

# ANSYS WORKBENCH分析应用基础

## LESSON03 圆角L型支架的应力结果



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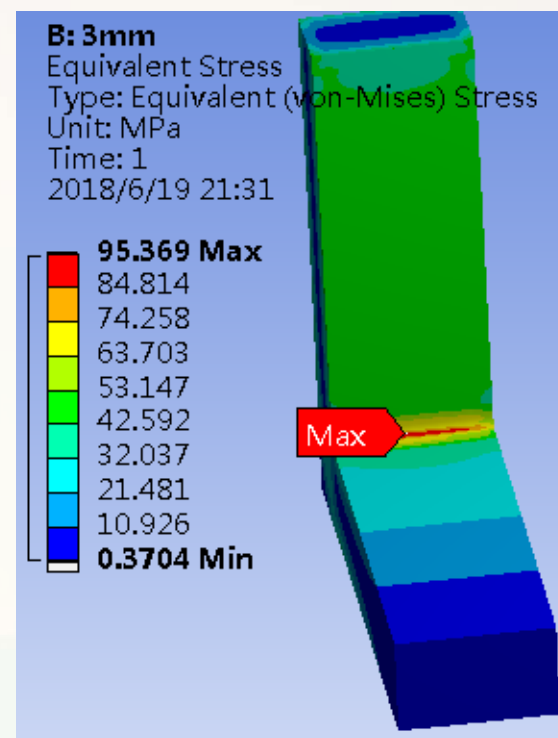
课程制作 张 晔

QQ交流群：205237137

机械人读书笔记

## 本课重点内容

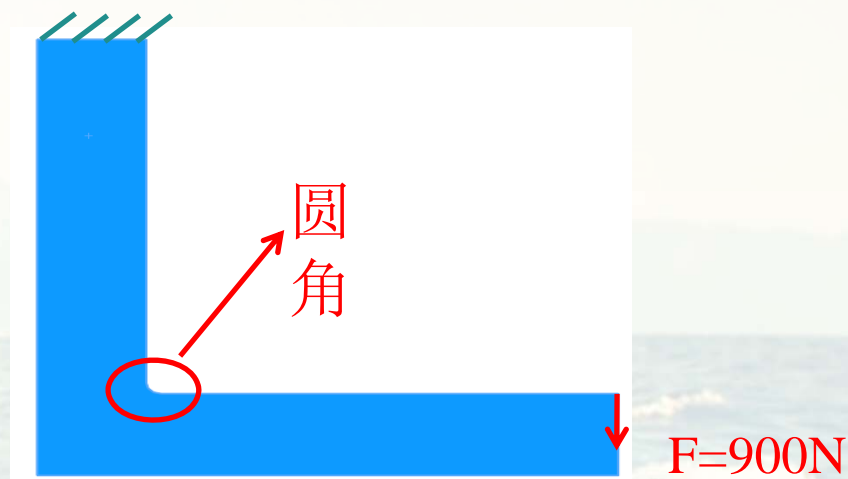
1. DM界面了解
2. 文件数据传输了解
3. 局部位置云图显示功能
4. 网格精度定性



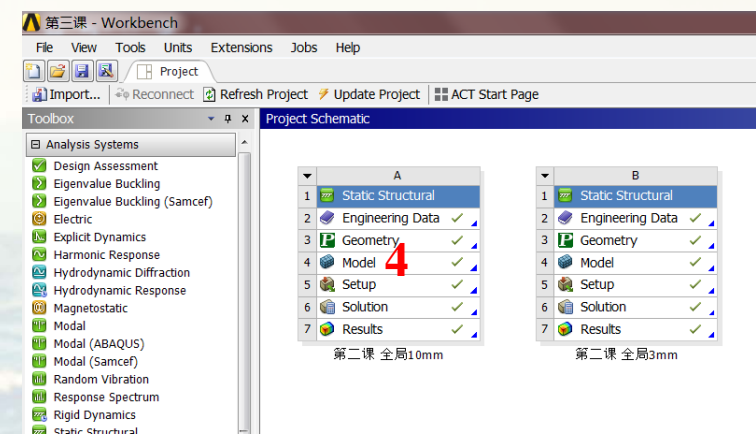
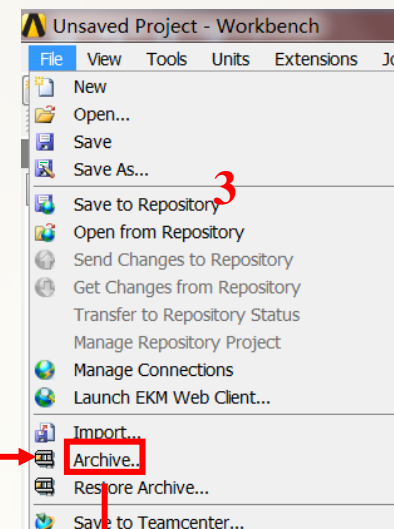
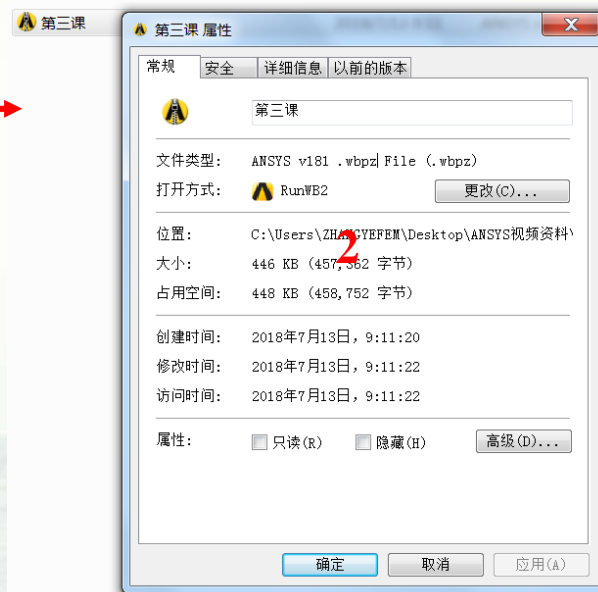
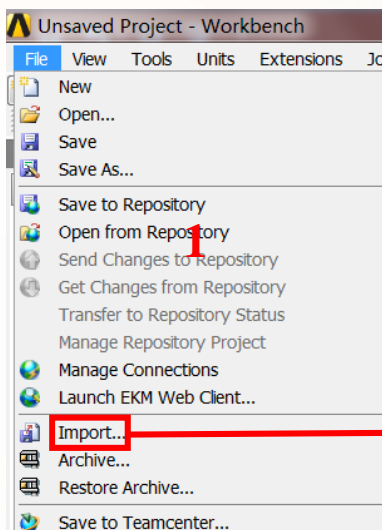
## 分析实例：L型支架

**问题描述：**修改第二课的L形支架模型，如图位置增加半径2.54mm的圆角，上端面固定，同时在下端面施加900N弯曲载荷，分别使用10mm、3mm、1mm和0.5mm网格求解模型，对比应力结果。

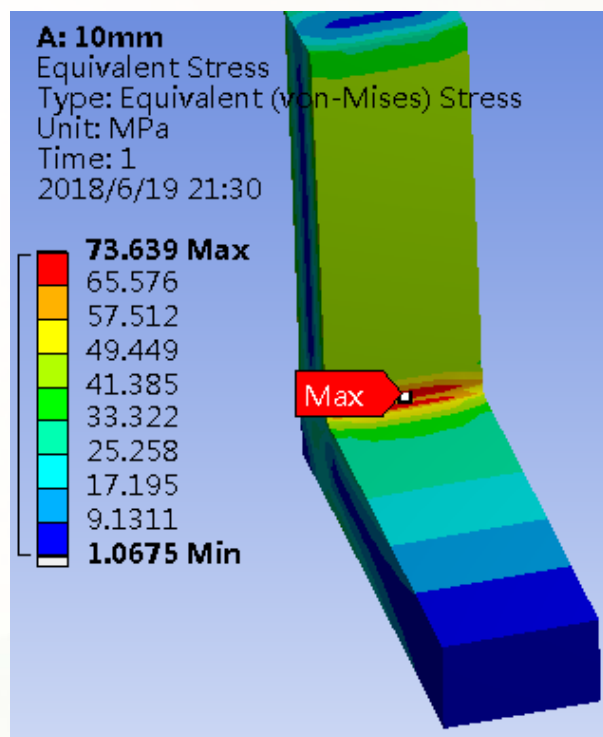
**材 料：** Structure Steel



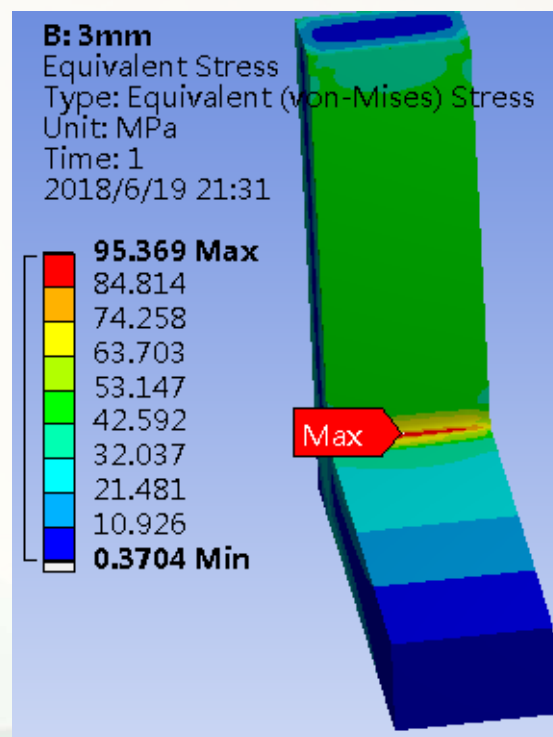
# 文件的解压缩



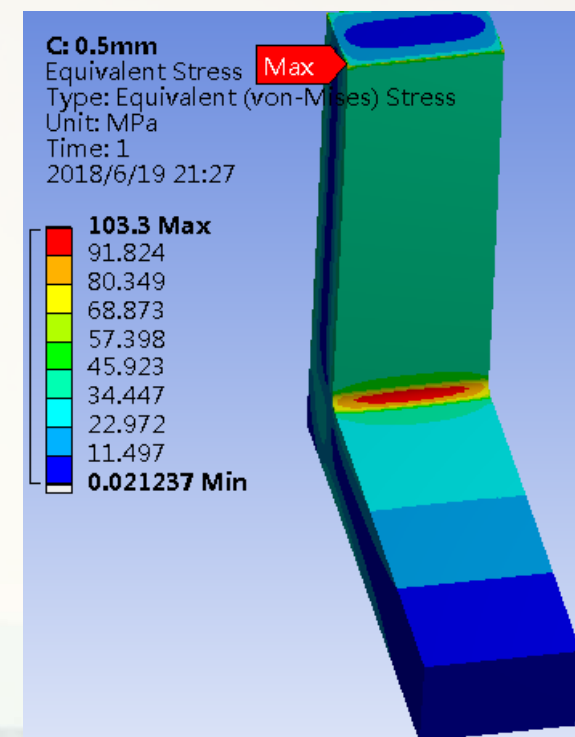
## 网格精度对应力结果的影响



10mm



3mm



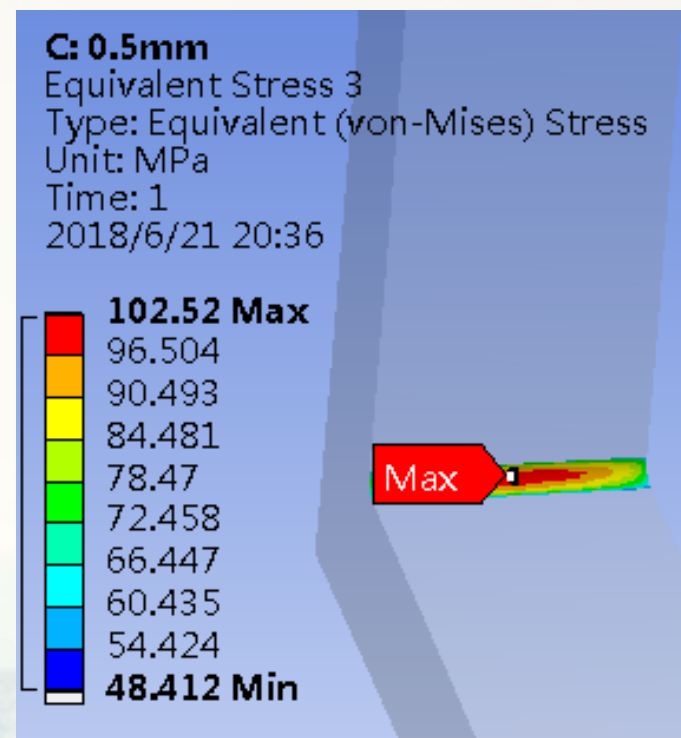
0.5mm



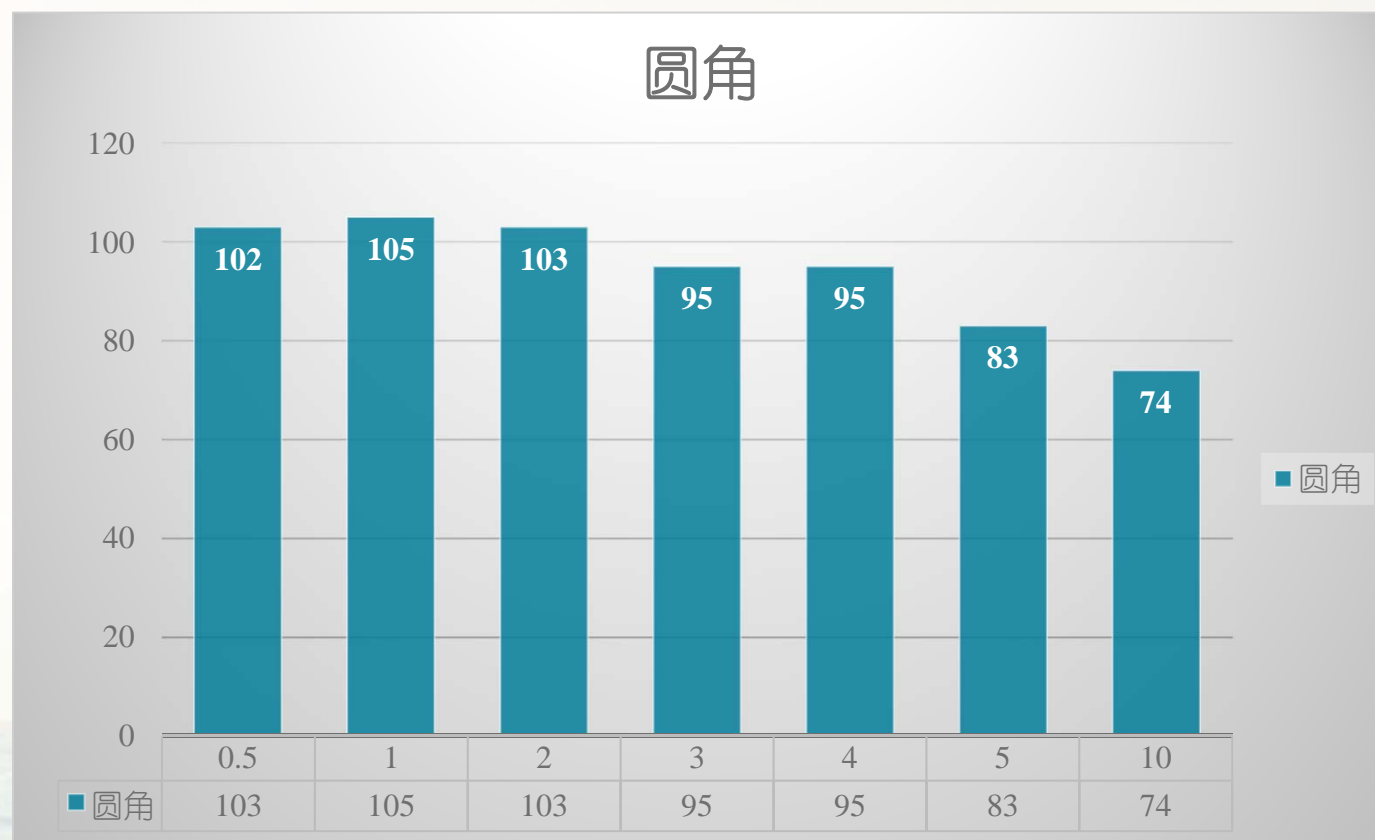
## 结果的局部显示



Details of "Equivalent Stress 3"	
<b>Scope</b>	
Scoping Method	Geometry Selection
Geometry	Apply Cancel
<b>Definition</b>	
Type	Equivalent (von-Mises) Stress
By	Time
<input type="checkbox"/> Display Time	Last
Calculate Time History	Yes
Identifier	
Suppressed	No
<b>Integration Point Results</b>	
Display Option	Averaged
Average Across Bodies	No
<b>Results</b>	
<input type="checkbox"/> Minimum	
<input type="checkbox"/> Maximum	
Minimum Occurs On	
Maximum Occurs On	
<b>Information</b>	

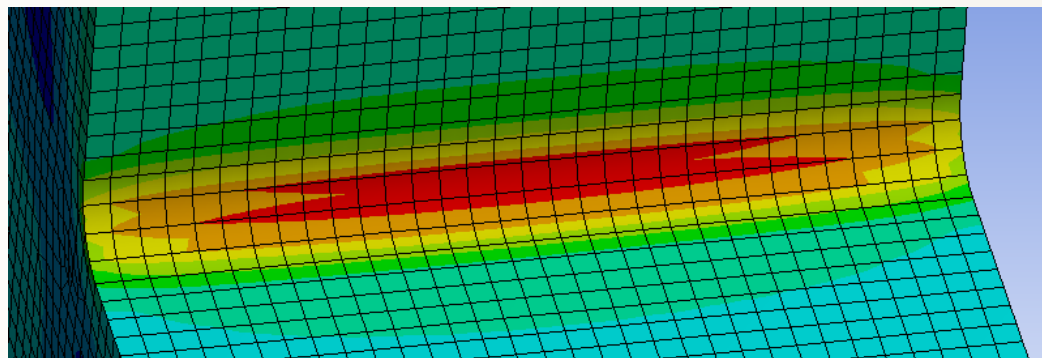


## 网格密度和应力最大值的关系

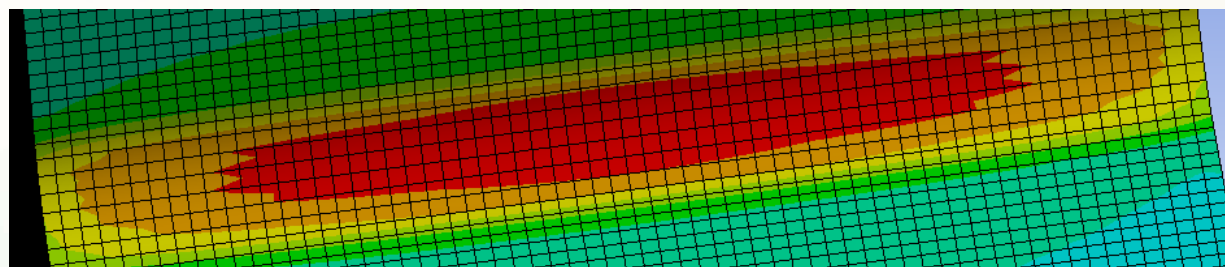


## 网格精度定性判定指标

1mm



0.5mm



默认显示的红色应力区域存在部分连续位置完整覆盖两层单元



The background is a dark teal color with a complex, light-colored technical drawing or blueprint pattern. The drawing consists of various geometric shapes, lines, and hatching, typical of engineering or architectural plans. It includes circular features, rectangular blocks, and intricate line work that suggests a detailed mechanical or structural design. The overall effect is a professional and technical aesthetic.

下一期视频，我将和大家一起交流关于  
《应力奇异及位移结果对比》