2019 TIAC Conference

Innovators Sub-committee Update
• Current Initiatives
  – Best Practice Guide (BPG) Updates
  – Denis Formula Updates

• Future Initiatives
  – Mobile Application
  – Corrosion Under Insulation (CUI)
Denis Formula Revision 5 – Proposed Changes

• Better define the method of measurement and reduce opportunities for misinterpretation
• Extend factors to include for larger pipe sizes (i.e. 64 NPS)
• Align imperial and metric conversion tables. (Possibly considering only one unit of measure)
• Set factor for heat tracing penetrations (%)
• Simplify height allowances by utilizing a 1 – 2 factors rather than a tiered system
• Revise hot work factor to a single unit rather than a tiered system
• Eliminating factors for screwed fittings (Factor stacking)
• Simplify the view of the conversion factors to a single table

<table>
<thead>
<tr>
<th>Size</th>
<th>4” Elliptic</th>
<th>4” Elliptic</th>
<th>Branch Pipe</th>
<th>Tee</th>
<th>Branch Fittings</th>
<th>Reduce/Expand</th>
<th>Valves/Flange</th>
<th>Forged Piping</th>
<th>Piping @ Delta</th>
<th>Connection</th>
<th>Flanges</th>
<th>Valves/Flanged</th>
<th>Valves/Threaded</th>
<th>Valves/Flanged</th>
<th>Bends</th>
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<td>0.42</td>
<td>3.00</td>
<td>0.62</td>
<td>0.62</td>
<td>0.47</td>
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<td>0.55</td>
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</tr>
</tbody>
</table>
Dennis Rev. 04 - Elbow Extension

- 45° Elbow
  \[ y = 0.1166x + 1.0095 \]
- 90° Elbow
  \[ y = 0.1685x + 1.5778 \]
Sample – Method of Measurement