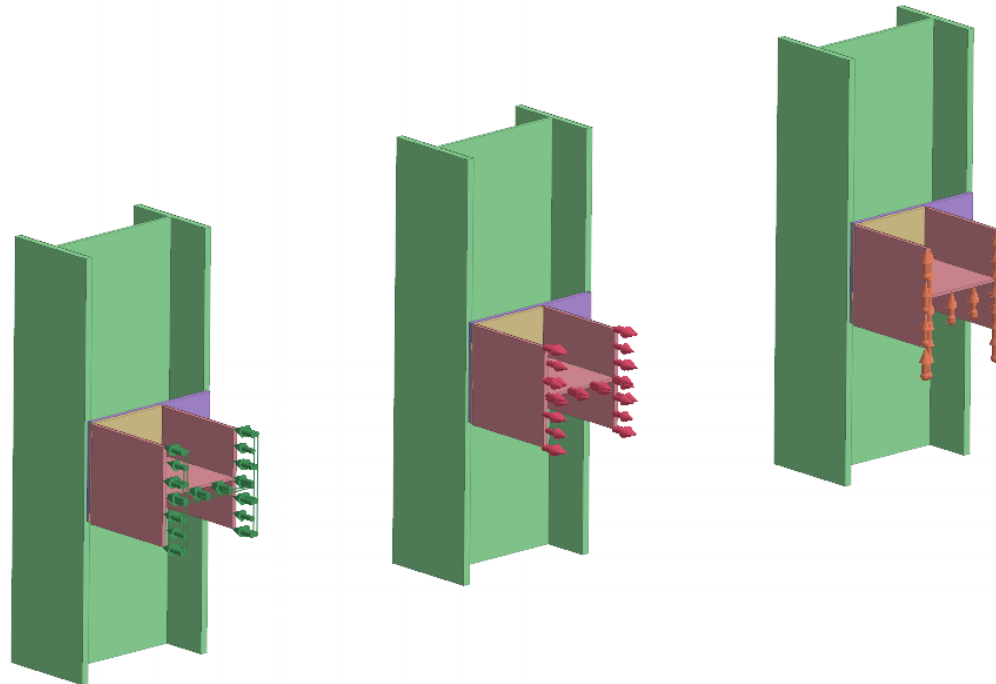
名稱 位移-1

→ 已經選取 1 個幾何特徵

方向 [^]

<input type="checkbox"/> Tx	0 mm	<input type="checkbox"/> Rx	0
<input type="checkbox"/> Ty	0 mm	<input type="checkbox"/> Ry	0
<input checked="" type="checkbox"/> Tz	-0.5 mm	<input type="checkbox"/> Rz	0

[Refresh] [OK] [Add] [Close]





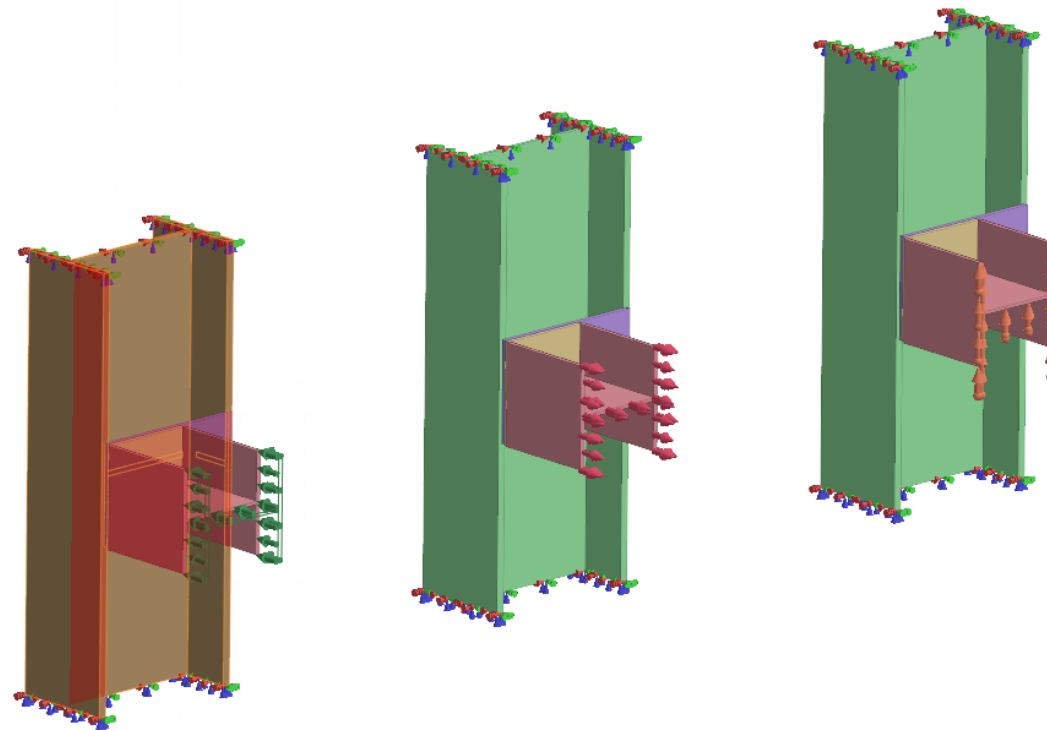
重力

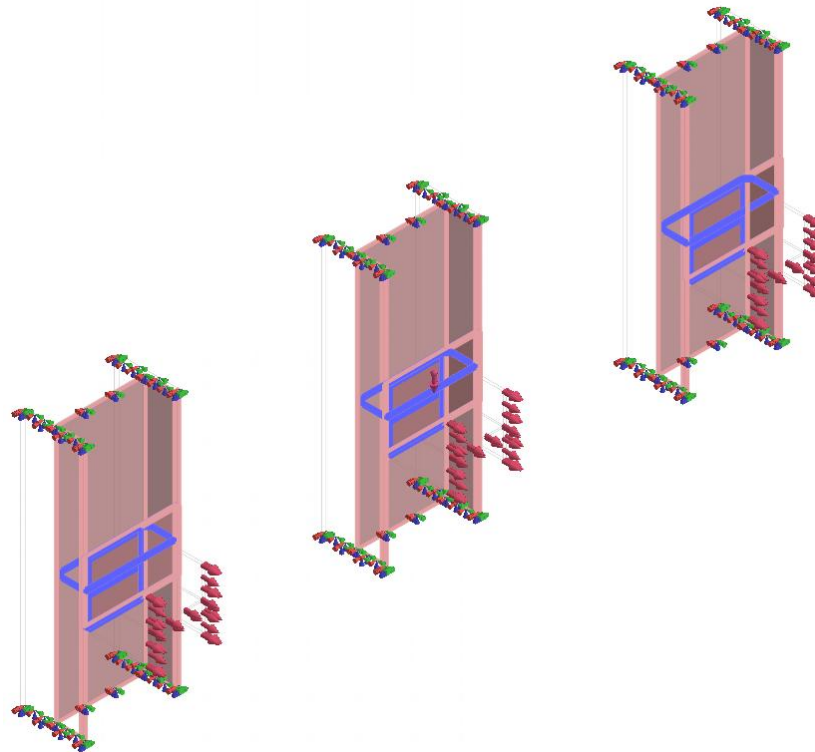
名稱 重力-1

比例因子

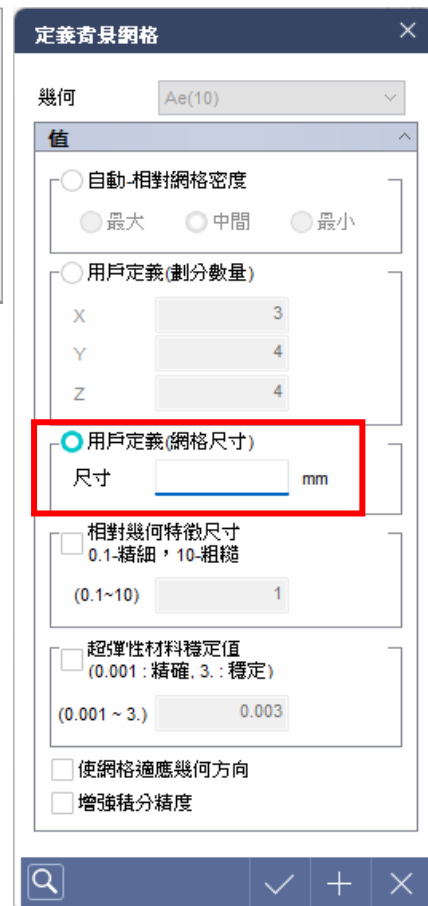
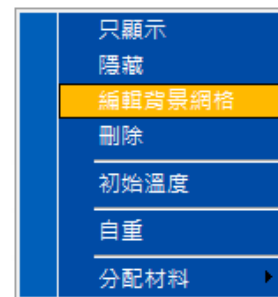
Gx	0	mm/sec ²
Gy	0	mm/sec ²
Gz	-9806	mm/sec ²

✓ + ✕



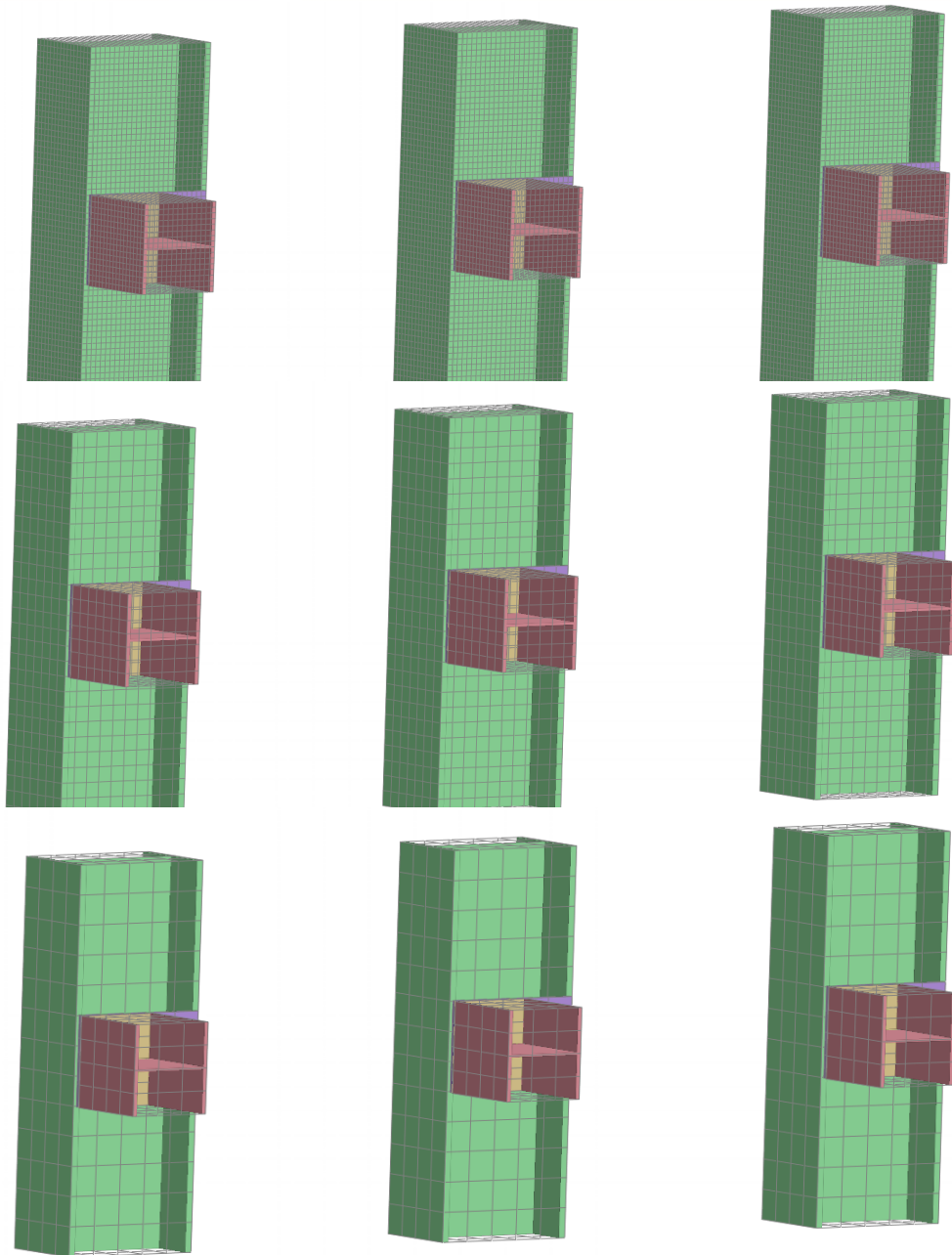


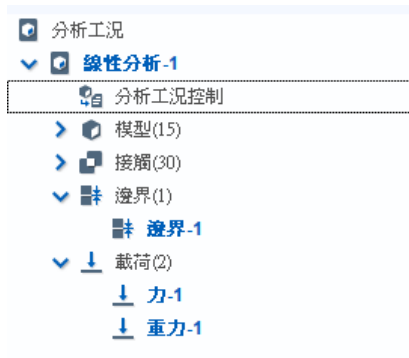
尺寸: 20 mm



尺寸: 50 mm

尺寸: 100 mm

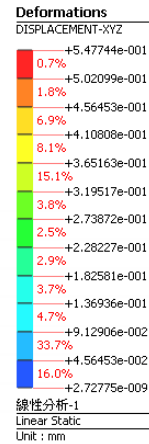
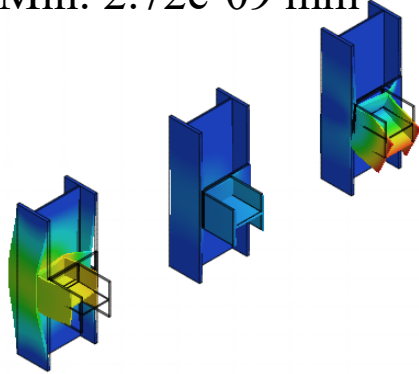




Grid Size: 20mm

Max: 0.5477 mm

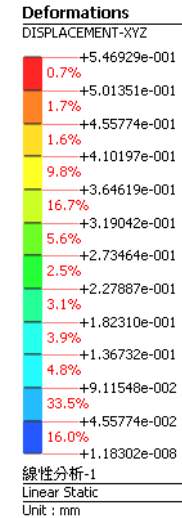
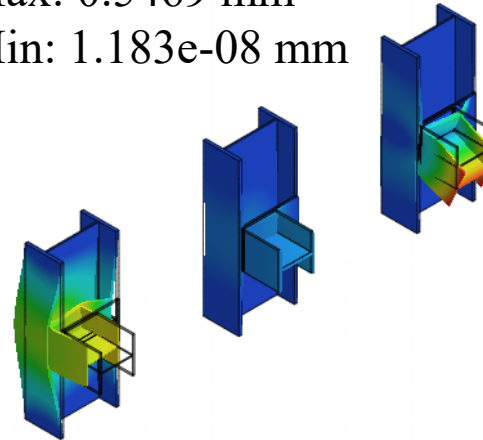
Min: 2.72e-09 mm



Grid Size: 50mm

Max: 0.5469 mm

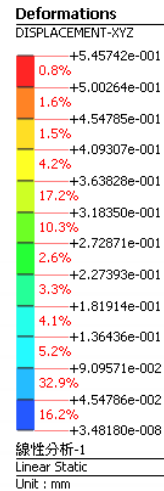
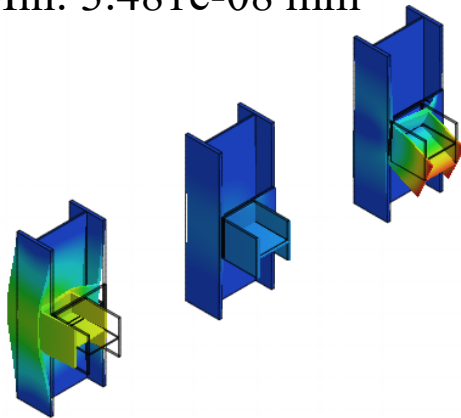
Min: 1.183e-08 mm



Grid Size: 100mm

Max: 0.5457 mm

Min: 3.481e-08 mm

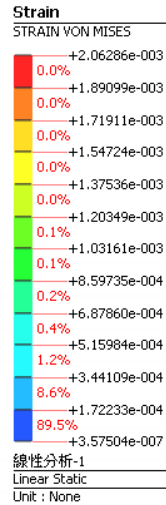
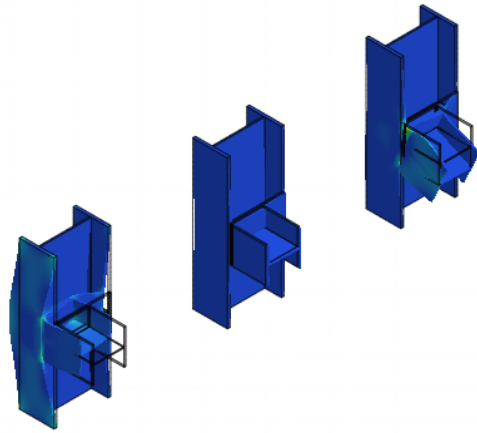


DEFORMATION

Grid Size: 20mm

Max: 0.00206

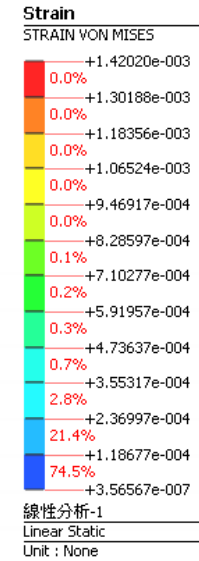
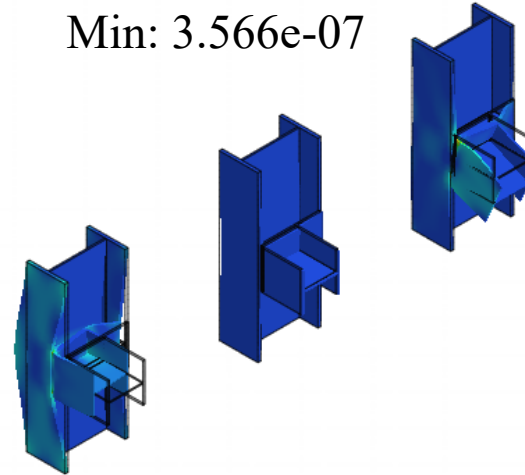
Min: 3.575e-07



Grid Size: 50mm

Max: 0.001420

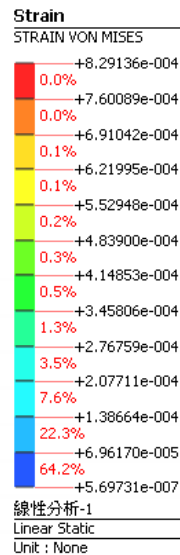
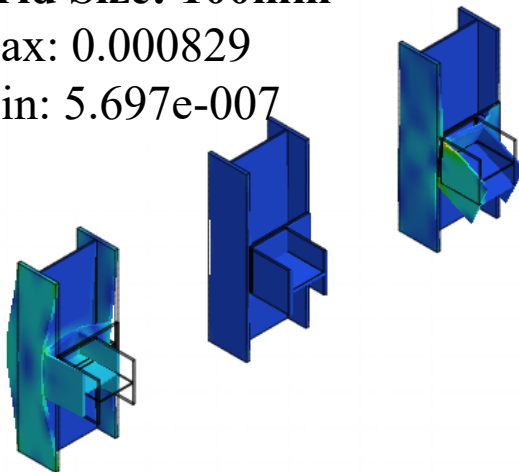
Min: 3.566e-07



Grid Size: 100mm

Max: 0.000829

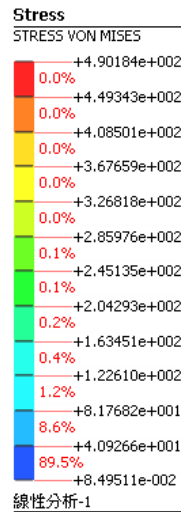
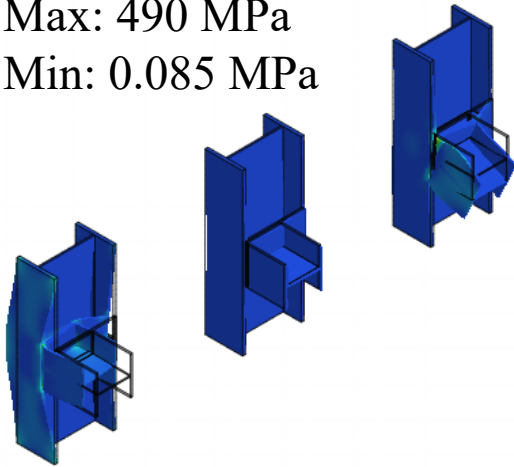
Min: 5.697e-007



STRAIN

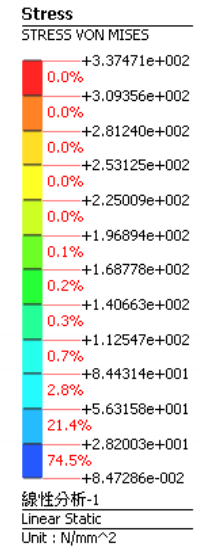
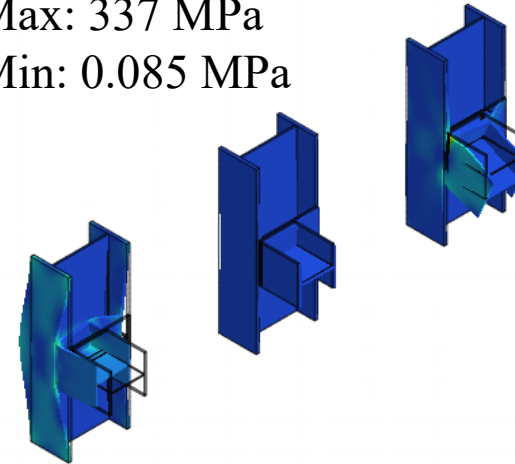
Grid Size: 20mm

Max: 490 MPa
Min: 0.085 MPa



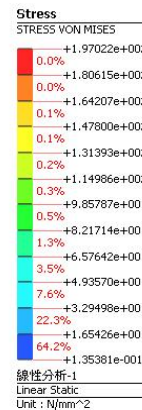
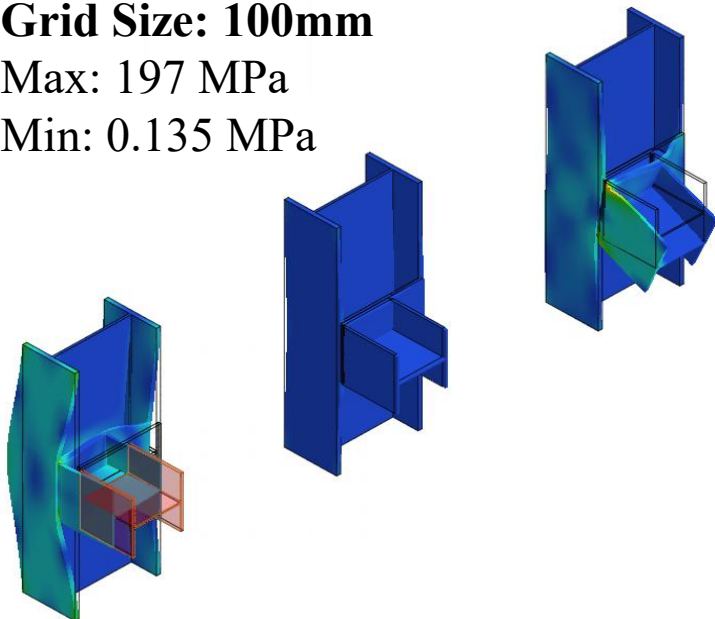
Grid Size: 50mm

Max: 337 MPa
Min: 0.085 MPa



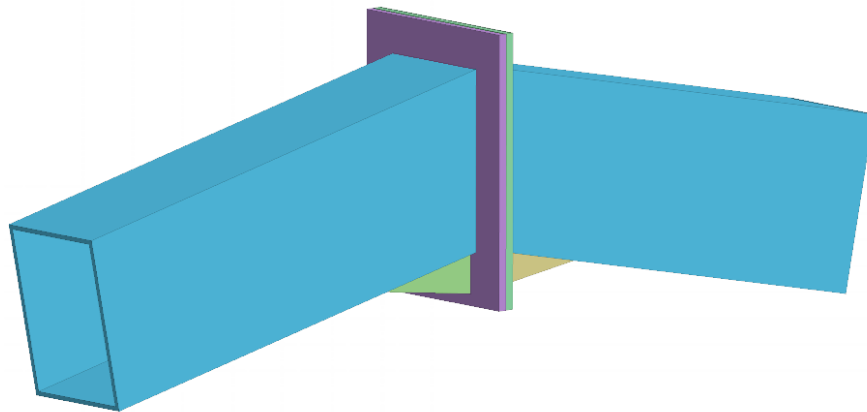
Grid Size: 100mm

Max: 197 MPa
Min: 0.135 MPa



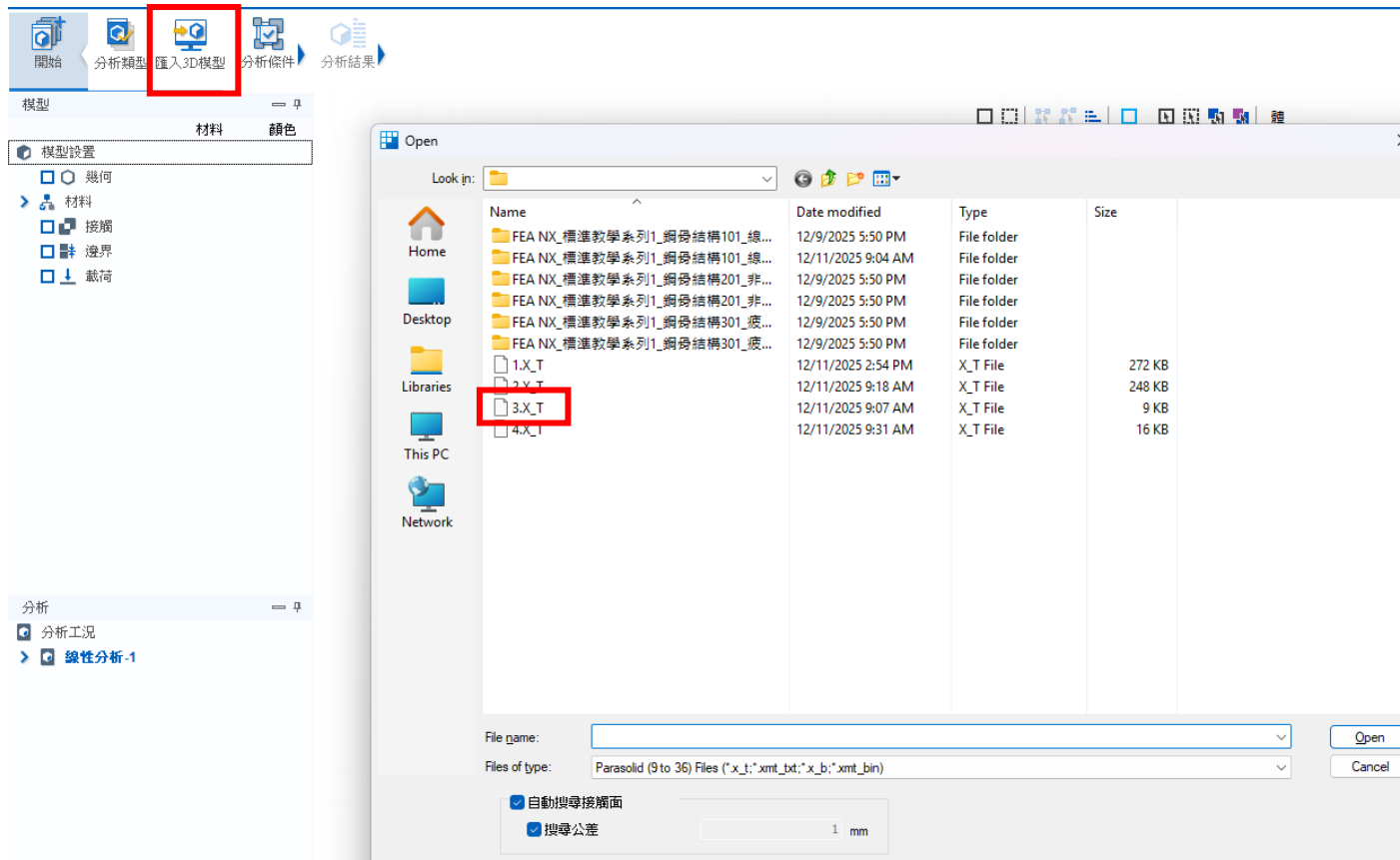
STRESS

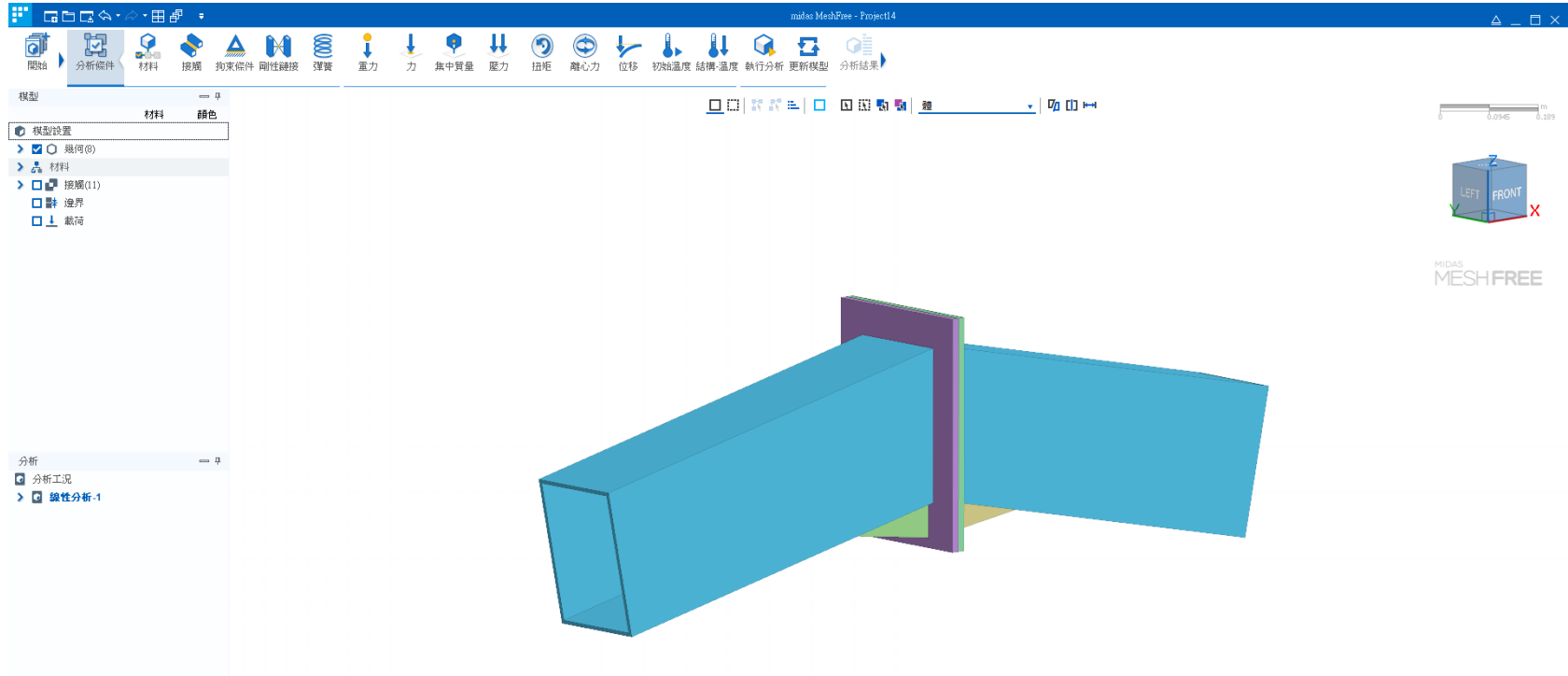
CASE 2: 剛性連接和局部座標



CASE OVERVIEW/HIGHLIGHTS

1. Local Coordinate System
2. Rigid Body





模型設置
 幾何
 材料
 接觸(20)
 邊界(1)
 載荷(2)

新增(等向性-彈塑性)
 新增(等向性-超彈性)
 新增(正交性-線彈性)

CNS(S) 名稱 CNS(SS)490 顏色 座標系 無

彈塑性 熱

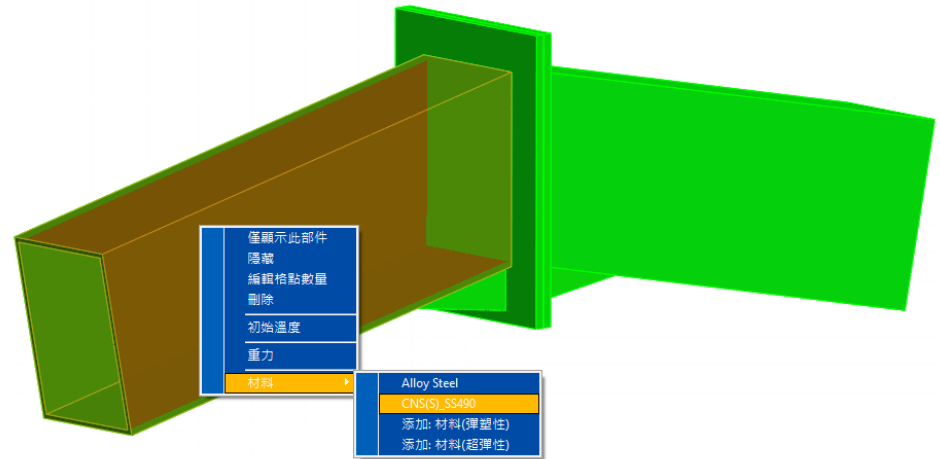
結構
 彈性模量 205940 N/mm² 熱膨脹係數 1.1e-005
 泊松比 0.3 參考溫度 0 [°C]
 質量密度 7.85e-006 kg/mm³

計算安全係數
 失效理論 無
 拉伸 0 N/mm² 壓縮 0 N/mm²

彈塑性
 塑性硬化曲線 無 函數
 應力-應變曲線 無 函數
 硬化法則 等向性
 綜合硬化因子(0.0-1.0) 0
 理想塑性
 屈服應力 0 N/mm²

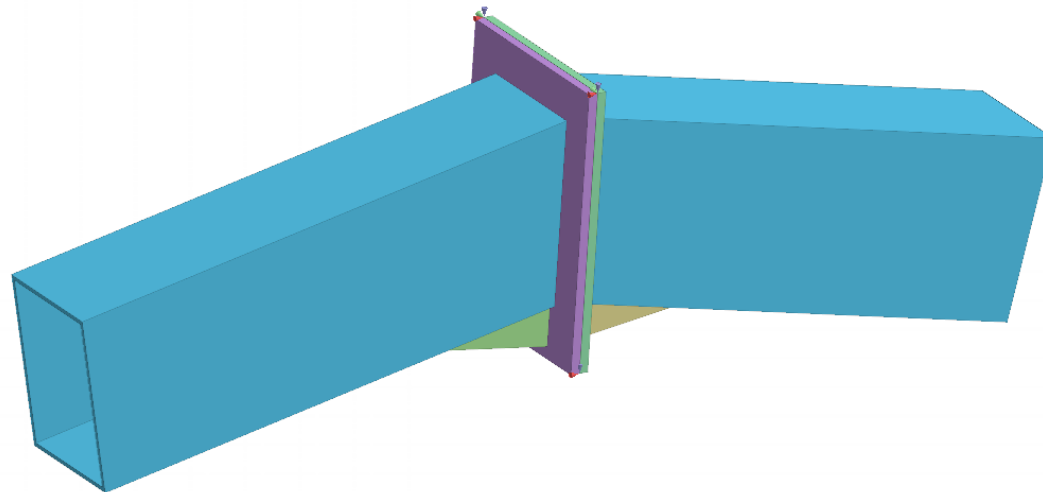
一般
 質量比例阻尼 0 1/sec
 剛度比例阻尼 0 sec
 結構阻尼係數 0

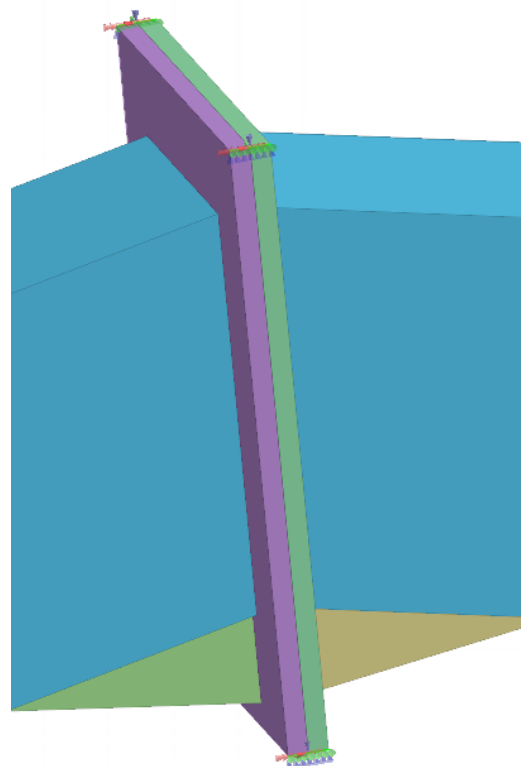
載入 編輯

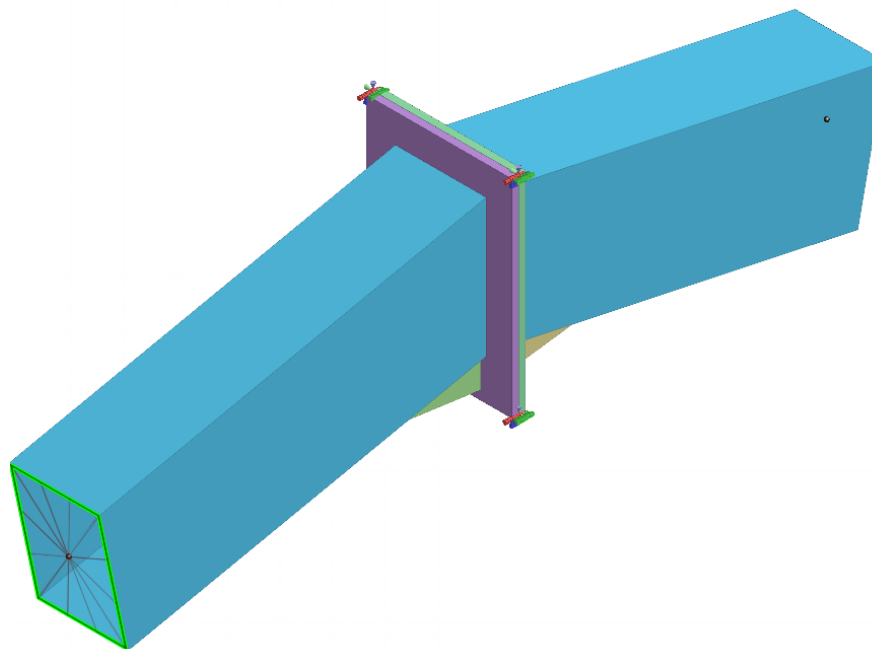
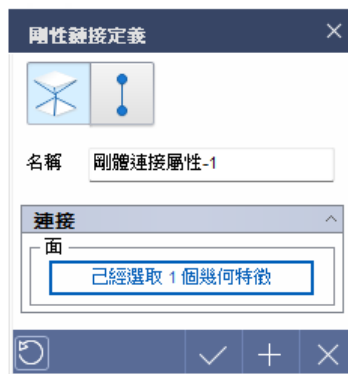


模型設置
 幾何(8)

- Extrude(1) CNS(SS)_SS490
- Extrude(1)(1.. CNS(SS)_SS490
- Body CNS(SS)_SS490
- Body(2) CNS(SS)_SS490
- Body(3) CNS(SS)_SS490
- Body(4) CNS(SS)_SS490
- Body(5) CNS(SS)_SS490
- Body(6) CNS(SS)_SS490









定義力

名稱 Force-2

載荷類型

載荷類型 集中力載荷

主

點 已選擇 1 物件

座標 0, 0, 0

從

參考目標

類型 面

已選擇 1 物件

方向

X	0	N
Y	0	N
Z	5000	N

↺
✓
+
×



Define Pressure

Name: Pressure-1

Selected 1 Object(s)

Direction

Load: Normal

X: 0

Y: 0

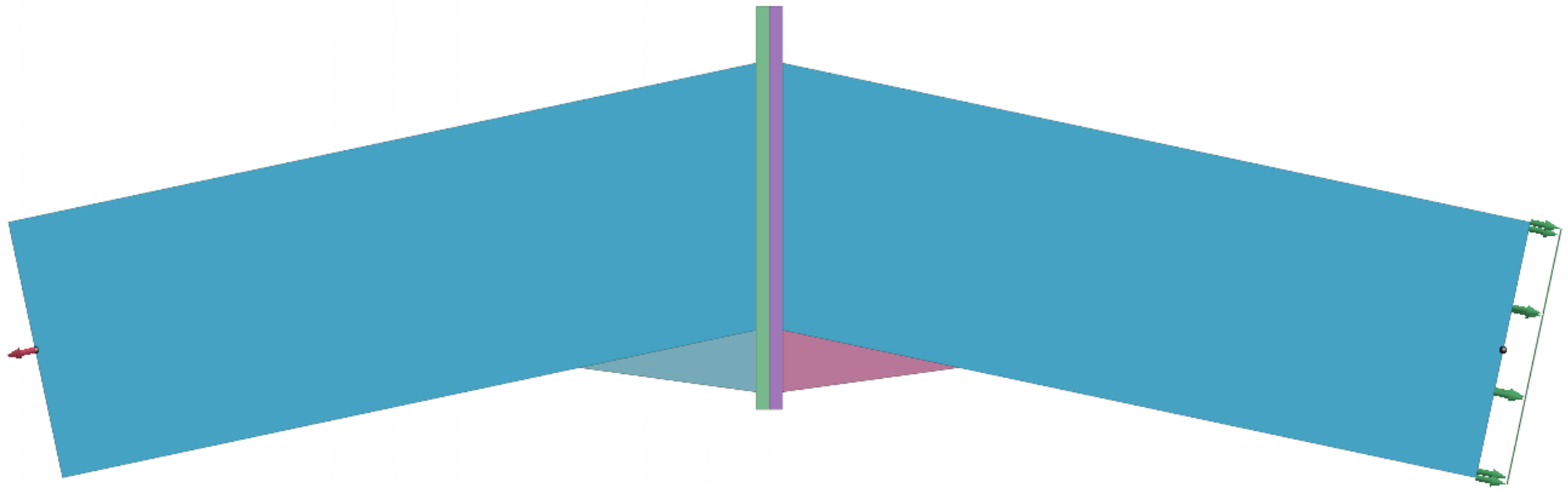
Z: 0

Pressure

P: -20 N/mm²

Follower Force

Use Follower Force in Geometrically Nonlinear Analysis





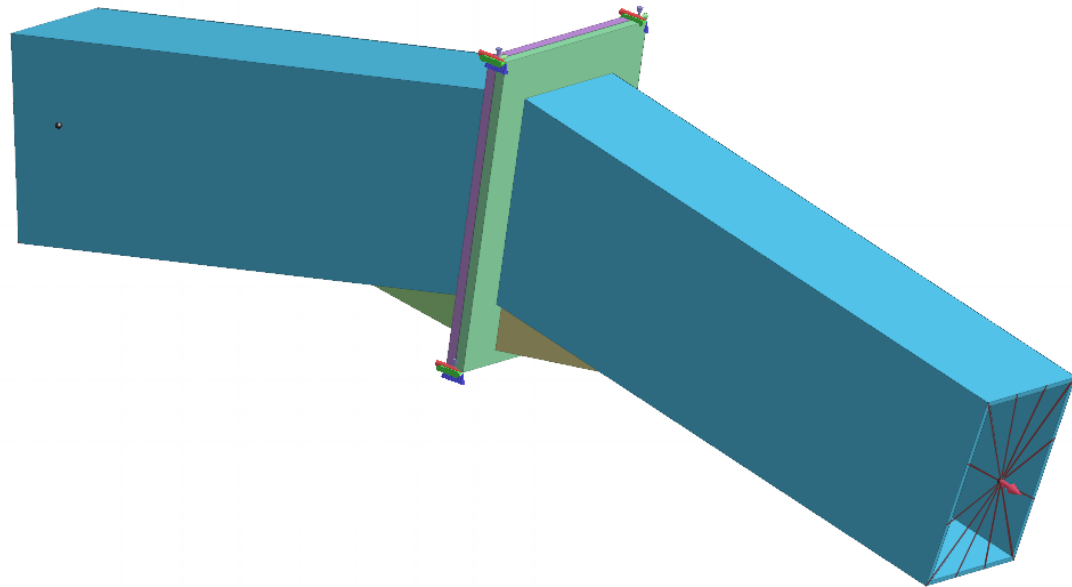
Define Gravity
✕

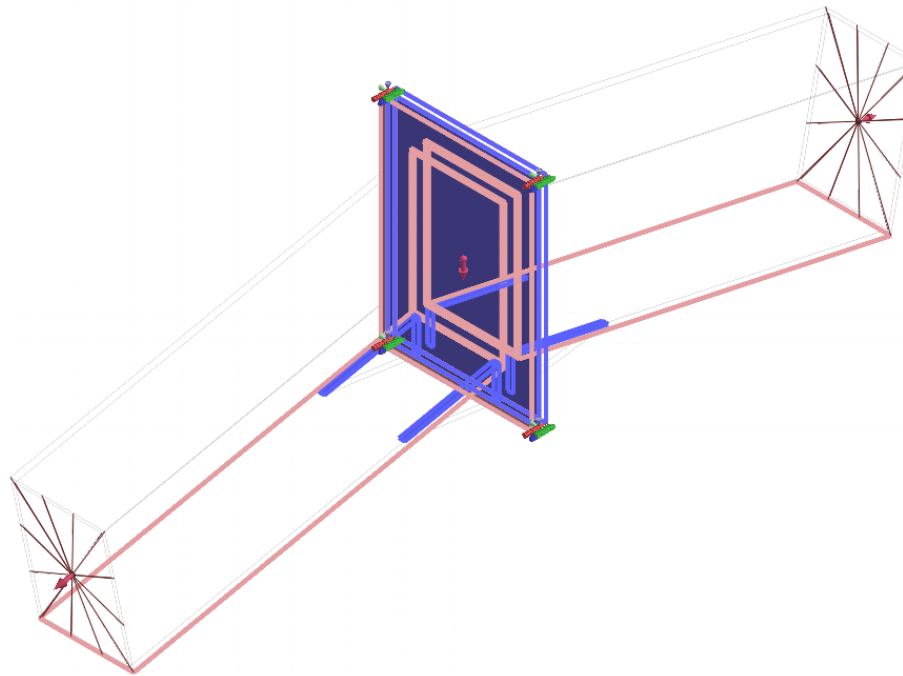
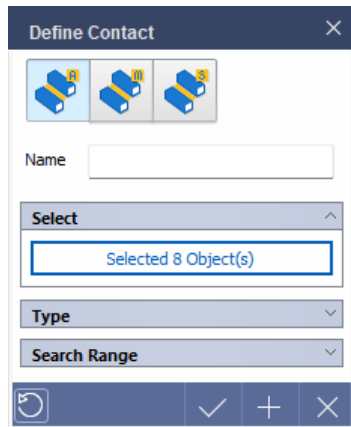
Name

Value

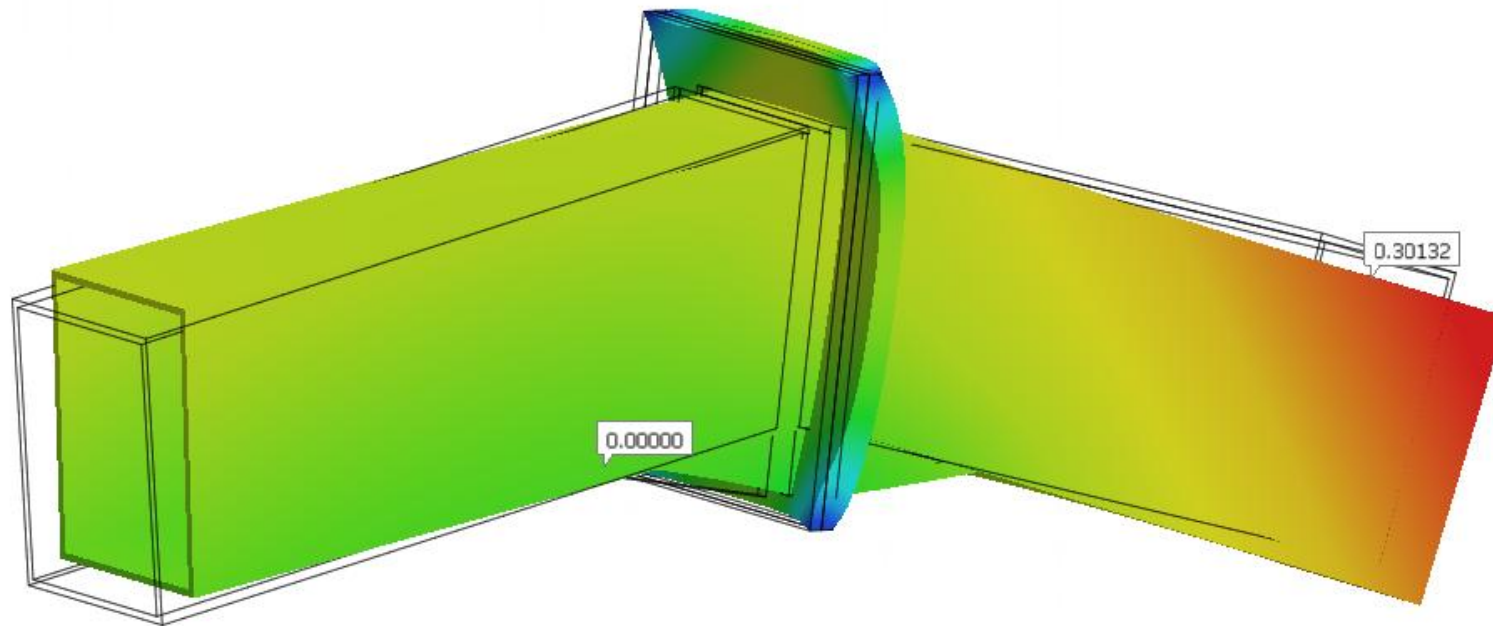
Gx	<input style="width: 70%;" type="text" value="0"/>	mm/sec ²
Gy	<input style="width: 70%;" type="text" value="0"/>	mm/sec ²
Gz	<input style="width: 70%;" type="text" value="-9806"/>	mm/sec ²

↻
✓
+
✕





- 接觸
- Body-Body 焊接
 - Body-Body-... 焊接
 - Body-Body-... 焊接
 - Body-Body-... 焊接
 - Body-Body-... 焊接
 - Extrude(1)-B.. 焊接
 - Extrude(1)-B.. 焊接
 - Extrude(1)-B.. 焊接
 - Extrude(1)-B.. 焊接
 - Extrude(1)-B.. 焊接
 - Extrude(1)-B.. 焊接
 - Body-Body-... Welded
 - Body-Body-... Welded
 - Body-Body-... Welded
 - Body-Body-... Welded
 - Body-Body-... Welded
 - Extrude(1)-B.. Welded



變形

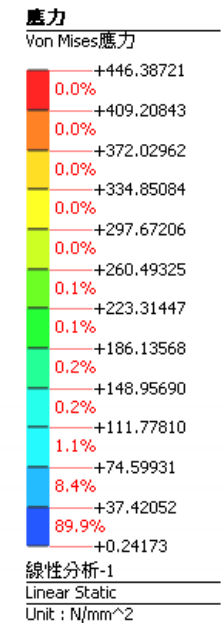
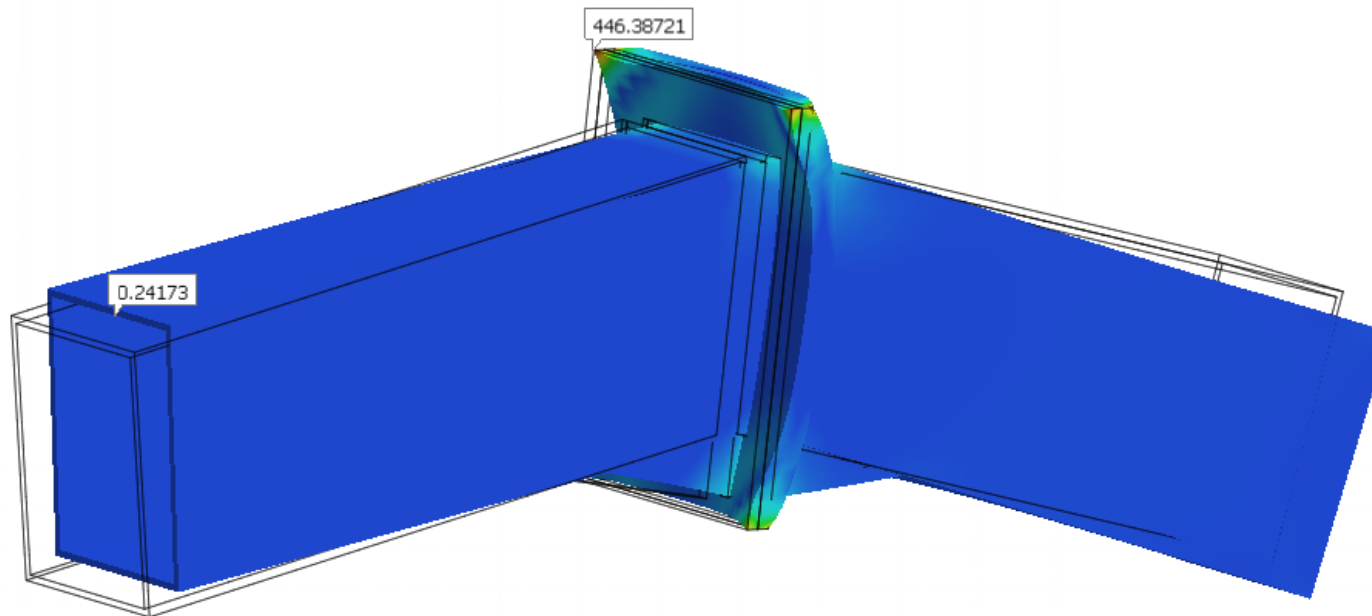
位移-XYZ

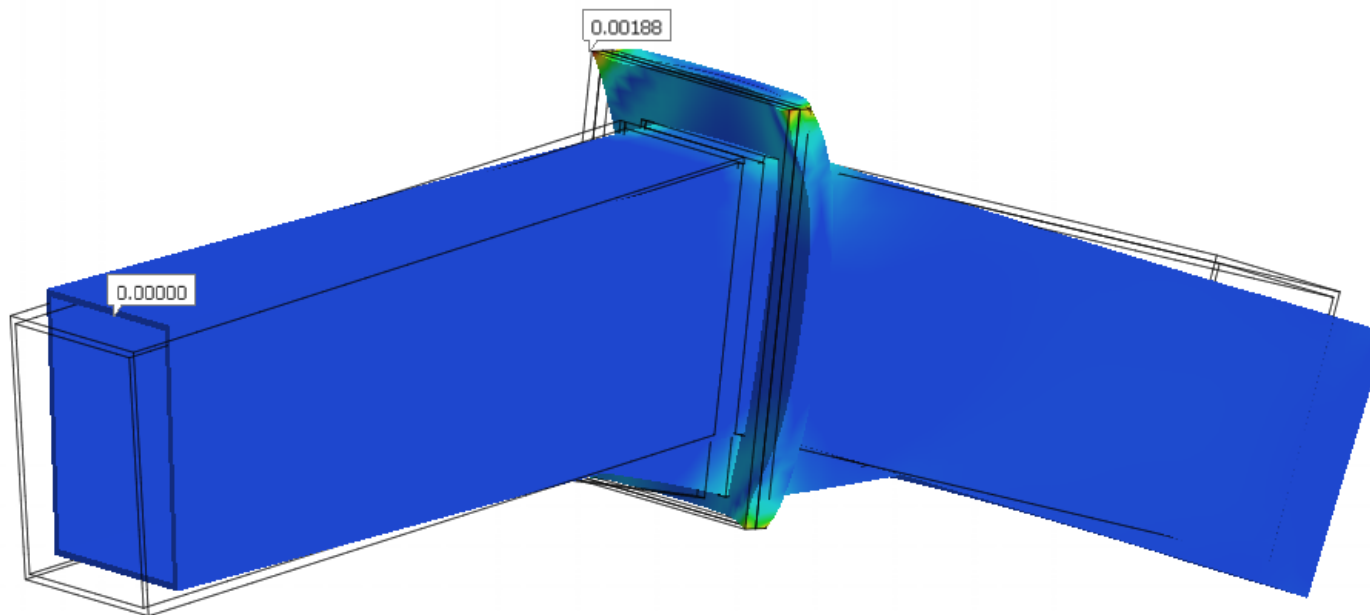


線性分析-1

Linear Static

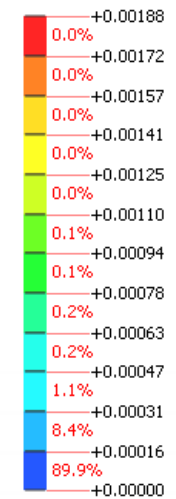
Unit : mm





應變

Von Mises應變



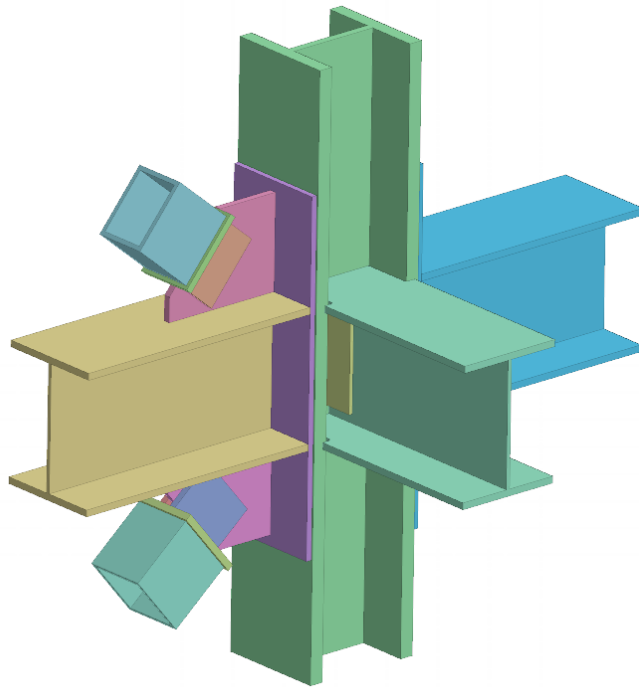
線性分析-1

Linear Static

Unit : None

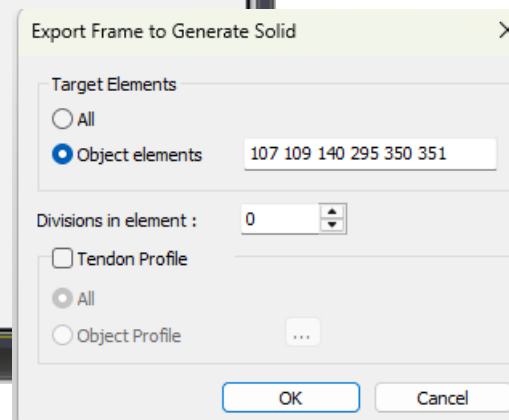
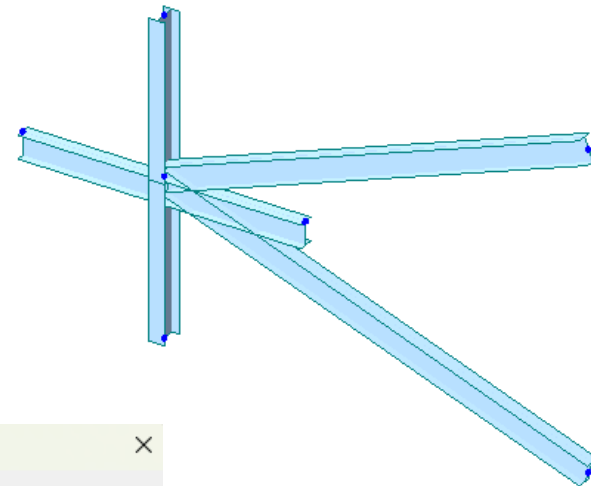
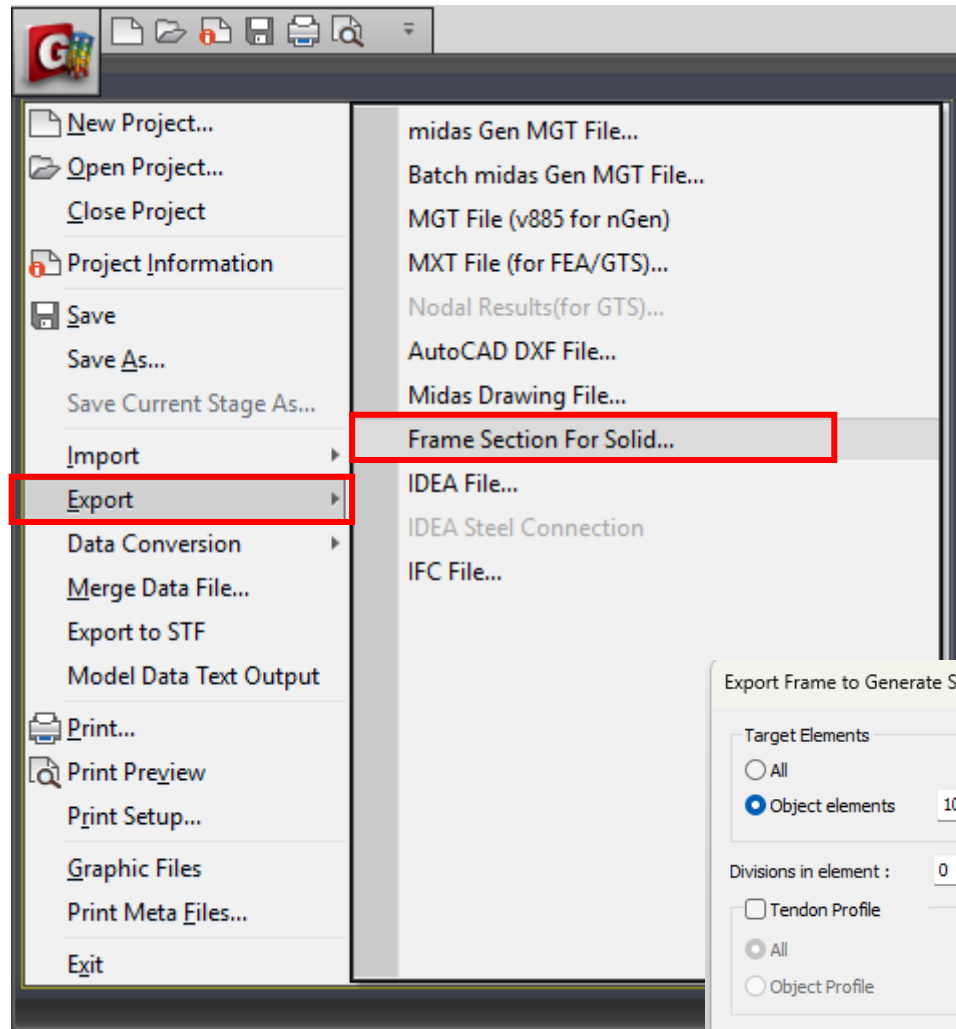
CASE 3 GEN NX and MeshFree

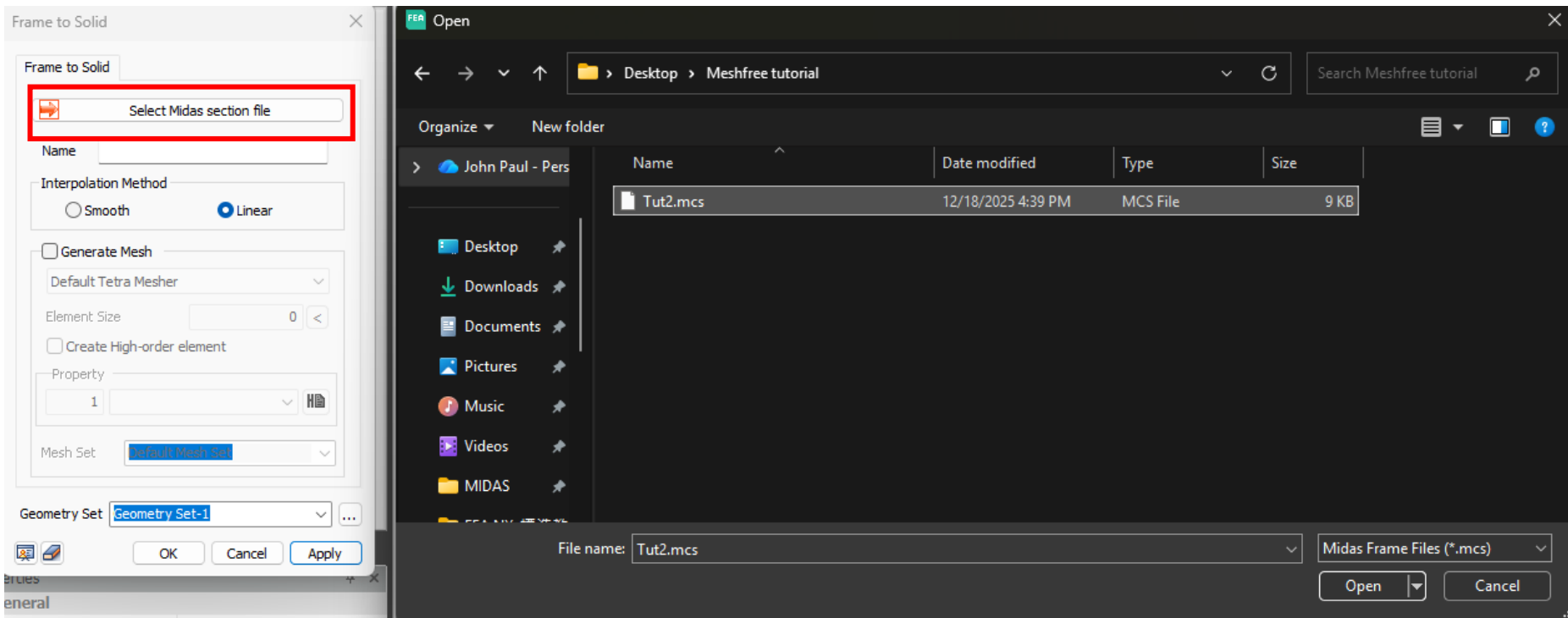
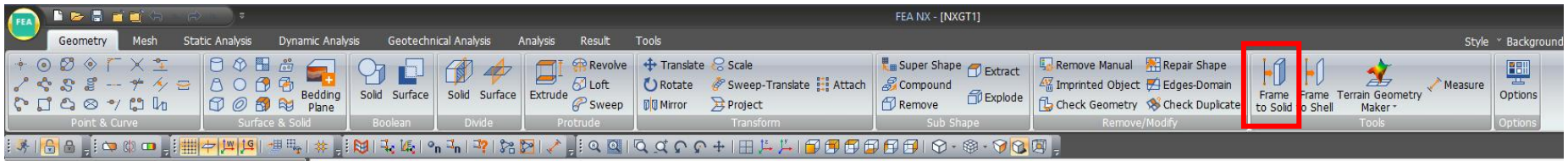
串接計算



CASE OVERVIEW/HIGHLIGHTS

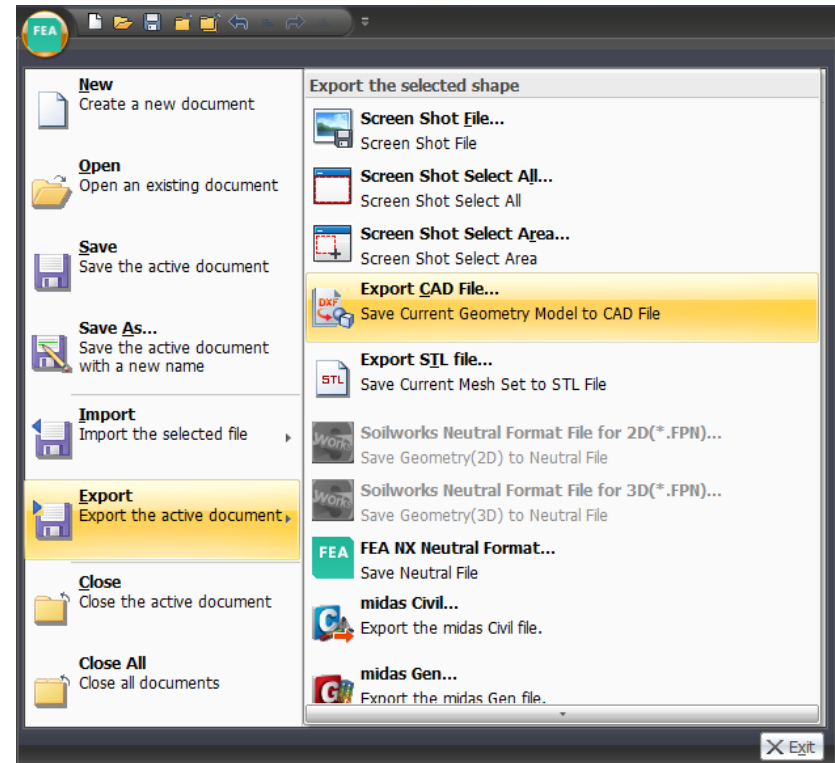
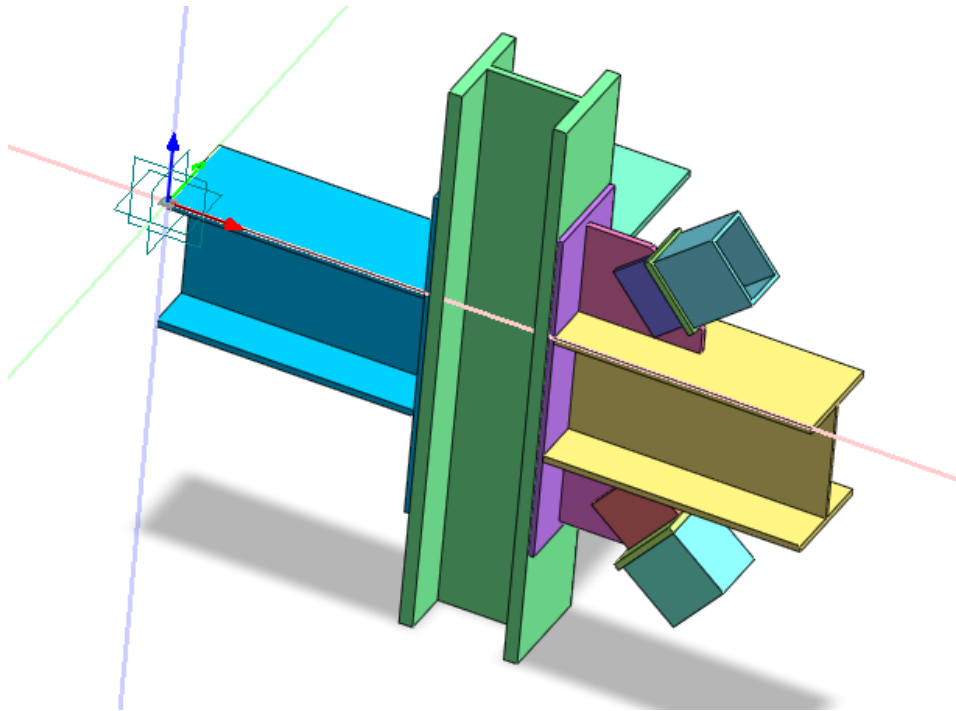
- MIDAS GEN NX –Meshfree Interaction





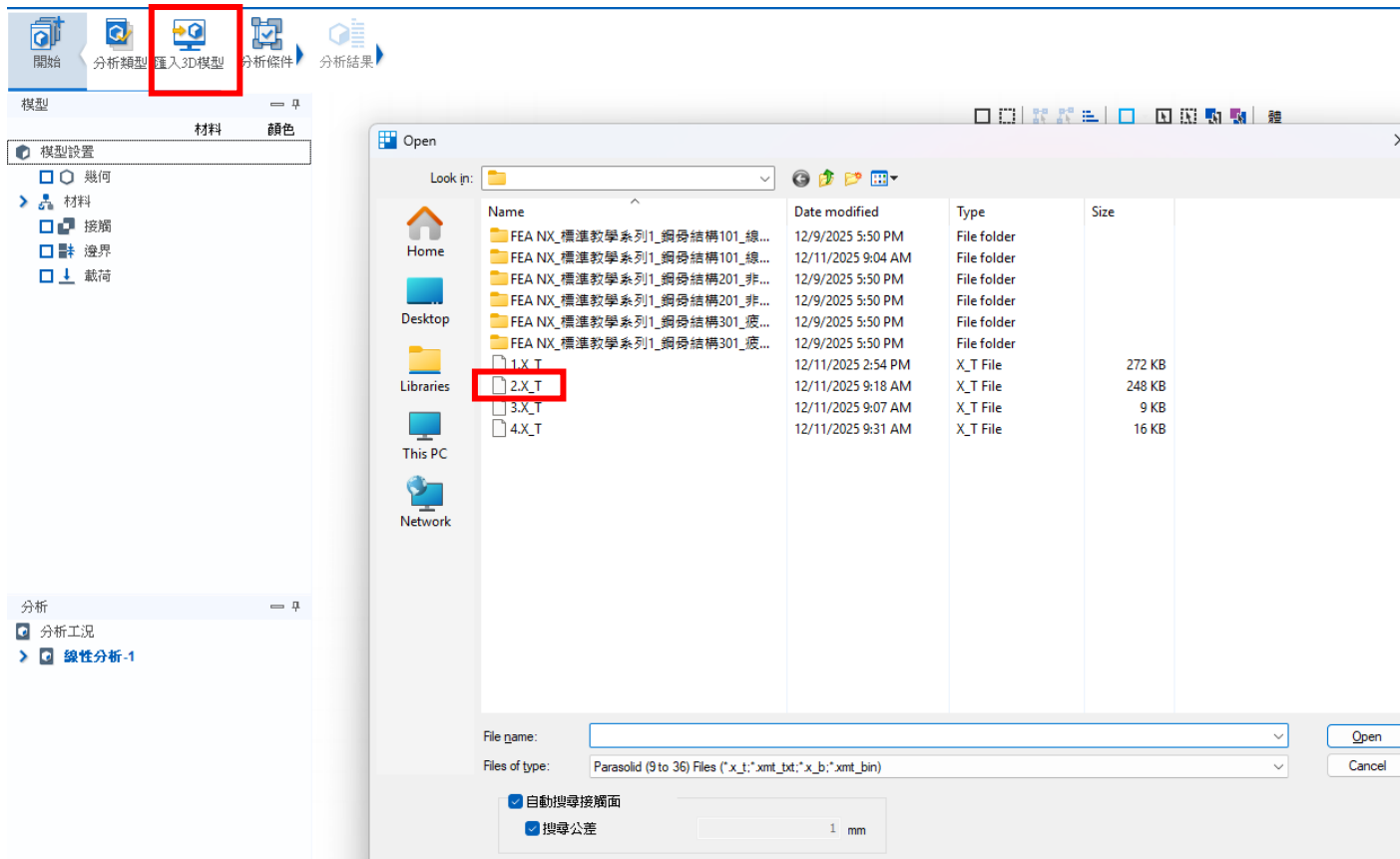
補充:接頭3D繪製

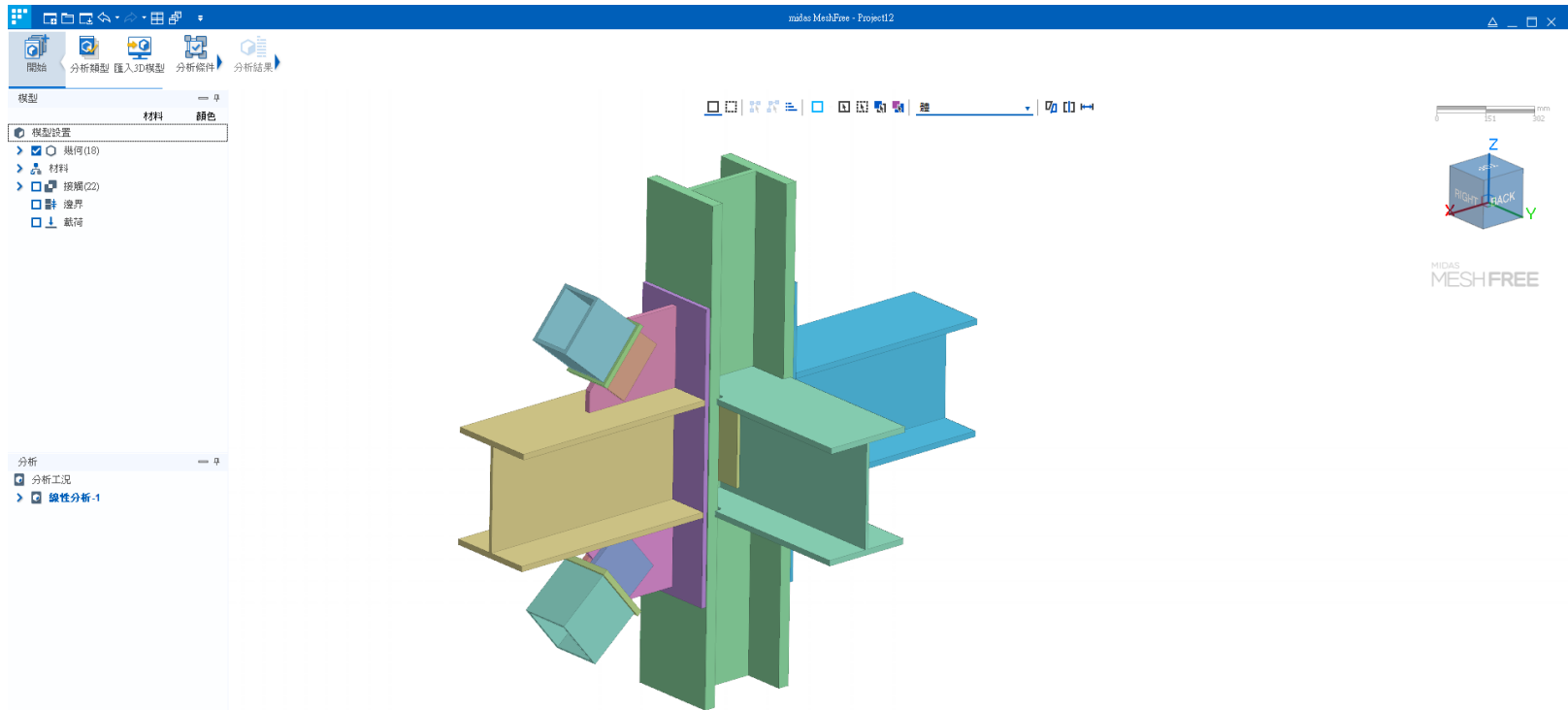
Note: Use any 3D CAD software to edit the model.



Export to any of the 3D CAD type

Parasolid (9 to 37.0.118) Files (*.x_t;*.xmt_b;*.xmt_bin)
 Parasolid (9 to 37.0.118) Files (*.x_t;*.xmt_b;*.x_b;*.xmt_bin)
 ACIS (R1 - 2024 1.0) Files (*.sat;*.sab;*.asat;*.asab)
 STEP (AP203, AP214, AP242) Files (*.stp;*.step)
 IGES (Up to 5.3) Files (*.igs;*.iges)
 Pro-E (16 - Creo 11.0) Files (*.prt;*.prt.*;*.asm;*.asm.*)
 CATIA V4 (CATIA 4.1.9 - 4.2.4) Files (*.model;*.exp;*.session)
 CATIA V5 (V5 R8 - V5-6 R2024) Files (*.CATPart;*.CATProduct)
 SolidWorks (98 - 2025) Files (*.sldprt;*.sldasm)
 Unigraphics (11 - NX2406) Files (*.prt)
 Inventor Part (V6 - V2025) Files (*.ipt)
 Inventor Assembly (V11 - V2025) Files (*.iam)
 Solid Edge (V18 - SE2024) Files (*.par;*.asm;*.psm)
 All Files (*.*)





模型設置
 幾何
 材料
 接觸(20)
 邊界(1)
 載荷(2)

新增(等向性-彈塑性)
 新增(等向性-超彈性)
 新增(正交性-線彈性)

CNS(S) 名稱 CNS(SS490) 顏色 ■ 座標系 無

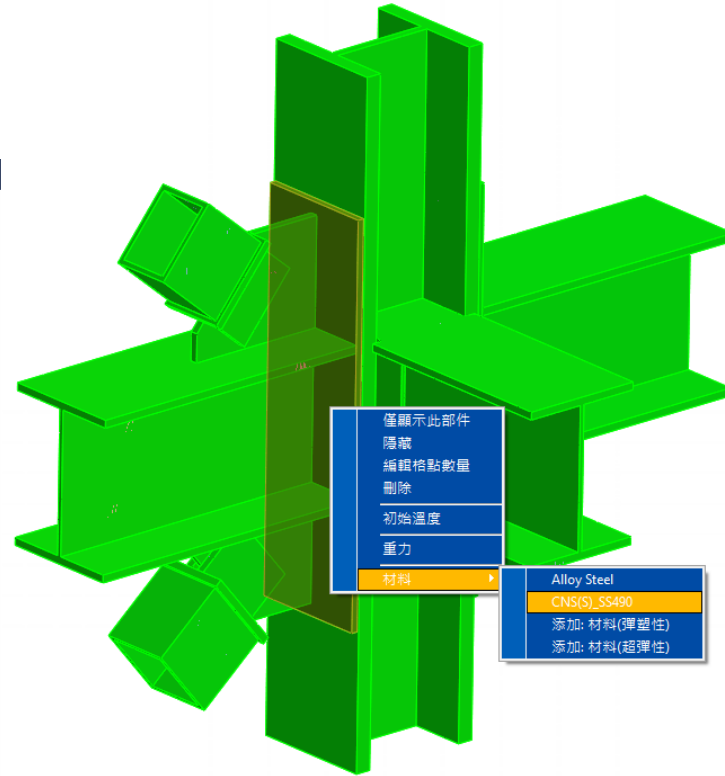
彈塑性 熱
 結構
 彈性模量 205940 N/mm² 熱膨脹 膨脹係數 1.1e-005
 泊松比 0.3 參考溫度 0 [°C]
 質量密度 7.85e-006 kg/mm³

計算安全係數
 失效理論 無
 拉伸 0 N/mm² 壓縮 0 N/mm²

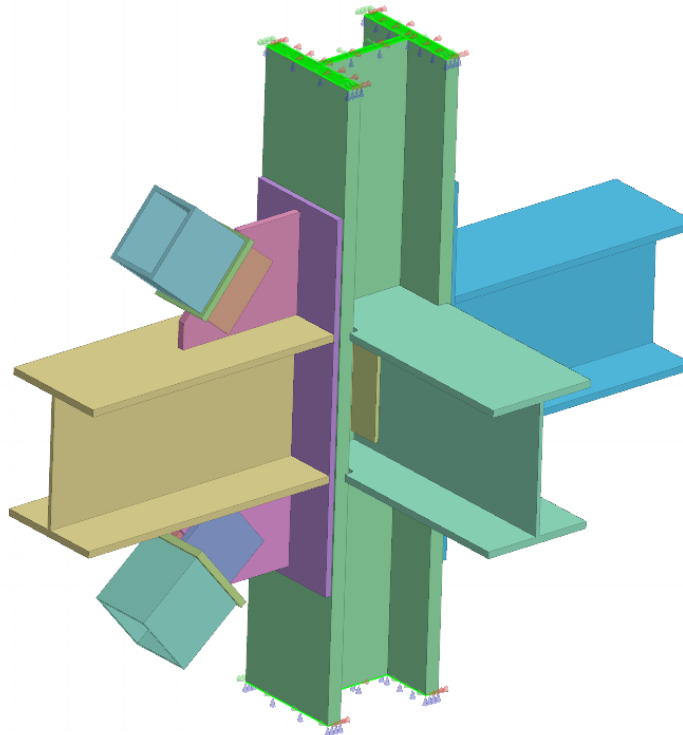
彈塑性
 塑性硬化曲線 無 函數
 應力-應變曲線 無 函數
 硬化法則 等向性
 綜合硬化因子(0.0-1.0) 0
 理想塑性
 屈服應力 0 N/mm²

一般
 質量比例阻尼 0 1/sec
 剛度比例阻尼 0 sec
 結構阻尼係數 0

載入 編輯



- 幾何(18)
- Body CNS(SS490)
 - Body(1) CNS(SS490)
 - Body(2) CNS(SS490)
 - Body(3) CNS(SS490)
 - Body(4) CNS(SS490)
 - Body(5) CNS(SS490)
 - Body(6) CNS(SS490)
 - Body(7) CNS(SS490)
 - Body(8) CNS(SS490)
 - Body(9) CNS(SS490)
 - Body(10) CNS(SS490)
 - Body(11) CNS(SS490)
 - Body(12) CNS(SS490)
 - Body(13) CNS(SS490)
 - Body(14) CNS(SS490)
 - Body(15) CNS(SS490)
 - Body(16) CNS(SS490)





定義力 [X]

名稱

載荷類型 [^]

載荷類型

總力 每面 / 邊

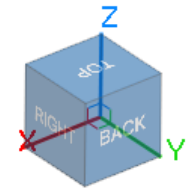
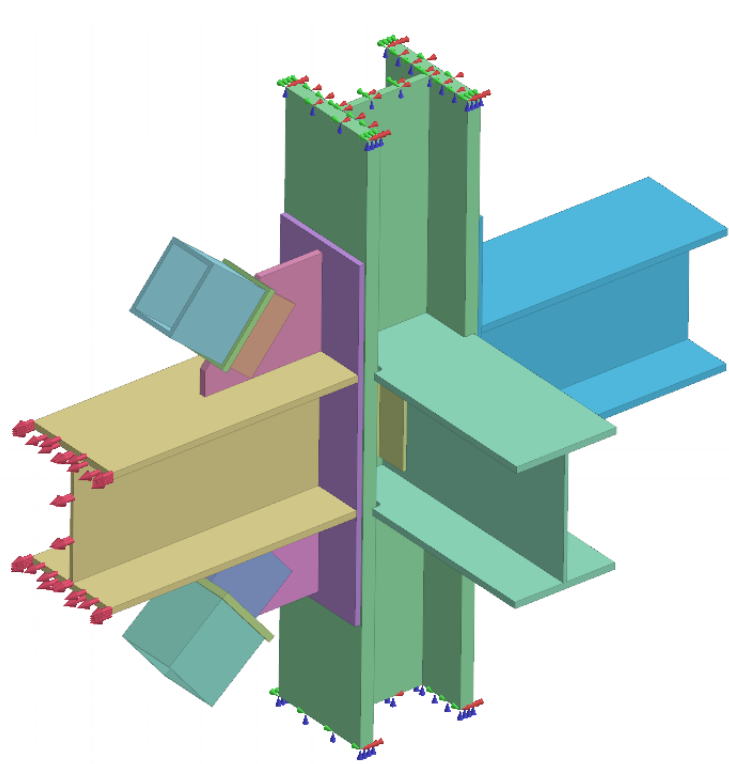
已選擇 1 物件

參考目標 [^]

類型

方向 [^]

X	<input type="text" value="50000"/>	N
Y	<input type="text" value="0"/>	N
Z	<input type="text" value="0"/>	N





定義力

名稱: 力-2

載荷類型

載荷類型: 集中力載荷

總力 每面/邊

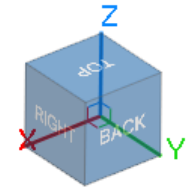
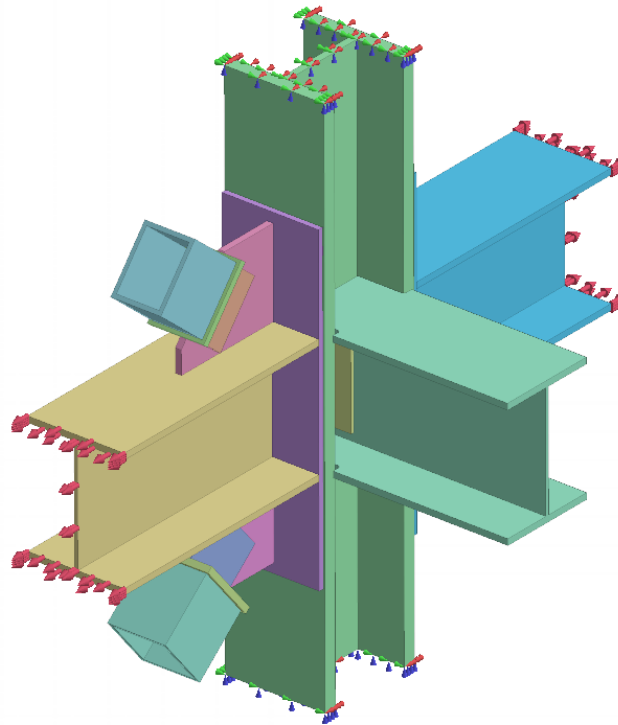
已選擇 1 物件

參考目標

類型: 全域坐標系

方向

X	-50000	N
Y	0	N
Z	0	N





定義力

名稱

載荷類型

載荷類型

總力 每面 / 邊

已選擇 1 物件

參考目標

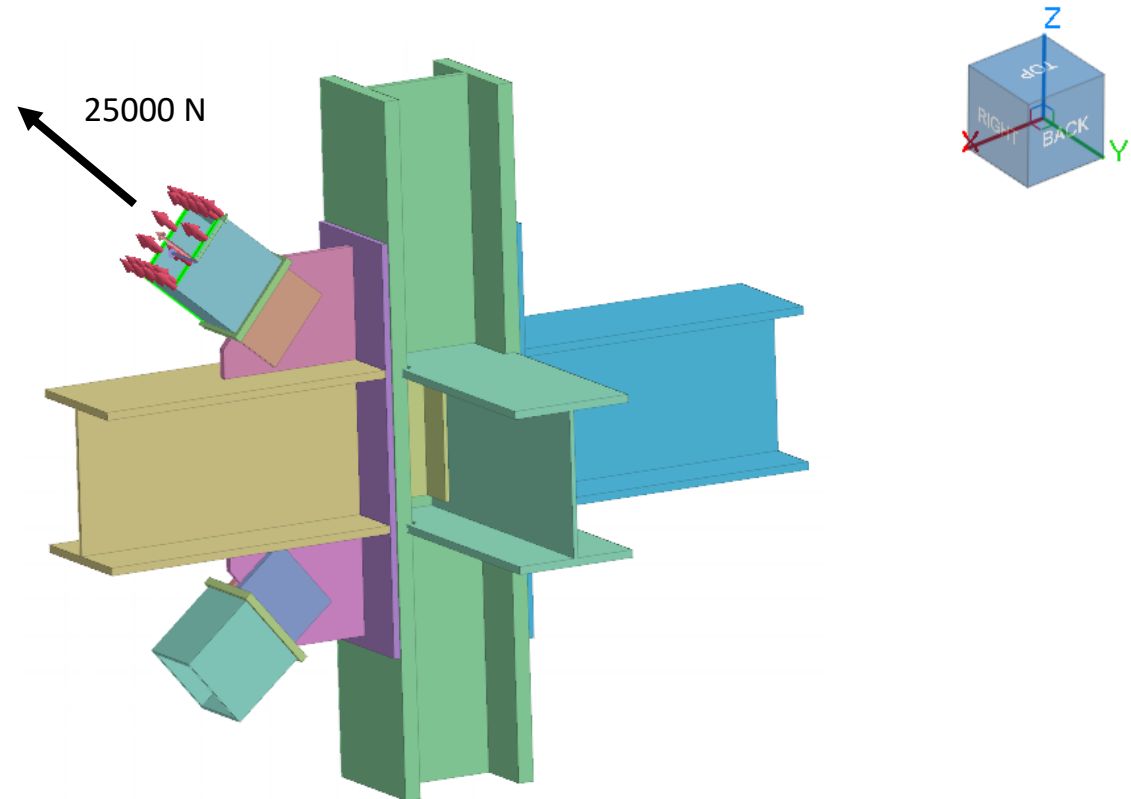
類型

已選擇 1 物件

方向

X	<input type="text" value="25000"/> N
Y	<input type="text" value="0"/> N
Z	<input type="text" value="0"/> N

↺
✓
+
×





定義力 ✕

名稱

載荷類型

載荷類型 集中力載荷

總力 每面 / 邊

? 已選擇 1 物件

參考目標

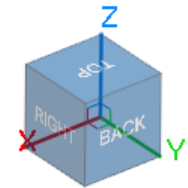
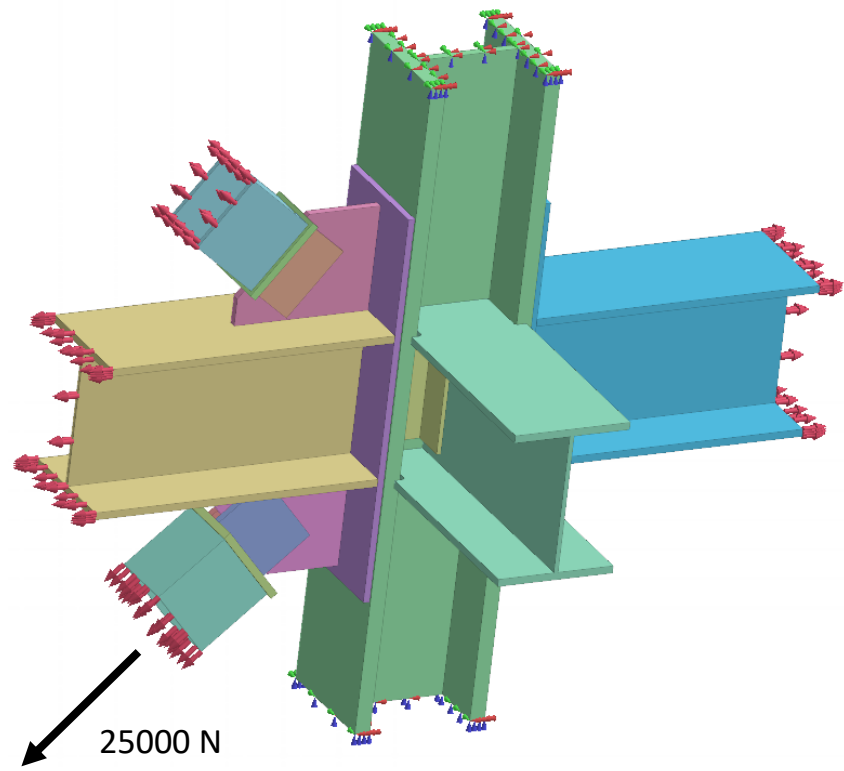
類型 面

? 已選擇 1 物件

方向

X	0	N
Y	0	N
Z	25000	N

↺
✓
+
✕





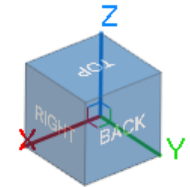
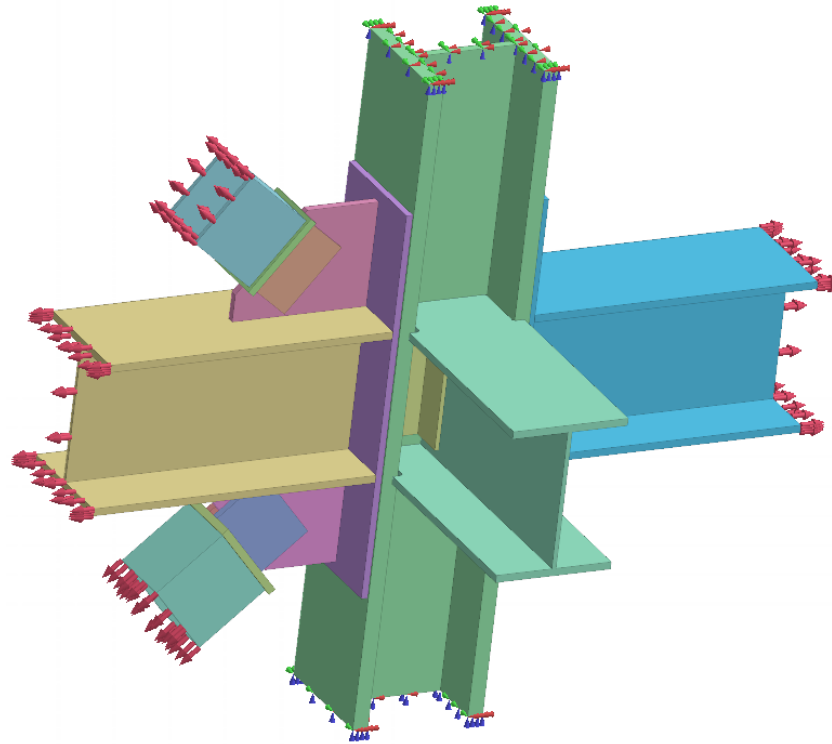
重力

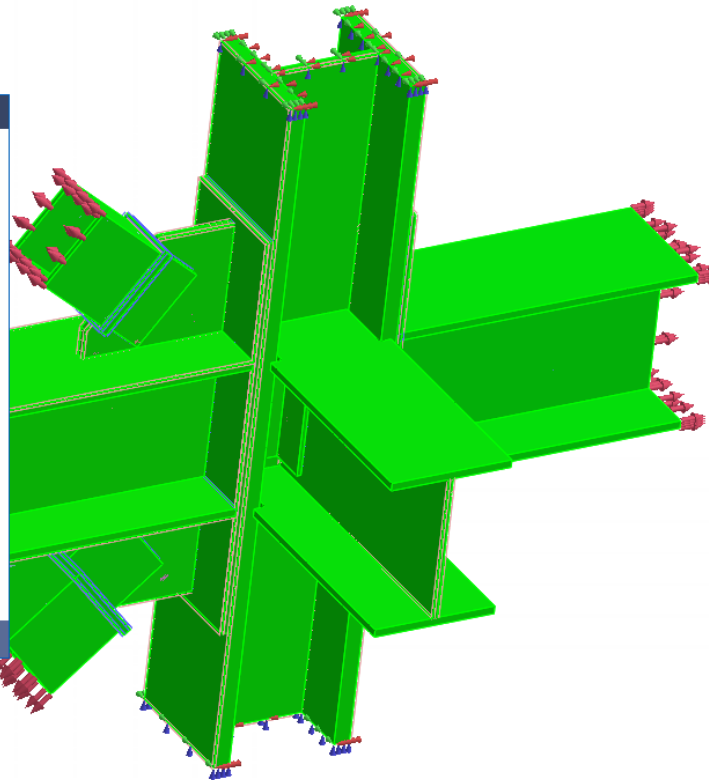
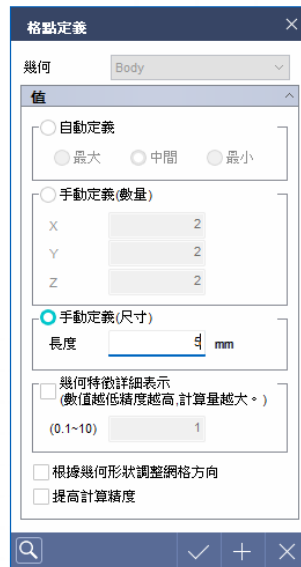
名稱 重力-1

比例因子

Gx	0	mm/sec ²
Gy	0	mm/sec ²
Gz	-9806	mm/sec ²

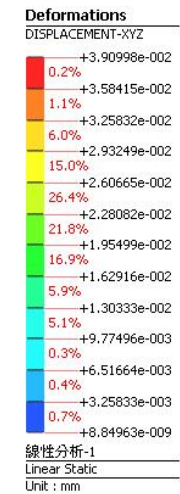
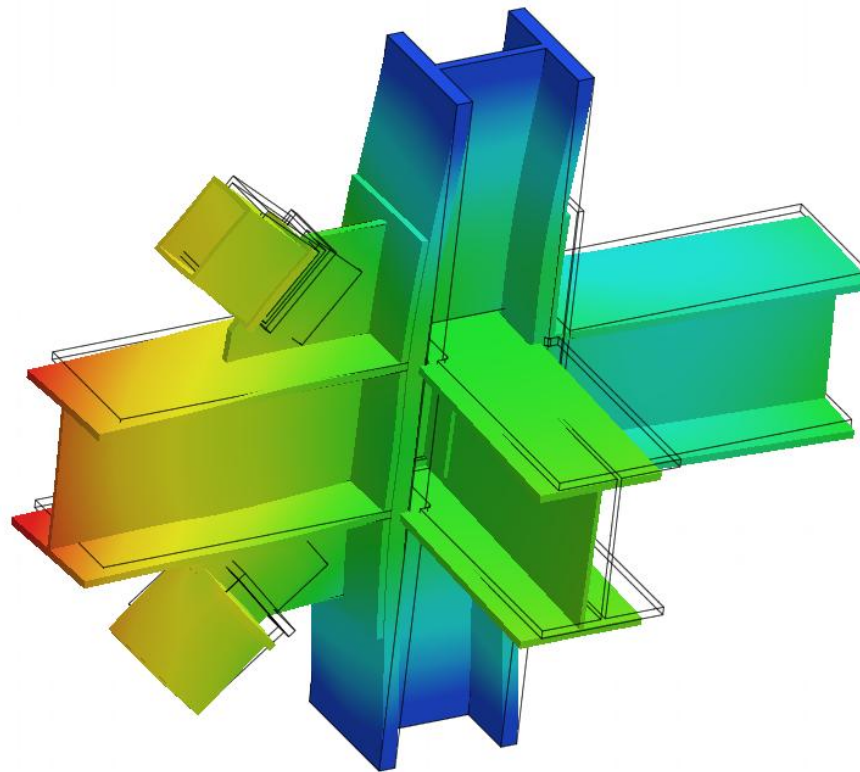
✓ + ✕





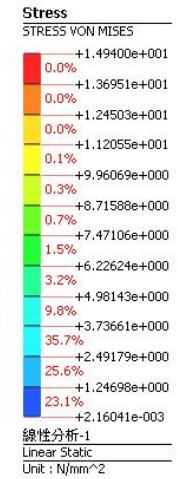
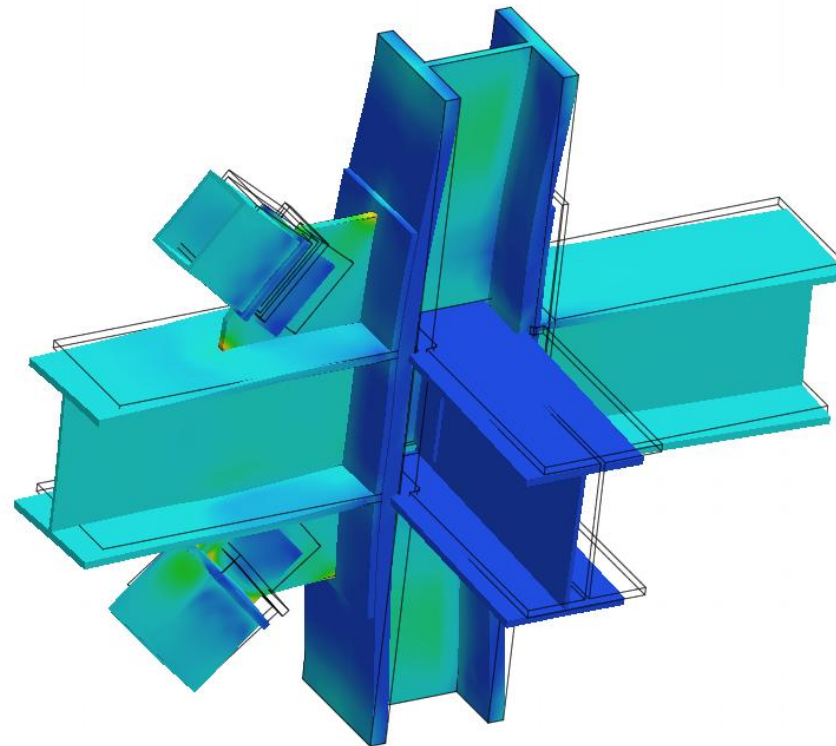


分析類型
 結果





分析類型 線性分析-1
結果 STRESS VON MISES





分析類型
 結果

