

Connection Type **Baseplate**

Analysis Type Redesign

Bolt Analysis Method
ASCE 48-05

Plate Bending Stress Analysis Method
Bend Lines at Pole Flat or Point

- Assume shear is resisted by only 1/2 of bolts?
- Use plate thicknesses in 1/4 inch (or larger) increments?
- Limit Bend Line Length to Pole Point/Point Width?
- Limit Bend Line Length to 1/2 of Plate Outer Dimension?
- Limit Bend Line Length to a point at 45 degrees from End-Most Bolt?
- Limit Bend Line Length to Pole Perimeter divided by number of bolts?
- Limit Bend Line Length to Pole Flat Width?
- Bypass 'Minimum Edge Distance' warnings?
- Bypass AASHTO Minimum Plate Thickness warning?
- Bypass anchor bolt development length calculation?

Enable audible feedback?

Allow Output Regardless?

HP LaserJet 3390 / 3392 PCL5 Portrait (8.50 x 11.00)

Analysis complete

Initialize Data	Preview Text	Print Text	Perform Analysis
Page Setup	Preview Graphics	Plot Graphics	
			Exit

File Help

Analysis Settings | General Data | Pole Data | Plate and Bolt Data | Vangs & Arm Connection | User Spec Bolt Coord. | Loading Data | User Mandates | Anchorage | Output Settings

Customer Name

Project Number

Project Description

Site Name

Job Number

Structure Number

Company Data

Engineer Name

Company Name

Street Address

P O Box

City

State

ZIP code

Phone Number

Fax Number

Email Address

Web Address



Load Logo

C:\K2_Projects\K2Logo_NoText.bmp

Enable audible feedback?

Allow Output Regardless?

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Pole Type
Transmission

Pole Material
A572-50

Pole Shape
12F - 12 Sides, Flat on Tran

Pole Flat/Flat Width (in)
95.000

Pole Thickness (in)
0.6875 (11/16)

Pole Weld Size (in)
0.6875

Is a Stealth Pole?

Enable audible feedback?

Allow Output Regardless?

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Analysis Settings | General Data | Pole Data | Plate and Bolt Data | Vangs & Arm Connection | User Spec Bolt Coord. | Loading Data | User Mandates | Anchorage | Output Settings

Plate Shape <input type="text" value="0 - Round"/>	Plate Material <input type="text" value="A572-50"/>	Hole Shape <input type="text" value="None"/>	Bolt Pattern <input type="text" value="Equally Spaced"/>	Bolt Grade <input type="text" value="18J Gr. 75"/>
Plate Outer Dimension (in) <input type="text" value="115.250"/>	Bolt Hole Diameter (in) <input type="text" value="2.5625"/>	Hole Dimension 1 (in) <input type="text" value="0.000"/>	Bolt Circle Diameter 1 (in) <input type="text" value="105.000"/>	Bolt Diameter (in) <input type="text" value="2-1/4 inch"/>
Plate Thickness (in) <input type="text" value="4.0"/>		Hole Dimension 2 (in) <input type="text" value="0.000"/>	Bolt Circle Diameter 2 (in) <input type="text" value="0.000"/>	Bolt Length (in) <input type="text" value="129.000"/>
Corner Clip Length (in) <input type="text" value="0.000"/>	Galvanizing Drain Method <input type="text" value="None"/>	Plate Hole Corner Radius (in) <input type="text" value="0.000"/>	Bolts on Bolt Circle 1 <input type="text" value="48"/>	<input checked="" type="checkbox"/> Bolt Threads are in Shear Plane?
Plate Blank Dimension 1 (in) <input type="text" value="115.250"/>	Drain Dimension 1 (in) <input type="text" value="0.000"/>	<input checked="" type="checkbox"/> Plate is Galvanized?	Bolts on Bolt Circle 2 <input type="text" value="0"/>	Number of Top-Side Nuts <input type="text" value="1"/>
Plate Blank Dimension 2 (in) <input type="text" value="115.250"/>	Drain Dimension 2 (in) <input type="text" value="0.000"/>	<input type="checkbox"/> Socket Style Weld?		Number of Bottom-Side Nuts <input type="text" value="1"/>

Enable audible feedback?

Allow Output Regardless?

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			Exit

Pole Vang Data

Vang Plate Material

undefined

Bolt Grade

Undefined

Vang Plate Thickness (in)

Undefined

Bolt Layout (bolts per vang)

undefined

Vang Plate Depth (in)

0.000

Near End Bolt Edge Distance

0.000

Vang Plate Length

0.000

Bolt Offset from Pole Centerline (in)

0.000

Out-to-Out Width (in)

0.000

Bolt Spacing (in)

0.000

Bolt Diameter (in)

Undefined

Bolt Spacing - Dimension 2 (in)

0.000

Arm Connection Data

Connection Type

Undefined

On outside of vang plates?

Plate Material

undefined

Outer Bend Radius (in)

0.000

Plate Thickness (in)

Undefined

Arm Shape

Undefined

Plate Depth (in)

0.000

Arm Flat/Flat Width (in)

0.000

Bolt Offset From Free Edge (in)

0.000

Bolt Offset from Arm Butt (in)

0.000

Enable audible feedback?

Allow Output Regardless?

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Initialize Data

Preview Text

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Perform Analysis

Page Setup

Preview Graphics

Plot Graphics

Exit

Below you may specify up to 20 different locations for bolt holes, in the first (upper right) quadrant (i.e., X and Y are positive). These coordinates will then be mirrored in the three other quadrants. If you are using an equally-spaced bolt pattern, or a quadrant-spaced bolt pattern, no input is needed here. Their location does not need to be associated with a particular bolt circle and may be located anywhere in the quadrant, but must be to the exterior of the tube outline. Later checks will be made for proper spacings, edge setbacks, etc.

	X Coordinates (in)	Y Coordinates (in)
01	0.00000	0.00000
02	0.00000	0.00000
03	0.00000	0.00000
04	0.00000	0.00000
05	0.00000	0.00000
06	0.00000	0.00000
07	0.00000	0.00000
08	0.00000	0.00000

Enable audible feedback?

Allow Output Regardless?

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Analysis complete

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Data for Load Case # 1 of 12 load cases. Highest # = 0

Load Case Name **A**

Force (Shear) along Axis 1 (kips)

Force (Shear) along Axis 2 (kips)

Axial Force (compression is negative) (kips)

Moment About Axis 1 (ft-kips)

Moment About Axis 2 (ft-kips)

Moment About Shaft Centerline Axis (ft-kips)

Strength Reduction Factor

Allowable Stress Increase Factor

Load Factor

Load Case 0

Note: Load Case 0 is referenced to a specified percentage of tube capacity, not any applied loads. Load Case 0 only applies to Baseplate and Flange analyses.

Strength Reduction Factor

Allowable Stress Increase Factor

Load Factor

Required % of Tube Capacity (%)

Enable audible feedback?

Allow Output Regardless?

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File Help

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Mandates for Baseplates and Flanges

Pole Out-of-Roundness Tolerance (%)

Minimum Bolt Edge Distance (in)

Plate Max Outer Dimension as adder to BC (in)

Quadrant On-Center Spacing (in)

Min Distance Center Hole to Pole (in)

Minimum Bolt Spacing (in)

Min Distance Pole to Edge (in)

Maximum Bend Line Length (in)

Maximum Plate Thickness (in)

Angle to rotate equally spaced bolts (Deg)

Maximum Flange Bolt Spacing (in)

Mandates for Arm Connections

Maximum Bolt Diameter (in)

Enable audible feedback?

Allow Output Regardless?

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Concrete Strength (psi)

3000

Foundation Diameter (in)

129.00

Clear Dist. Above Found. (in)

0.00

Anchor Bolt Cage

Template ID (in) 100.00

Template OD (in) 110.00

Top Template Thickness (in) 0.5 (1/2)

Bot Template Thickness (in) 0.5 (1/2)

Has Uplift Plates?

Uplift Plate Width (in) 6.00

Uplift Plate Thickness (in) 0.25

Enable audible feedback?

Allow Output Regardless?

HP LaserJet 3390 / 3392 PCL5 Portrait (8.50 x 11.00)

Initialize Data

Preview Text

Print Text

Perform Analysis

Page Setup

Preview Graphics

Plot Graphics

Exit

Text Settings

- Print bolt design parameters?
- Print bolt moment arm data?
- Print worst case plate bending moment details?
- Print Bolt Loading Results Detail?
- Print Load Case Summary?
- Print Plate Stress Details for each load case?
- Print Miscellaneous Results?

Graphics Settings

- Label Pole Flats?
- Label Pole Points?
- Label Pole Flat Bend Lines?
- Label Pole Point Bend Lines?
- Label Bolt Numbers?
- Label Bolt Moment Arms?
- Label Worst Case Bolts?
- Label Worst Case Plate Bending Stress Location?
- Plot Effective Bend Lines?

Enable audible feedback?

Allow Output Regardless?

HP LaserJet 3390 / 3392 PCL5 Portrait (8.50 x 11.00)

Analysis complete

Initialize Data

Preview Text

Print Text

Perform Analysis

Page Setup

Preview Graphics

Plot Graphics

Exit