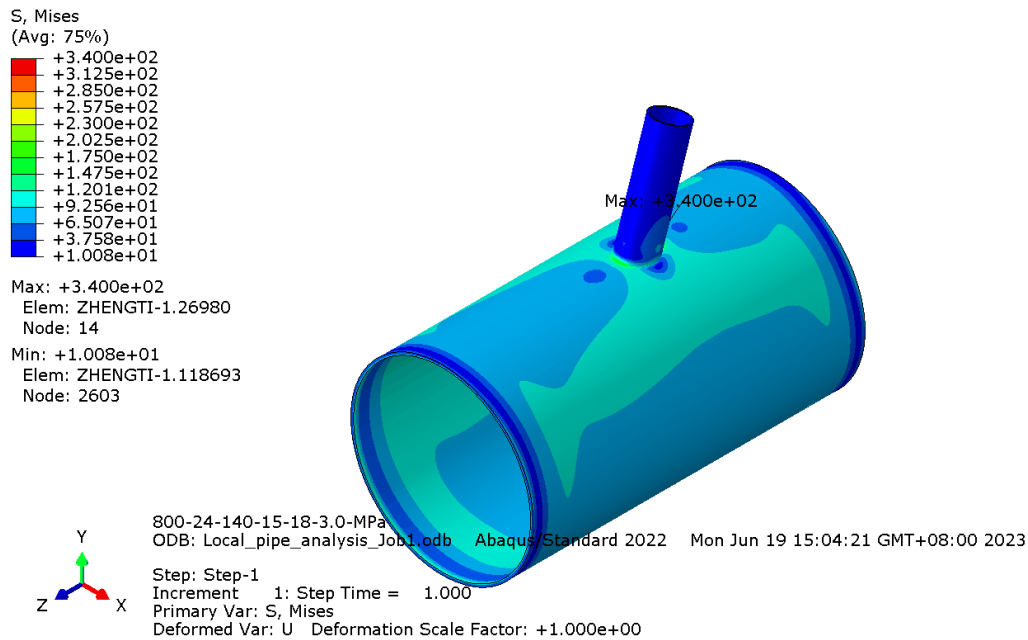


Appendix

Example 1:

Parameter: T: 24.0; t: 15.0; R: 800.0; r: 140.0; a: 18.0; P: 3.0;

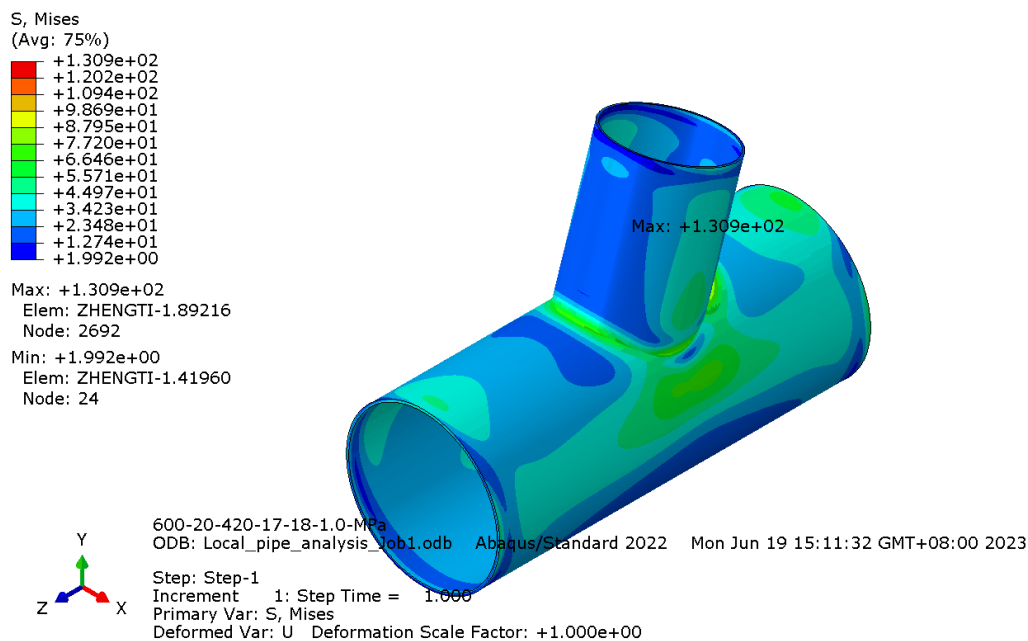
Predicted stress: 340.17; True stress: 340.0。



Example 2:

Parameter: T: 20.0; t: 17.0; R: 600.0; r: 420.0; a: 18.0; P: 1.0;

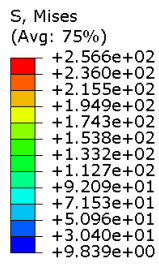
Predicted stress: 131.20 ; True stress: 130.9。



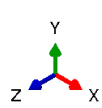
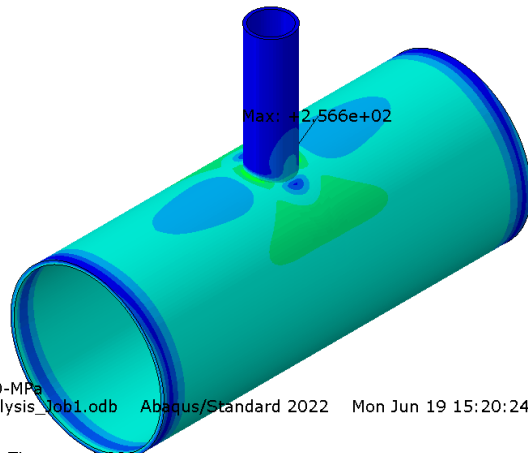
Example 3:

Parameter: T: 27.0; t: 24.0; R: 600.0; r: 140.0; a: 0.0; P: 4.0;

Predicted stress: 256.79 ; True stress: 256.6。



Max: +2.566e+02
Elem: ZHENGTI-1.10458
Node: 14
Min: +9.839e+00
Elem: ZHENGTI-1.43807
Node: 1889



600-27-140-24-0-4.0-MPa
ODB: Local_pipe_analysis_job1.odb Abaqus/Standard 2022 Mon Jun 19 15:20:24 GMT+08:00 2023

Step: Step-1
Increment 1: Step Time = 1.000
Primary Var: S, Mises
Deformed Var: U Deformation Scale Factor: +1.000e+00