



Piping Input - [D:\PIC STRESS ANALYSIS\COMBINED CO2 COMPRESSOR LINE - WITH VESSEL]

File Edit Model Kaux Plot Help

From: 1860 To: 1864 Name

DX: DY: 77.782 mm DZ: -77.782 mm Offsets

Diameter: 168.2750 Wt/Sch: 18.2626
 +Mill Tol %: 12.5000 -Mill Tol %: 12.5000
 Seam Welded
 Corrosion: 0.0000 Insul Thk: 60.0000

Temp 1: 70.0000 Temp 2: Temp 3:
 Pressure 1: 22360.000 Pressure 2:
 Hydro Press: 33540.000

Bend Reducer
 Rigid SIFs & Tees
 Expansion Joint Structural

Restraints Displacements
 Hangers Equipment
 Nozzles

Forces/Moments Thermal Bowing
 Uniform Loads Pitch & Roll
 Wind / Wave

Material: (131)A182 F316L
 Allowable Stress

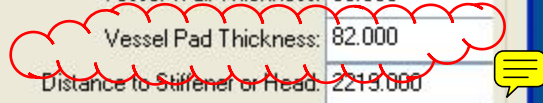
Elastic Modulus (C): 1.9512E+008
 Elastic Modulus (H1):
 Elastic Modulus (H2):
 Elastic Modulus (H3):
 Poisson's Ratio: 0.2920

Pipe Density: 0.00803
 Fluid Density: 0.00000
 Refractory Density:
 Insulation Density: 0.00014

Nozzles

Type
 WRC 297
 API 650
 PD 5500

Nozzle Node:	1864
Vessel Node (optional):	1866
Nozzle Outer Diameter:	168.275
Nozzle Wall Thickness:	18.263
Vessel Outer Diameter:	2235.000
Vessel Wall Thickness:	30.000
Vessel Pad Thickness:	82.000
Distance to Stiffener or Head:	2219.000
Distance to Opposite Stiffener:	5351.000
Vessel Centerline Direction Cosine VX:	
Vessel Centerline Direction Cosine VY:	1.000
Vessel Centerline Direction Cosine VZ:	
Vessel Temperature (optional):	225.000
Vessel Material (optional):	





CAESAR II Local Stress - [D:\PIC STRESS ANALYSIS\123]

File Edit Analyze View

Description Vessel Data Nozzle Data Loads Data

Analysis Type

- WRC 107
- WRC 297
- PD 5500 Annex G

Vessel Type

- Cylindrical
- Spherical

Vessel Data

Vessel Node Number (Optional): 1866

- Vessel Inside Diameter ID: 2235.000
- Vessel Outside Diameter OD

Vessel Wall Thickness (T): 30.000

Vessel Corrosion Allowance: 3.200

Vessel Stress Intensity Allowable

Vessel Design Temperature: 225.000

Vessel Material Name: SA-515 70

Hot Allowable Stress (Smh): 137895.203

Cold Allowable Stress (Smc): 137895.203

Additional Data

Include Pressure Stress Indices (Div.2):

For Help, press F1

NUM



CAESAR II Local Stress - [D:\PIC STRESS ANALYSIS\123]

File Edit Analyze View

Description | Vessel Data | **Nozzle Data** | Loads Data

Nozzle Type

- Round Hollow
- Round Solid
- Square Hollow
- Square Solid
- Rectangular Solid

Nozzle Data

Nozzle Node Number (Optional): 1864

Nozzle Inside Diameter ID: 168.300

Nozzle Outside Diameter OD

Attachment Wall Thickness (t): 18.260

Corrosion Allowance: 3.200

Reinforcing Pad

Reinforcing Pad Diameter: 240.000

Reinforcing Pad Thickness (T1): 82.000

Do not Consider Pad Thickness in Pressure Stress Calculations:

SCF Nozzle/Pad (optional)

Kn:

Kb:

SCF Pad/Vessel (optional)

Kn:

Kb:

For Help, press F1

NUM