



## Weld Fatigue Challenge 3A

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October-2004

# Weld Life Estimate

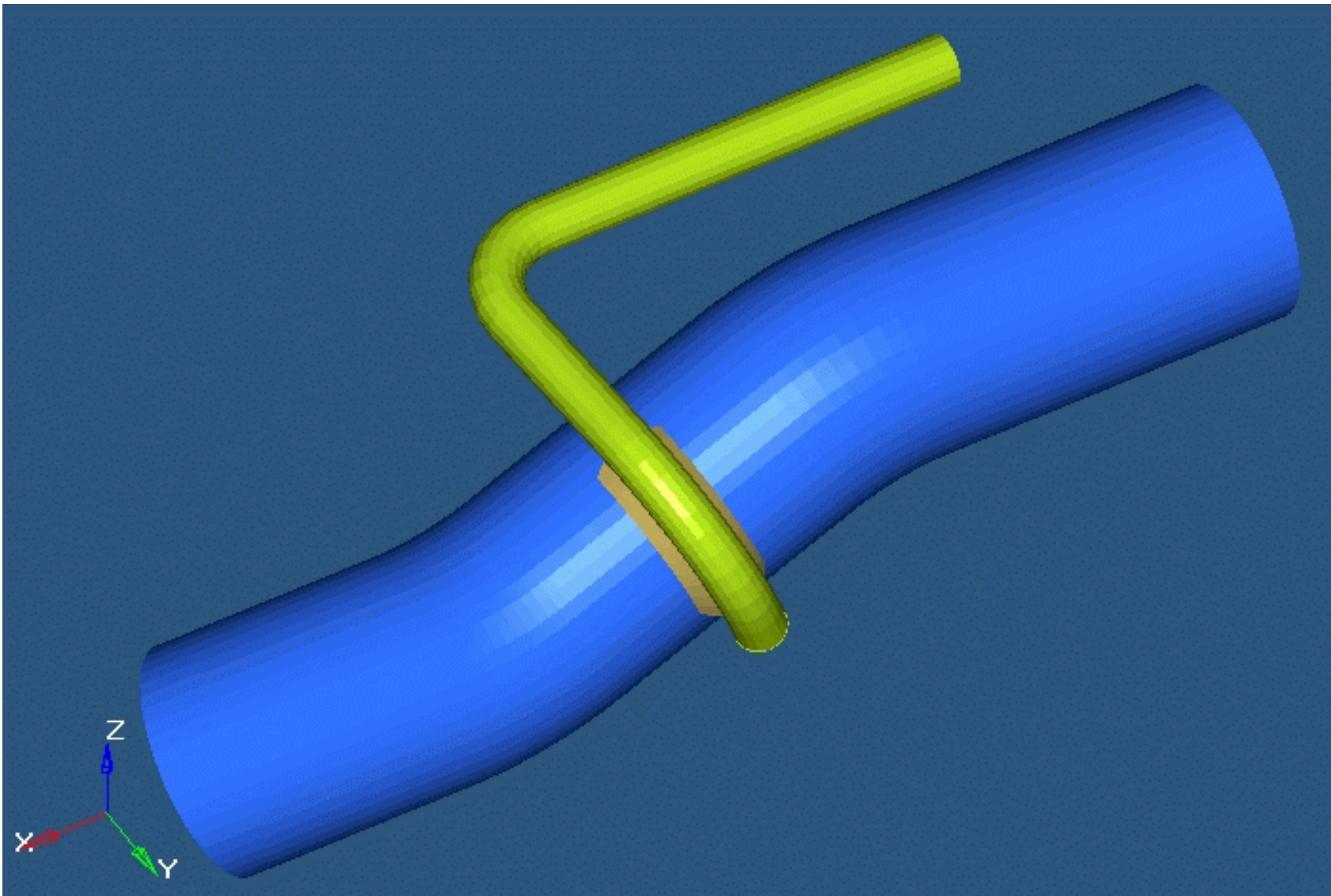
- Structural Stress approach
  - Battelle software
  - Custom wrapper in HyperWorks



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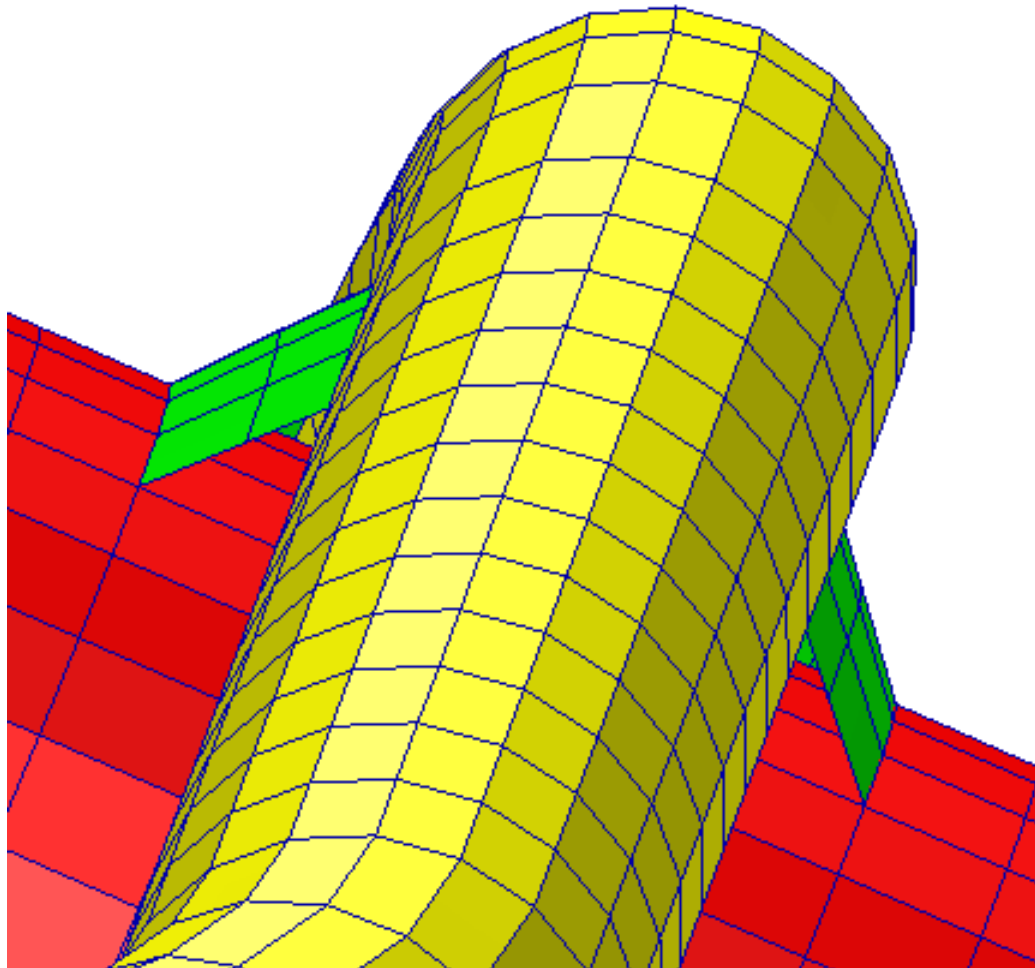


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## Model – weld details

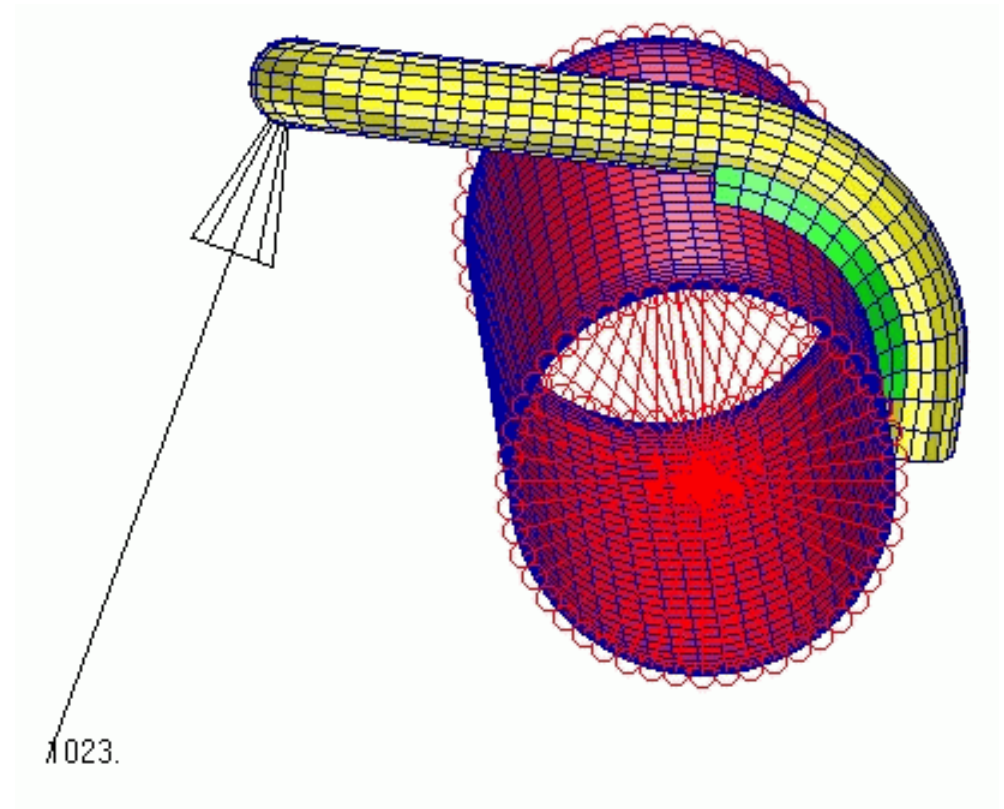




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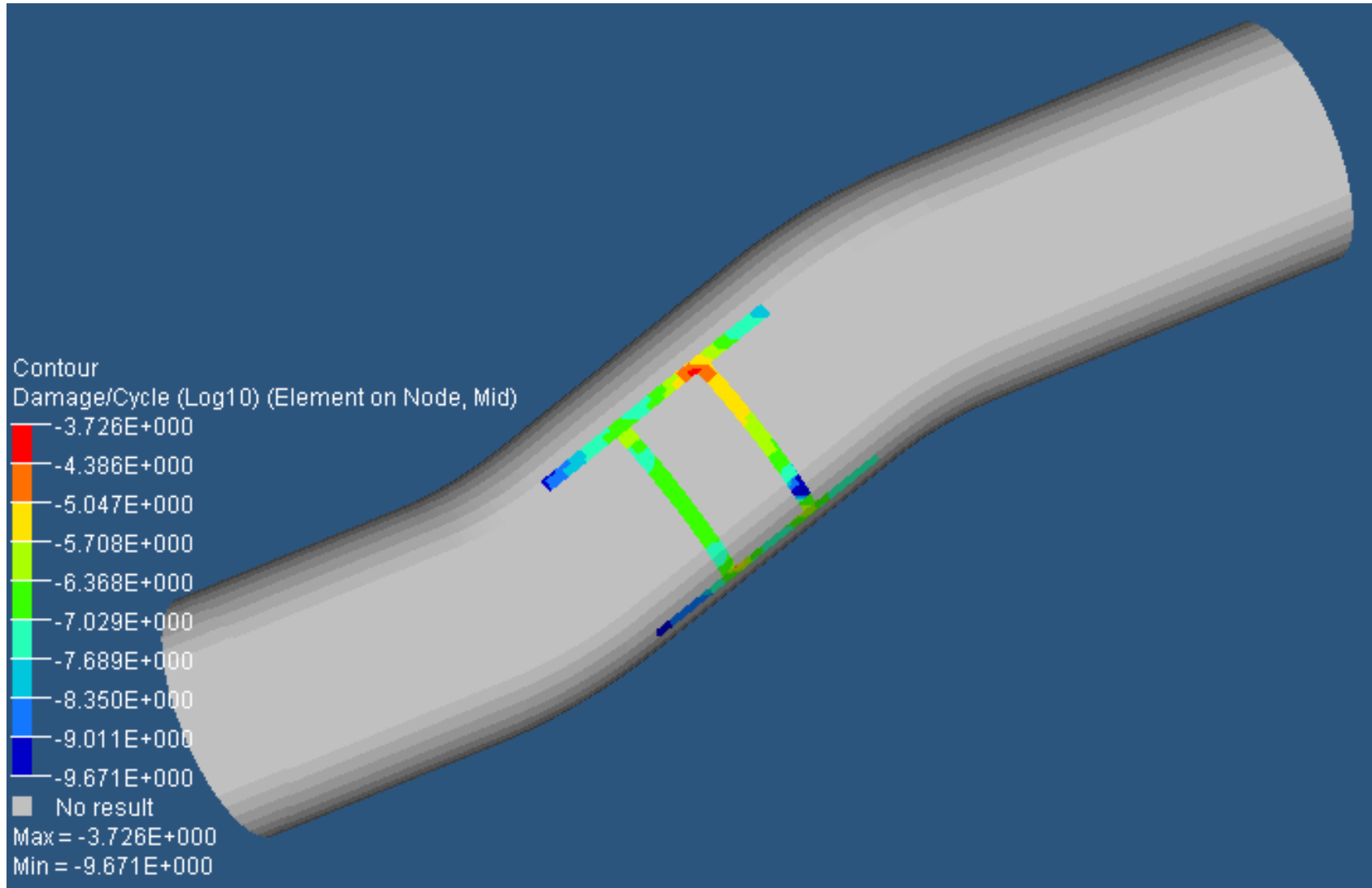
- Loads
  - Fully reversed
  - 4 load levels
    - 578N
    - 689N
    - 845N
    - 1023N





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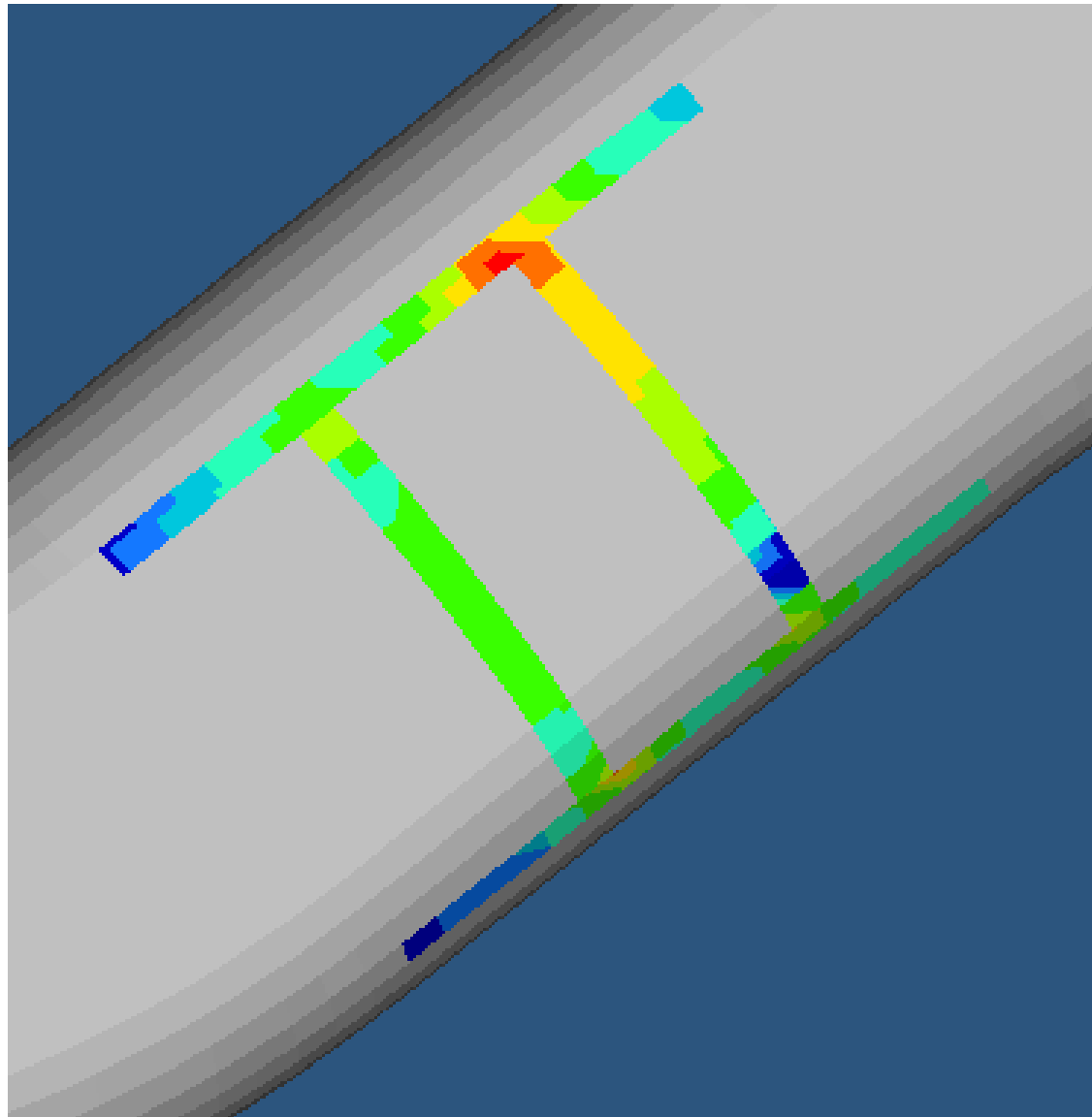




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# Structural Stress - Results

578 N	5315 cycles
689 N	3107 cycles
845 N	1665 cycles
1,023 N	929 cycles