Update: pipes of different half bend angles

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Outline

• Mercury Supply Pipe
• Re-mesh for Pipes without weld of different half bend angles
• Turbulence Intensity At Pipe Exits
• Discussion on Bend Effects and Nozzle Effects
Mercury Supply Pipe

Fig. 1 Target Supply Pipe

Fig. 2 Most Interested Weld

Whole azimuthal weld with semi-circle cross section

R=1/16"
Re-mesh for Pipes without weld of different half bend angles

The height of 1st cell normal to wall: 5.56e-5 pipe diameter;

Fig. 3 Eight Geometries Studied
Fig. 4 Turbulence Intensity At the Pipe Exit
Discussion on Bend Effects and Nozzle Effects

(a) Bend Starts
(b) 1st Bend Ends
(c) 2nd Bend Ends
(d) Nozzle Starts
(e) Exit

30 deg 60 deg 90 deg

(b) q1=30
(c) q1=60
(d) q1=90
(e) q2=30
(f) q2=60
(h) q2=90
(i) Nozzle Starts
(j) Narrow Starts
(k) Exit