Uniform Stress in Pinned Axial Member in Tension

Nominal Stress Away from the holes

\[ \sigma_{\text{avg}} = \frac{P}{A} = \frac{P}{ht} \]
Pinned Axial Member

\[ A_{\text{Reduced}} = (h-d)(t) \]

\[ \text{LAVG}_{\text{hole}} = \frac{P}{t(h-d)} \]
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Projected Area = $\frac{P}{dt}$

$\int_{Bearing \, Ave} \frac{p}{d^t}$
Uniform Stress in Pinned Axial Member in Compression

No Increased Normal Stress at the Hole

No Tear Out Shearing Stress at the Hole

Nominal Stress
\[ \sigma_{\text{avg}} = \frac{P}{A} \]

Bearing Stress
\[ \sigma_{\text{bearing}} = \frac{P}{A_{\text{bearing}}} \]

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