



- Engineering Data Sources  Ansys  
 Project  image
- 1  
 image
- Ansys  Structural Steel  
 Properties  
 Density  Isotropic Elasticity  Tensile Yield Strength  Tensile Ultimate Strength  Strain-Life Parameters  S-N Curve  
 image
- Properties  image
- C  Unit  Ansys  
 image
- Ansys  (  Workbench  )  
 Enter

## ?????????Ansys

- Geometry  Replace Geometry  Browse  
 Browse  image
- Geometry  Editor  
 Step  
 Editor  
 image
- Editor  
 SpaceClaim  Solidworks
- Spaceclaim  <https://youtu.be/aYS6czrbwOE?si=XLfLt-HNG38yLx5R>
- Editor  Workbench  Model  
 :arrow\_right:update  Geometry image  Mechanical   
 Mechanical  Geometry  :arrow\_right:Update Geometry from Source  image

## ????????????????(????)

- Geometry  Geometry  
 image
- Assignment  image
- Stiffness Behavior  Rigid  
 image
- image

- Connections  Contacts  
 Bonded  
 image
- :  
<https://www.youtube.com/watch?v=ov7PAEwFZm8>  
 image

| <input type="checkbox"/> | <input type="checkbox"/> ( <input type="checkbox"/> )       | <input type="checkbox"/> ( <input type="checkbox"/> ) |
|--------------------------|---|---|
| Bonded                   | <input type="checkbox"/>                                    | <input type="checkbox"/>                              |
| No Speration             | <input type="checkbox"/> ( <input type="checkbox"/> )       | <input type="checkbox"/>                              |
| Frictionless             | <input type="checkbox"/> ( <input type="checkbox"/> )       | <input type="checkbox"/>                              |
| Rough                    | <input type="checkbox"/>                                    | <input type="checkbox"/>                              |
| Frictional               | <input type="checkbox"/> ( <input type="checkbox"/> $\mu$ ) | <input type="checkbox"/>                              |

- Contacts   
 :arrow\_right:Create Automatic Connections

“ [!Tip] Delete Children  Contacts  ”

image

## ???????

- Mesh  image  
 Mesh  Physics Preference  
 Mechanical image
- Element Size  Element  
 1/10  1/50
- Element Order  Node  Node  image

image

- Sizing 
  - Adaptive Sizing
  - Resolution
  - Defeaturing  Geometry  Defeature Size
  - Defeature Size  2mm  2mm

- Transition
- Span Angle Center
- Slow
- Coarse

“ [!Tip]

- image
- Metric Graph  image
  - (  )
  - - :arrow\_right:  (  )
    - 1mm):arrow\_right:  :arrow\_right:  :arrow\_right:
    - (  ):arrow\_right:  (  0.5mm)

| <input type="checkbox"/>                        | <input type="checkbox"/>                              | <input type="checkbox"/>   | <input type="checkbox"/>   |
|---|---|--|--|
| Skewness ( <input type="checkbox"/> )           | <input type="checkbox"/> ( <input type="checkbox"/> ) | 0 ( <input type="checkbox"/> ) <input type="checkbox"/> 1 ( <input type="checkbox"/> ) | <input type="checkbox"/> : < 0.25 <input type="checkbox"/> : < 0.95 ( <input type="checkbox"/> 0.98 <input type="checkbox"/> ) |
| Orthogonal Quality ( <input type="checkbox"/> ) | <input type="checkbox"/> (CFD)                        | 1 ( <input type="checkbox"/> ) <input type="checkbox"/> 0 ( <input type="checkbox"/> ) | <input type="checkbox"/> : > 0.7 <input type="checkbox"/> : > 0.1  |
| Aspect Ratio ( <input type="checkbox"/> )       | <input type="checkbox"/> & <input type="checkbox"/>   | 1 ( <input type="checkbox"/> ) <input type="checkbox"/> <input type="checkbox"/>       | <input type="checkbox"/> < 5   |
| Jacobian Ratio ( <input type="checkbox"/> )     | <input type="checkbox"/> (FEA)                        | 1 ( <input type="checkbox"/> ) <input type="checkbox"/>                                | <input type="checkbox"/> 1.0 <input type="checkbox"/> 10 <input type="checkbox"/>  |
| Element Quality ( <input type="checkbox"/> )    | <input type="checkbox"/>                              | 0 ( <input type="checkbox"/> ) <input type="checkbox"/> 1 ( <input type="checkbox"/> ) | <input type="checkbox"/> <input type="checkbox"/> > 0.7  |

???????????

80%

- Static Structural  image
- Youtube  Google
- (Supports) —

| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>   |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | Fixed Support            | <input type="checkbox"/> | <input type="checkbox"/>   |
| <input type="checkbox"/> | Displacement             | <input type="checkbox"/> | <input type="checkbox"/> X, Y, Z <input type="checkbox"/> 0 <input type="checkbox"/> |

| Icon   | Category         | Sub-category | Options                 |
|--------|------------------|--------------|-------------------------|
| [Icon] | Frictionless     | [Icon]       | [Options]               |
| [Icon] | Cylindrical      | [Icon]       | [Options]               |
| [Icon] | Elastic Support  | [Icon]       | [Options] Stiffness [ ] |
| [Icon] | Compression Only | [Icon]       | [Options]               |

• [Icon] (Loads) — [Icon]

| Icon   | Category        | Sub-category    | Options                    |
|--------|-----------------|-----------------|----------------------------|
| [Icon] | Force           | [Icon]          | [Options]                  |
| [Icon] | Pressure        | [Icon]          | [Options]                  |
| [Icon] | Remote Force    | [Icon]          | [Options]                  |
| [Icon] | Bearing Load    | [Icon]          | [Options] Force [ ]        |
| [Icon] | Moment          | [Icon]          | [Options] Remote Point [ ] |
| [Icon] | Bolt Pretension | [Icon] / [Icon] | [Options]                  |

• [Icon] / [Icon] (Body Loads)

| Icon   | Category               | Sub-category    | Options   |
|--------|------------------------|-----------------|-----------|
| [Icon] | Standard Earth Gravity | [Icon]          | [Options] |
| [Icon] | Rotational Velocity    | [Icon]          | [Options] |
| [Icon] | Acceleration           | [Icon]          | [Options] |
| [Icon] | Thermal Condition      | [Icon] / [Icon] | [Options] |

- [Icon] Solve [Icon] image
- [Icon] SSD [Icon] image



