

Update: Turbulence Intensity

- pipes of different half bend angle

Feb. 7, 2013

Yan Zhan

Outline

- Mercury Supply Pipe
- Mesh Independence Check
- Re-mesh for Pipes without weld of different half bend angles
- Turbulence Intensity At Pipe Exits

Mercury Supply Pipe

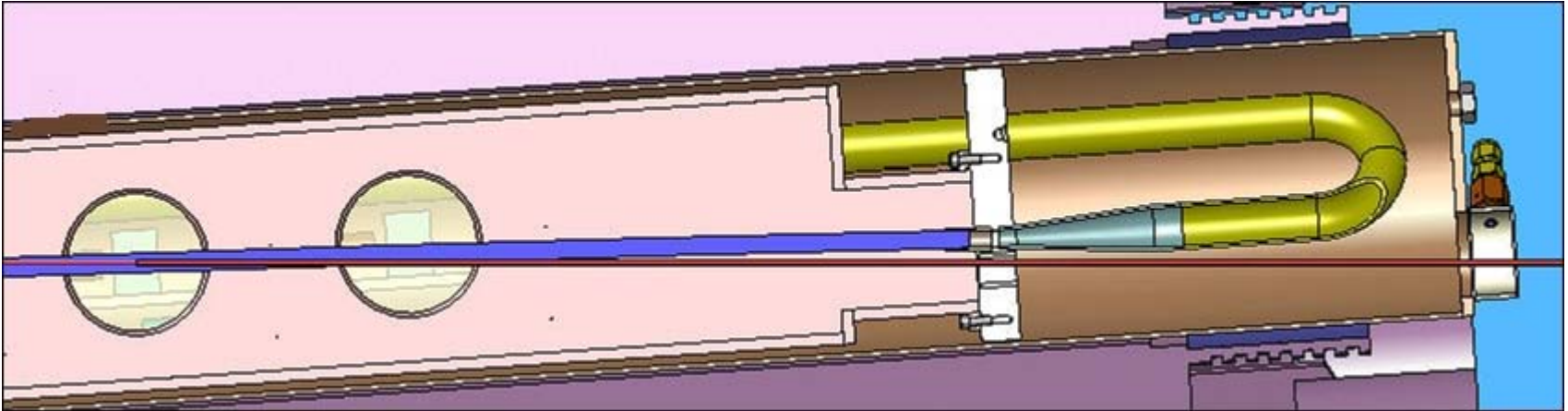
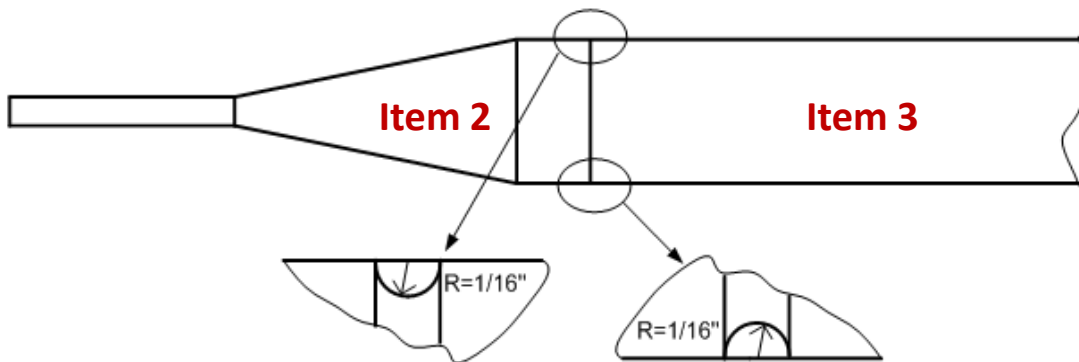


Fig. 1 Target Supply Pipe



Whole azimuthal weld with semi-circle cross section

Fig. 2 Most Interested Weld

Mesh Independence Check

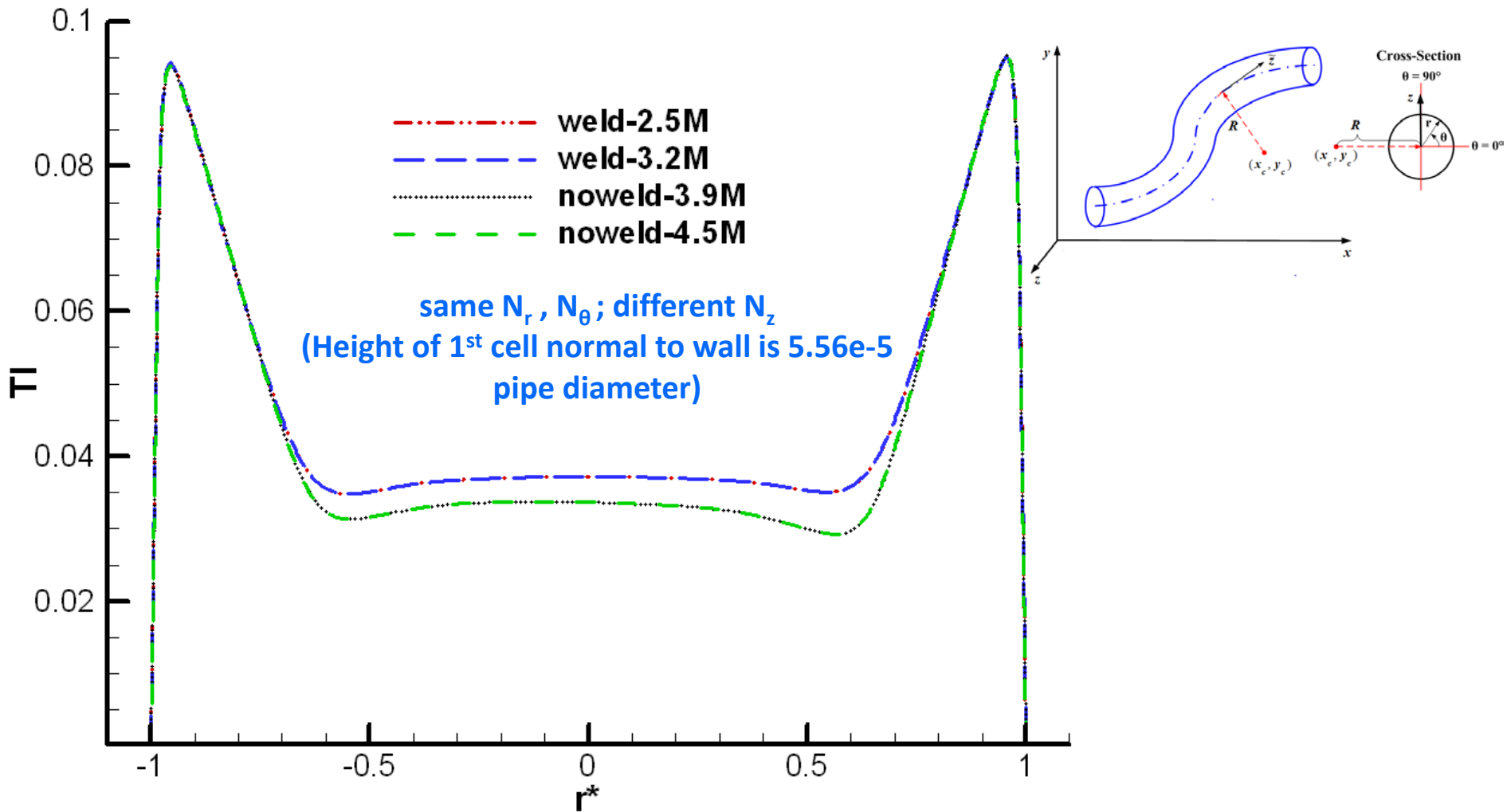


Fig. 3 Line Plots of TI at the Pipe Exit

Mesh Independence Check Cont'd

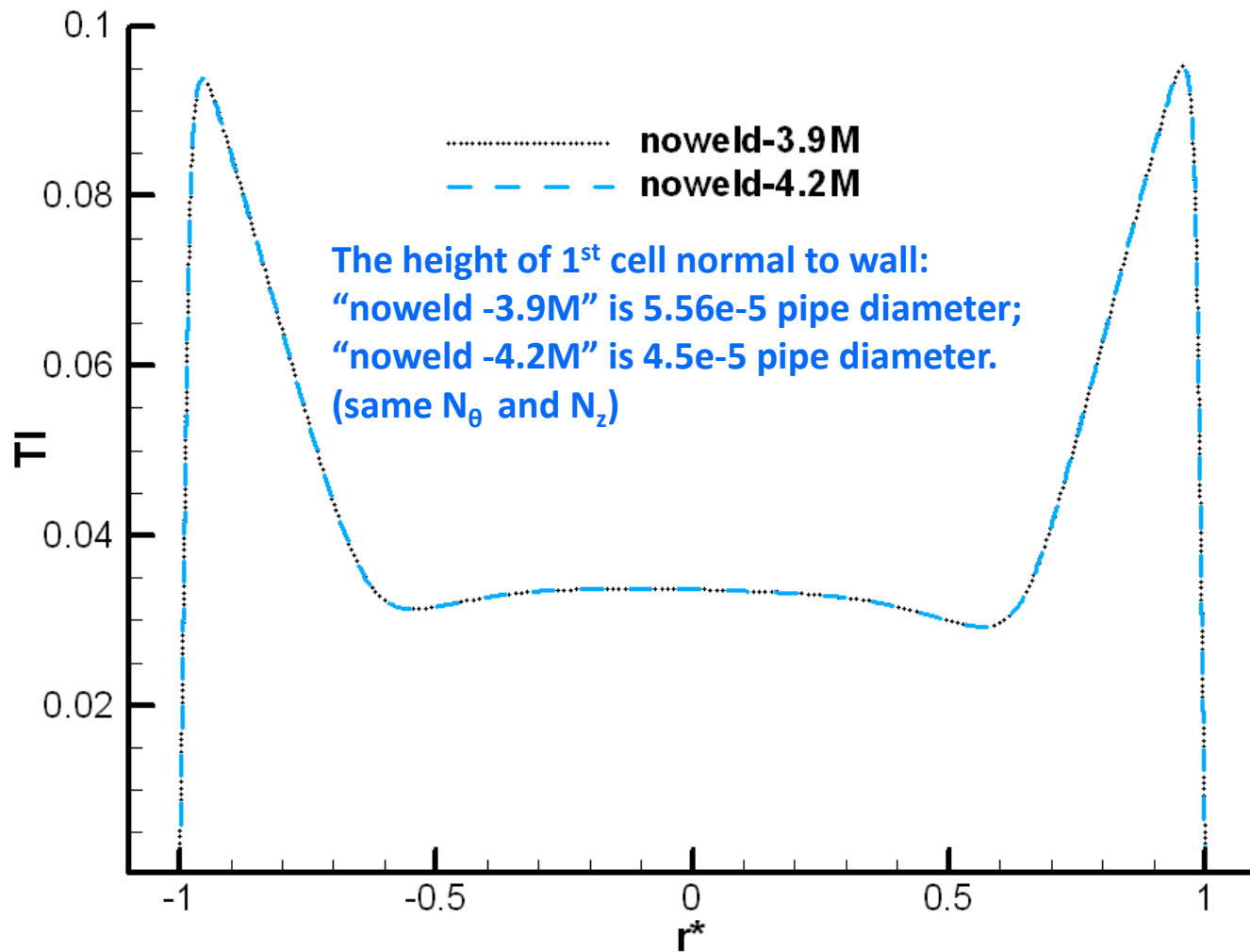


Fig. 4 Line Plots of TI at the Pipe Exit

Re-mesh for Pipes without weld of different half bend angles

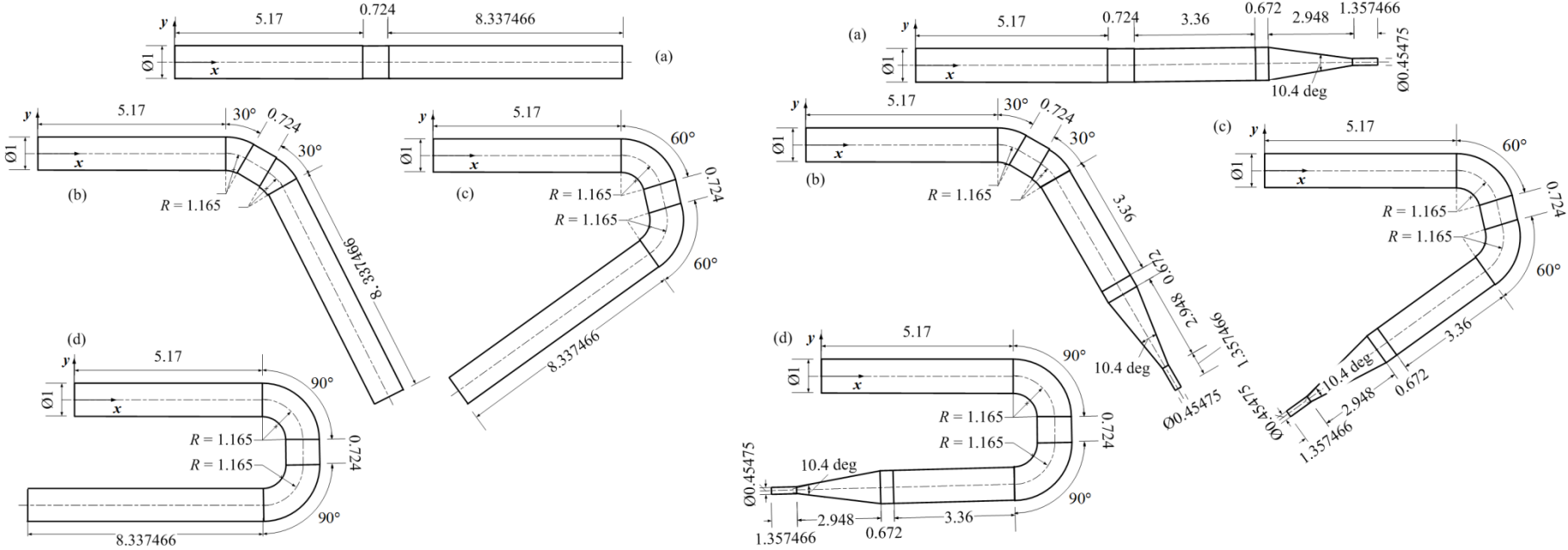


Fig. 5 Eight Geometries Studied

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

Turbulence Intensity At Pipe Exits

