MsS Inspection of Twisted
Heat Exchanger Tube

Southwest Research Institute
Contact
Hegeon Kwun
hkwun@swri.org

August 2008
1” OD, 0.085” Wall and 43” long Twisted S.S Tube Sample

Defect A
0.1 x 0.0075”
circumf. groove
9% CSA
at 16” from the sensor end

Defect B
0.1 x 0.015”
circumf. groove
18% CSA
at 20” from the sensor end

Defect C
0.32x0.4x0.065”max notch
5% CSA
at 24” from the sensor end

Defect D
0.125” hole
4 % CSA
at 28” from the sensor end
MsS T-Mode Data from 1” OD, 0.085” wall Twisted S.S Tube

Initial Pulse

End

A

B

C

D

250 kHz

A

B

C

D

150 kHz
Cutoff frequencies at approximately 75 and 200 kHz that were caused by the twisted geometry.