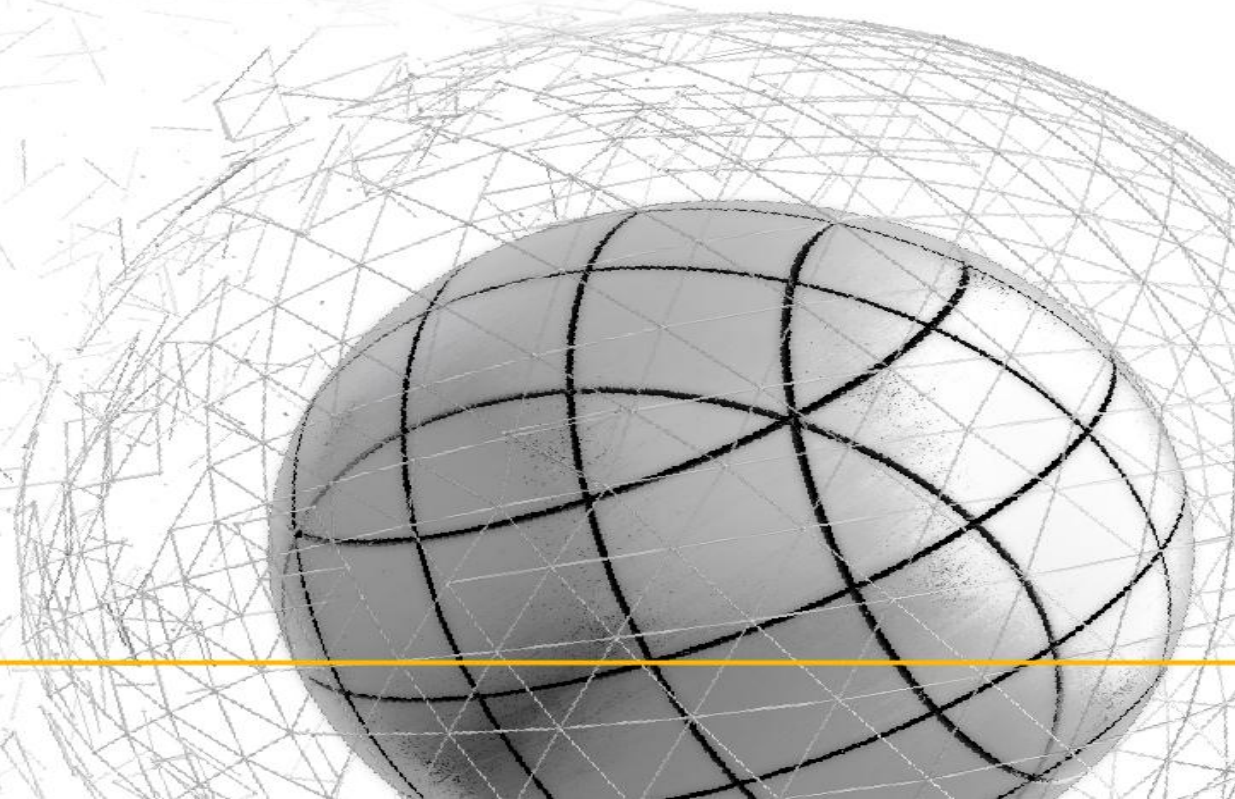


The logo for MIDAS MESH FREE is positioned on the left side of the slide. It features a blue icon composed of six squares arranged in a 2x3 grid to the left of the text "MIDAS" in a smaller font, and "MESH FREE" in a larger, bold font below it.

MIDAS MESH FREE

沈約翰
support@midasuser.com.tw

Simple, but Everything.



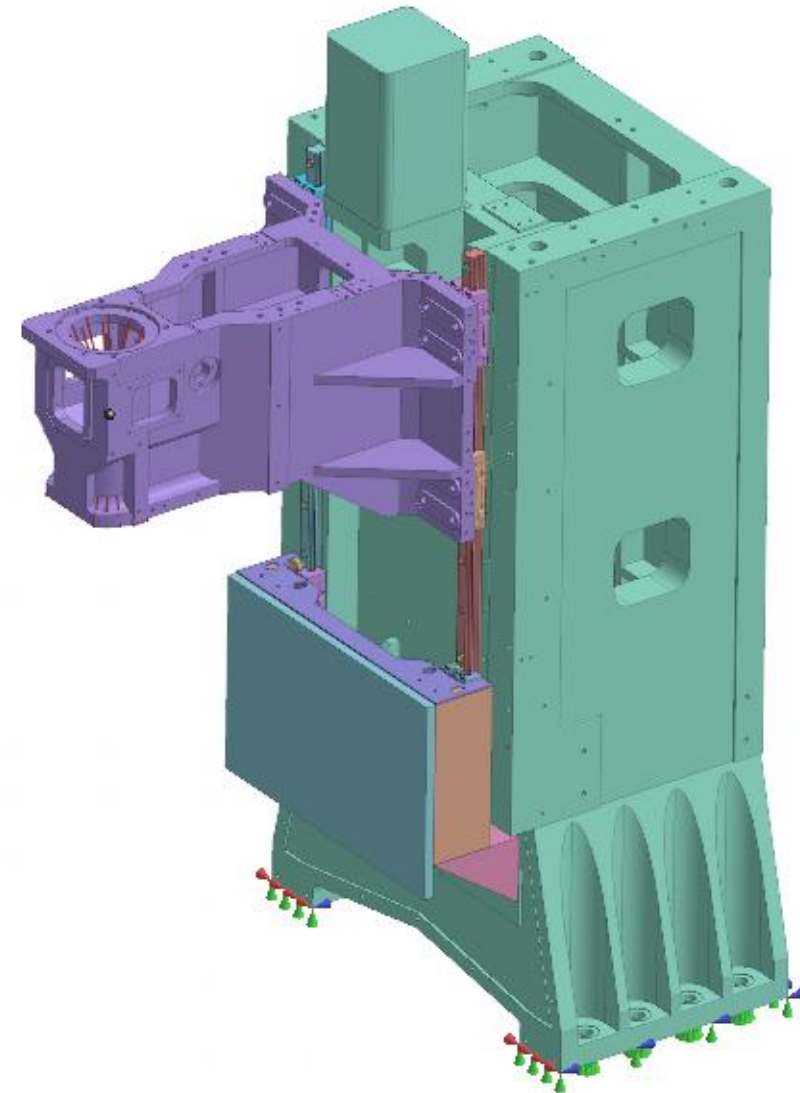
CASE 6: FREQUENCY

Analysis Case: Frequency Response

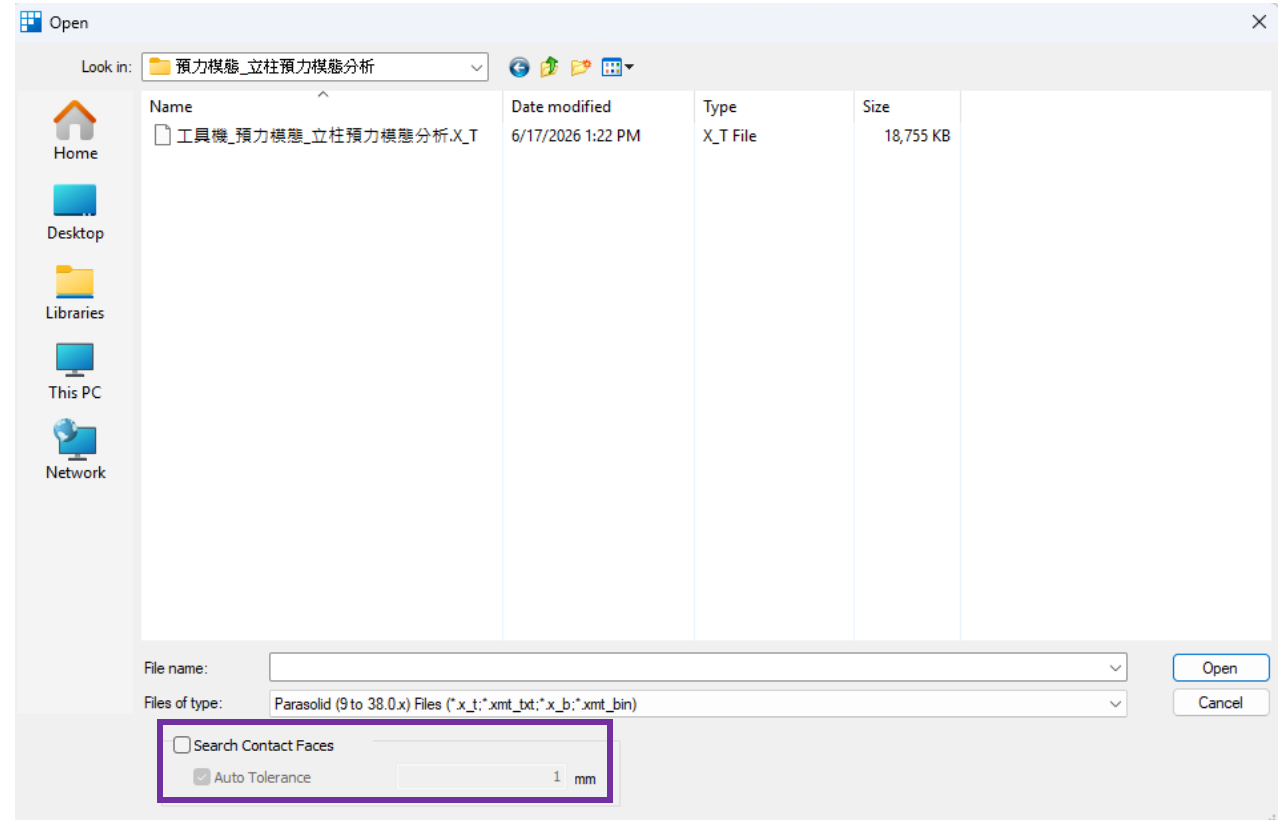
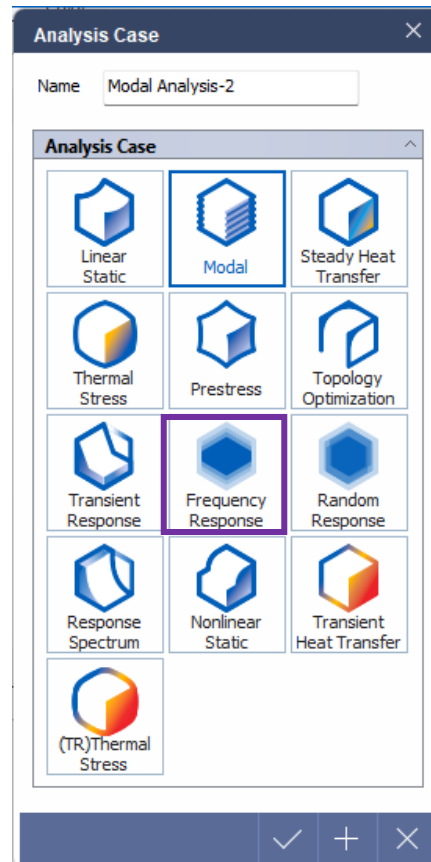
Material: Alloy Steel

Contact: Welded

Load: 1000 N Frequency dependent load

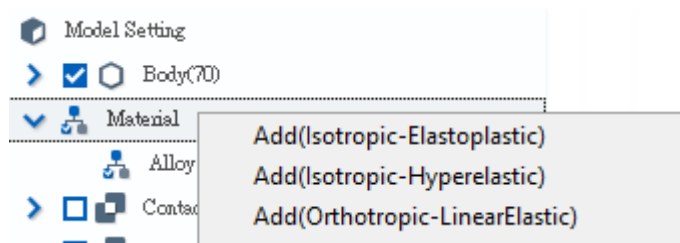


CASE 4: Prestress



Parasolid (9 to 38.0.x) Files (*.x_t;*.xmt_bin;*.x_b;*.xmt_bin)
 Parasolid (9 to 38.0.x) Files (*.x_t;*.xmt_bin;*.x_b;*.xmt_bin)
 ACIS (R1 - 2026 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 12.0) Files (*.prt;*.prt.*;*.asm;*.asm.*)
 CATIA V4 (CATIA 4.1.9 - 4.2.4) Files (*.model;*.exp;*.session)
 CATIA V5 (V5 R8 - V5-6 R2026) Files (*.CATPart;*.CATProduct)
 SolidWorks (98 - 2026) Files (*.sldprt;*.sldasm)
 Unigraphics (11 - NX2506) Files (*.prt)
 Inventor Part (V6 - V2026) Files (*.ipt)
 Inventor Assembly (V11 - V2026) Files (*.iam)
 Solid Edge (V18 - SE2026) Files (*.par;*.asm;*.psm)
 All Files (*.*)

GEOMETRY: MATERIAL



Define Material

All
Name Alloy Steel
Color
Coord. Sys. None

Elastoplastic Thermal

Structural
Elastic Modulus 210000 N/mm²
Poisson's Ratio 0.28
Mass Density 7.7e-06 kg/mm³
Thermal Expansion
Expansion 1.3e-05
Ref. Temperature 0 [°C]

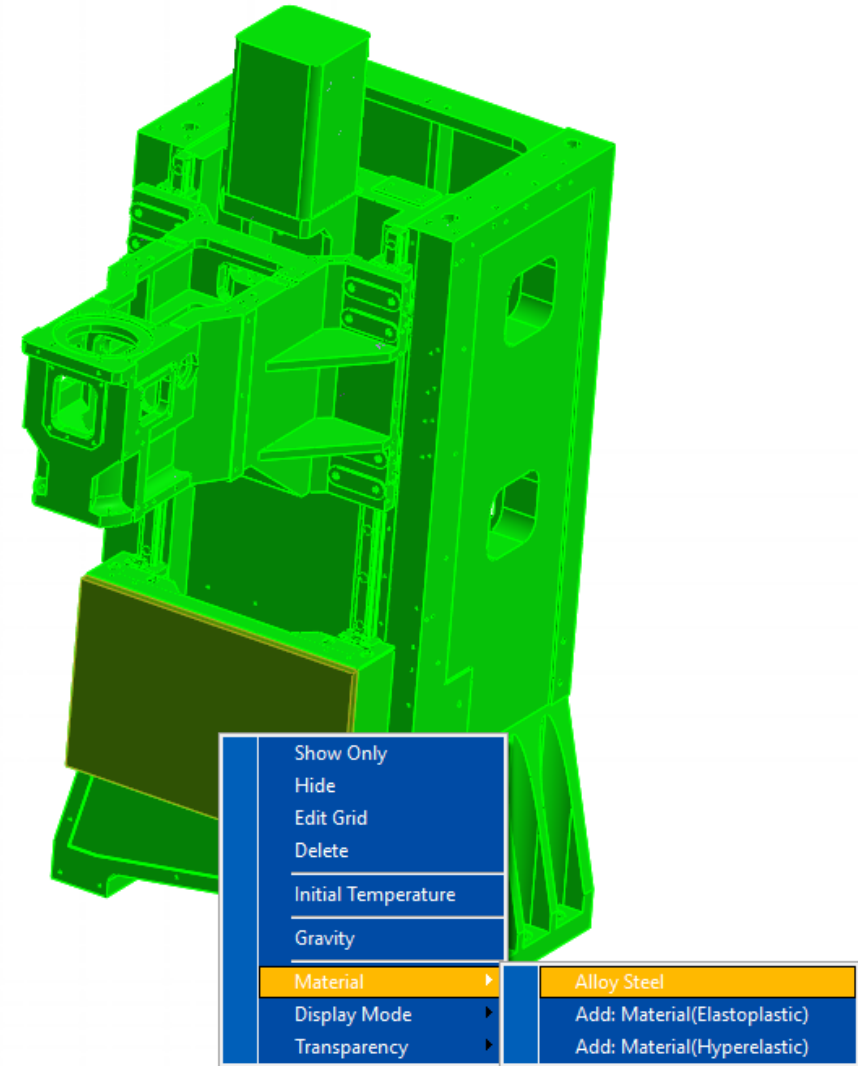
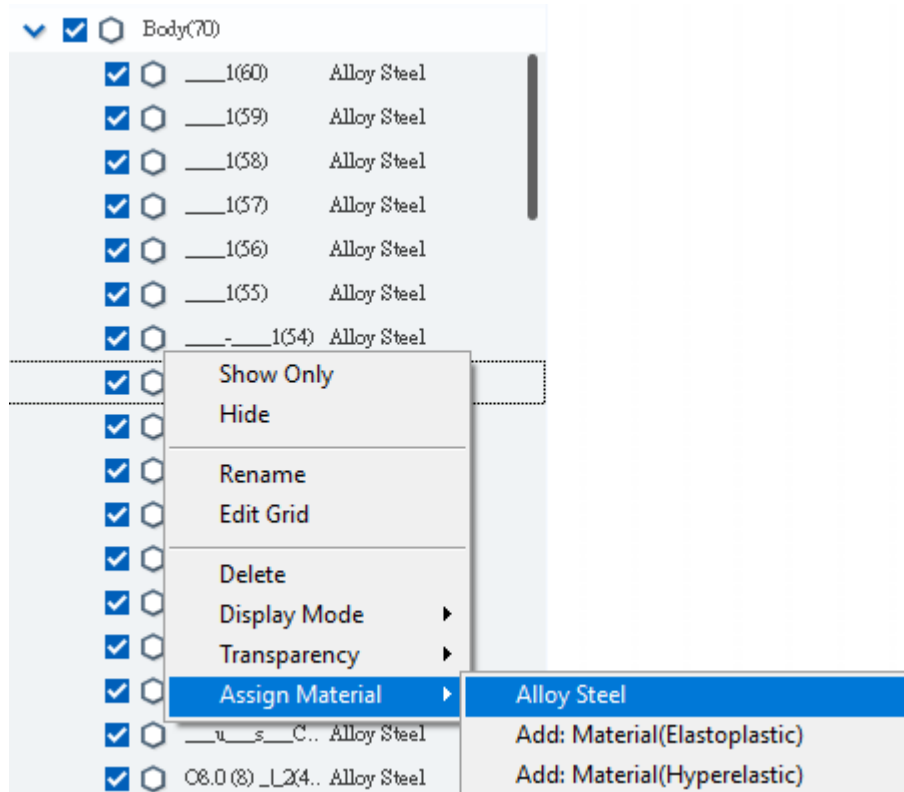
Factor of Safety Calculation
Failure Theory None
Tension 0 N/mm² Compression 0 N/mm²

Elastoplastic
Plastic Hardening Curve None Function
Stress Strain Curve None Function
Hardening Rule Isotropic
Combined hardening factor 0
Perfect Plastic
Yield Stress 0 N/mm²

General
Mass Proportional Damping 0 1/sec
Stiffness Proportional Damping 0 sec

Load Edit

GEOMETRY: MATERIAL



ANALYSIS CONDITION: CONSTRAINT



Define Boundary Condition

Name
Boundary-1

Select

Face
? Selected 2 Objec...

Reference Object

Symmetry Condition

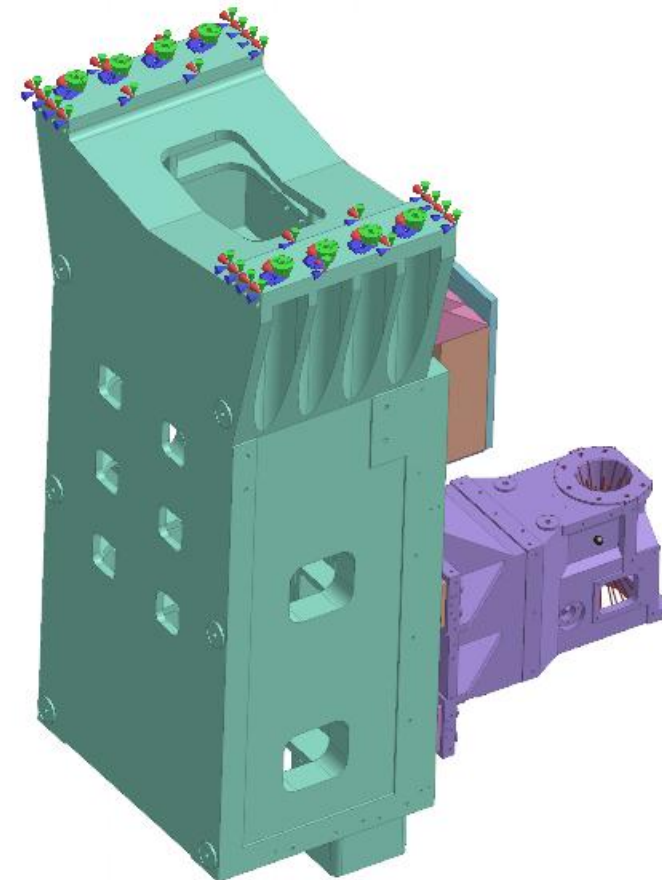
DOF

☒ Tx
☒ Ty
☒ Tz

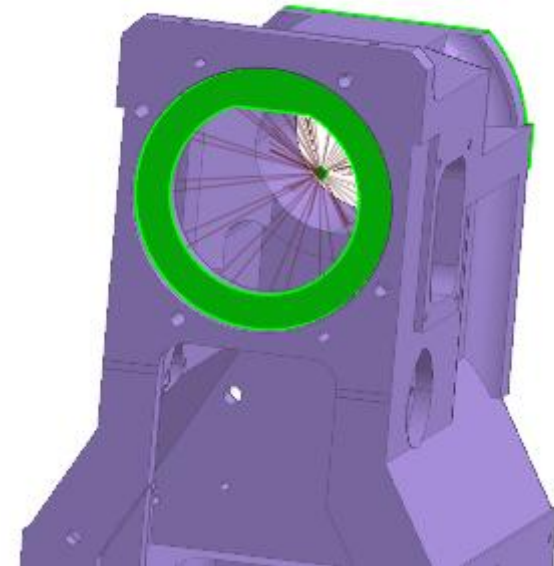
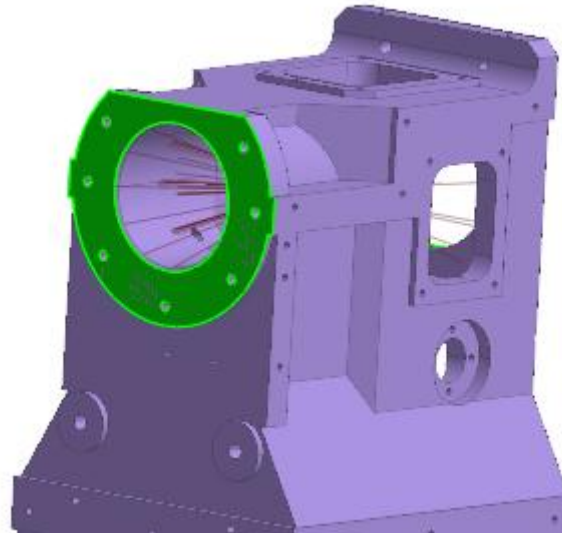
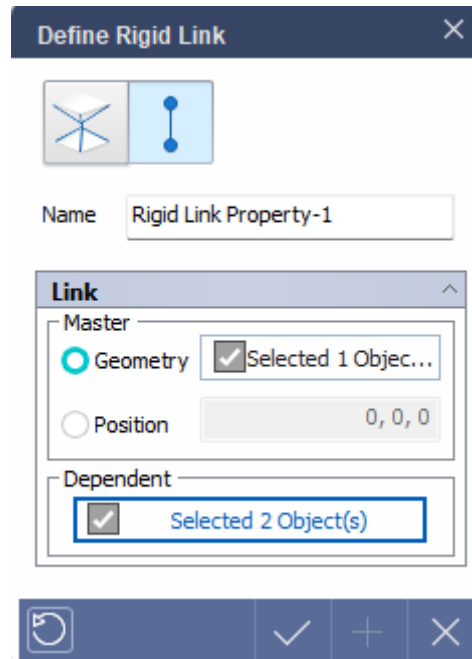
✓

+

×



ANALYSIS CONDITION: RIGID LINK



ANALYSIS CONDITION: LOAD



Frequency Dependent Load [X]

↓ ↓ ↓

Name: Frequency Dependent Force-1

Load Category

Load Type: Force

Master

☒ Point [?] Selected 1 Object...

☐ Coord. 0, 0, 0

Dependent

[?] Select Object(s)

Reference Object

Type: Global Coordinate System

Direction

X: 0 N

Y: 0 N

Z: 1000 N

Frequency Dependency

☒ Magnitude/Phase

Magnitude

☒ Constant 1

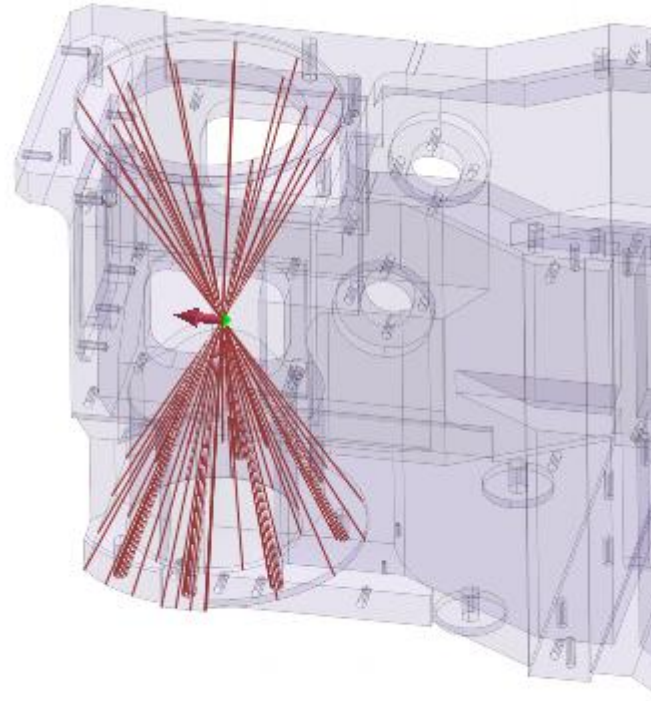
☐ User Defined None(Cons) [?]

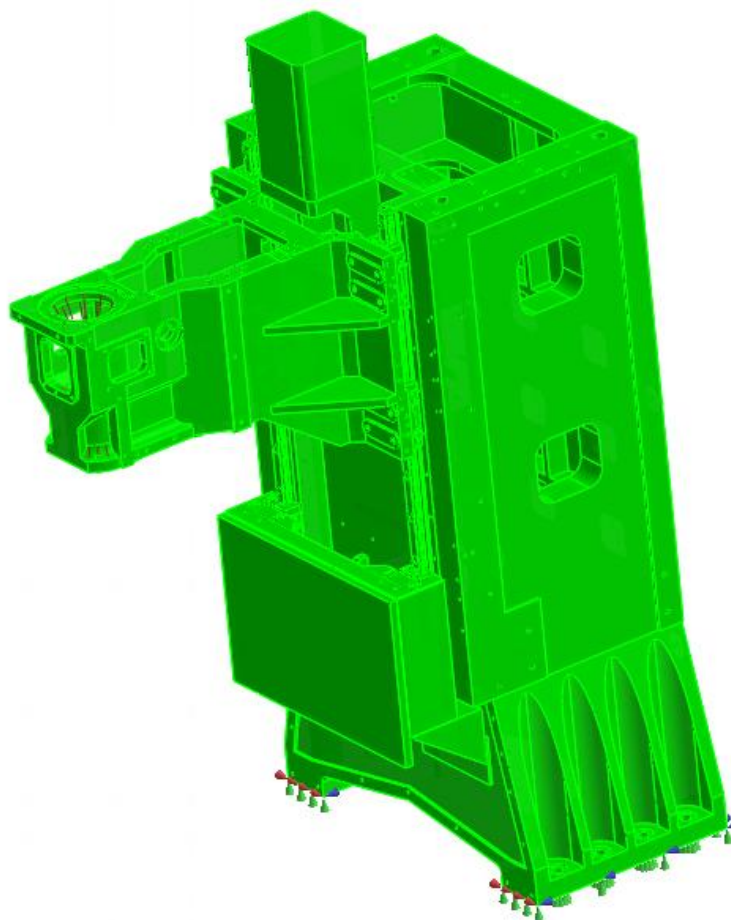
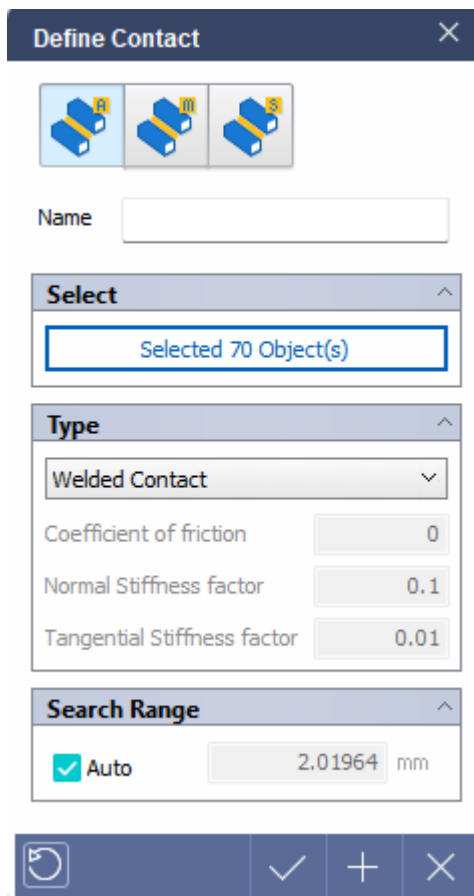
Phase

☒ Constant 0 [deg]

☐ User Defined None(Cons) [?]

[?] [✓] [+]





- ☐  CONE_2_____ Welded
☐  M5x0.8_6-CO.. Welded
☐  M5x0.8_6_____ Welded
☐  M5x0.8_6-CO... Welded
☐  M5x0.8_6_____ Welded
☐  M5x0.8_6_____ Welded
☐  M5x0.8_6-CO... Welded
☐  M5x0.8_6-CO.. Welded
☐  M5x0.8_6-CO.. Welded
☐  M5x0.8_6-CO.. Welded
☐  M5x0.8_6-CO.. Welded
☐  M5x0.8_6-CO.. Welded
☐  M5x0.8_6-CO.. Welded
☐  M5x0.8_6-CO.. Welded
☐  M5x0.8_6-CO.. Welded
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☐  M5x0.8_6-CO.. Welded
☐  M5x0.8_6-CO.. Welded
☐  M5x0.8_6-CO.. Welded
☐  M5x0.8_6-CO.. Welded
☐  M5x0.8_6-CO.. Welded
☐  M5x0.8_6-CO.. Welded

Frequency set

Name

Frequency

Add

Frequency list

Method

Linear

▼

Modify

Delete

Initial frequency

0

[Cycle]/sec

Frequency increment

20

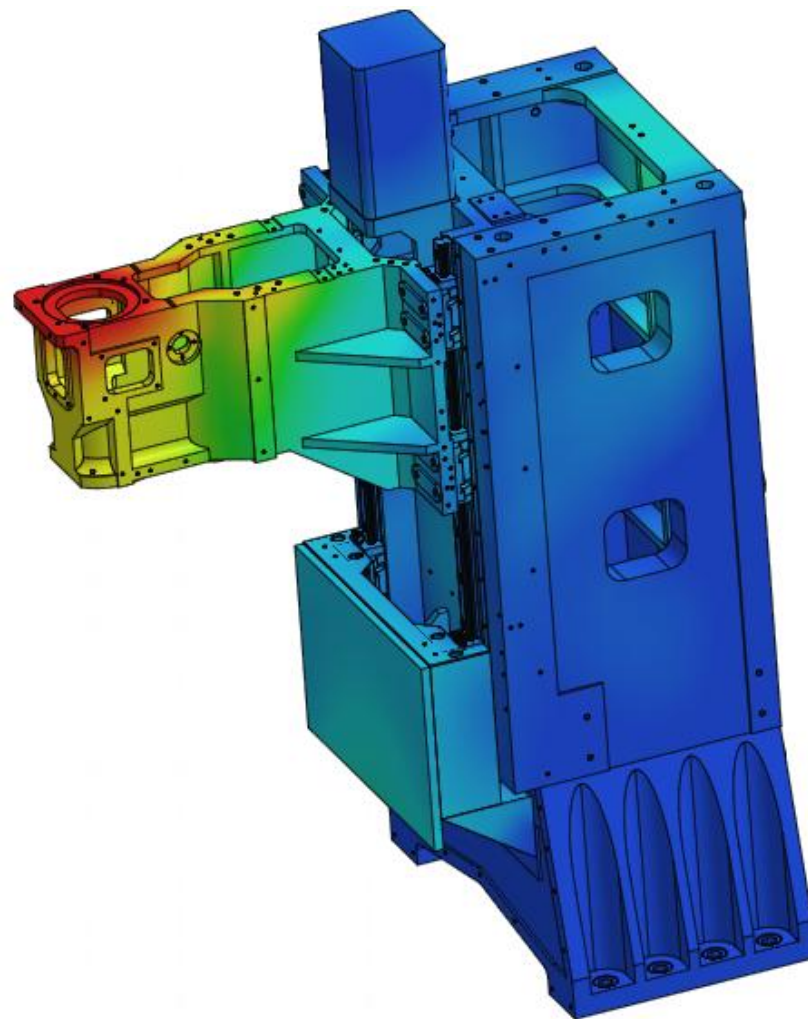
[Cycle]/sec

Number of Increments

100

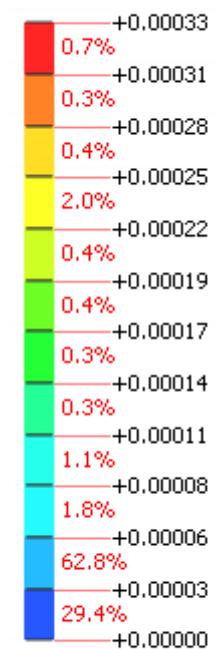
No.	Name	Method
1	freq	Linear

RESULT: DISPLACEMENT



Deformations

DISPLACEMENT-XYZ



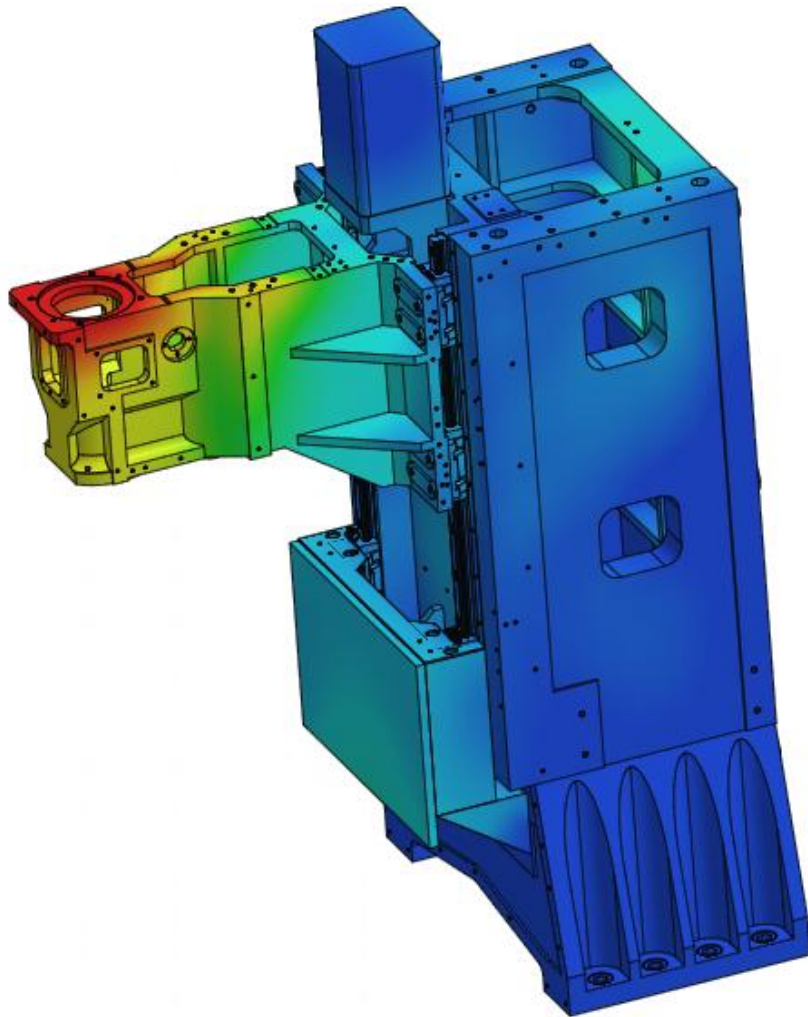
Modal Frequency Response-1

Modal Frequency Response

FREQ=2.0000e+03

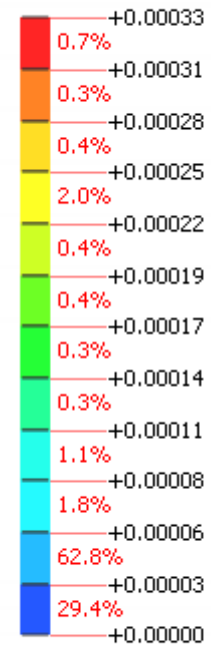
Unit : mm

RESULT: DISPLACEMENT



Deformations

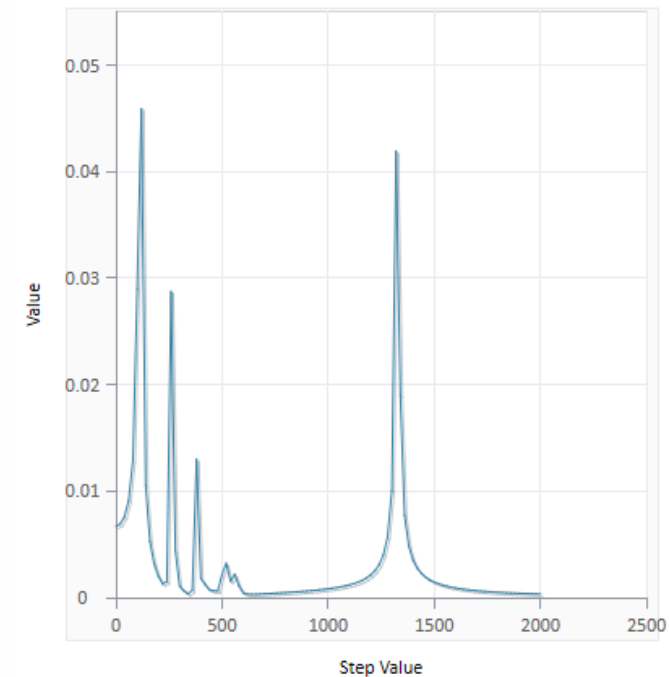
DISPLACEMENT-XYZ



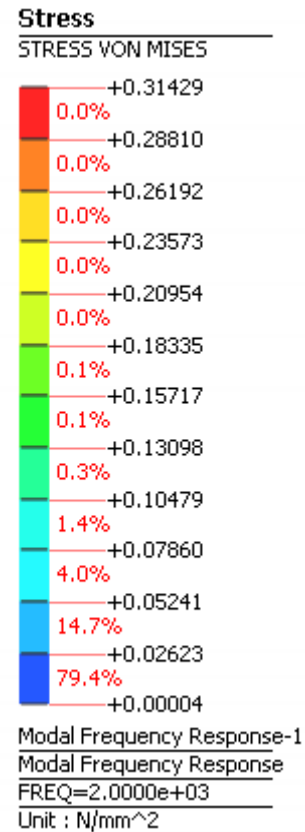
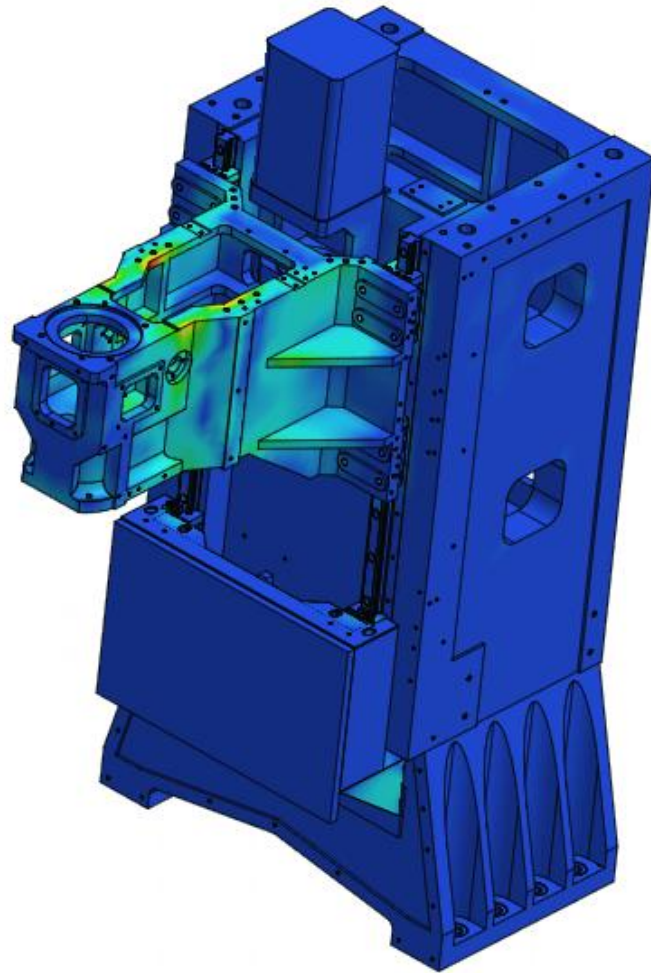
Modal Frequency Response-1
Modal Frequency Response
FREQ=2.0000e+03
Unit : mm

MULTI STEP GRAPH

Multi Step Result Graph



RESULT: STRESS VON MISES



MULTI STEP GRAPH

