

MsS Inspection of Twisted Heat Exchanger Tube

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1" OD, 0.085" Wall and 43" long Twisted S.S Tube Sample



MsS



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

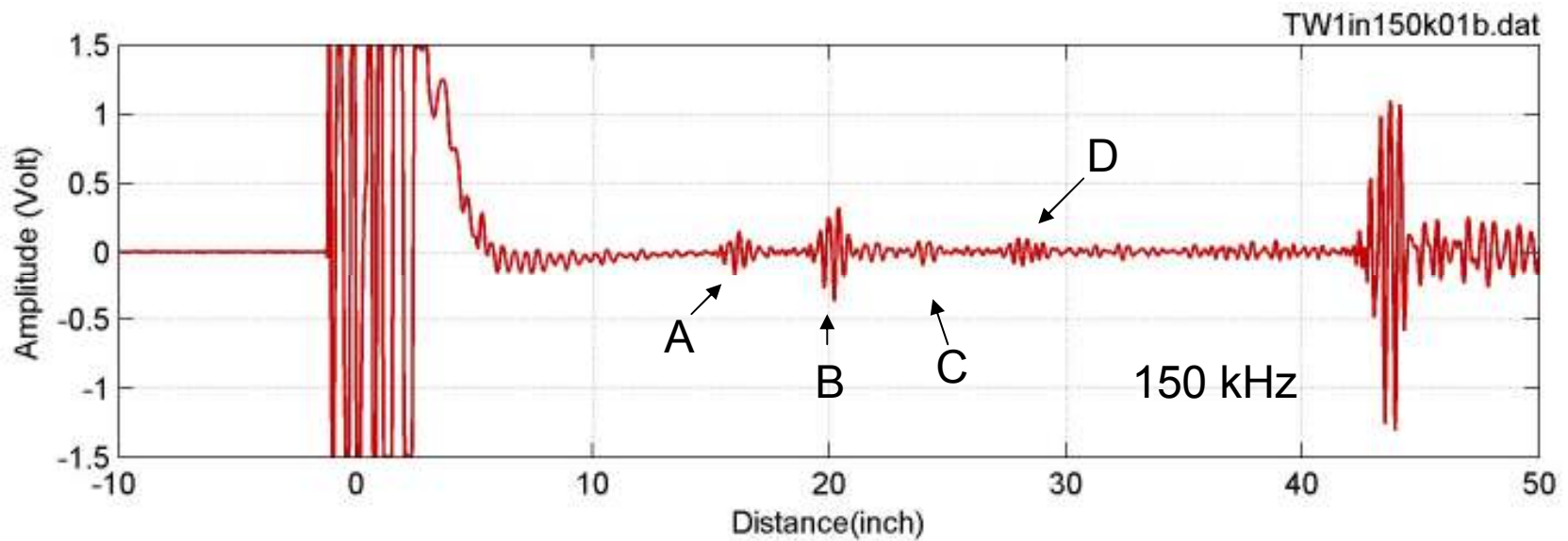
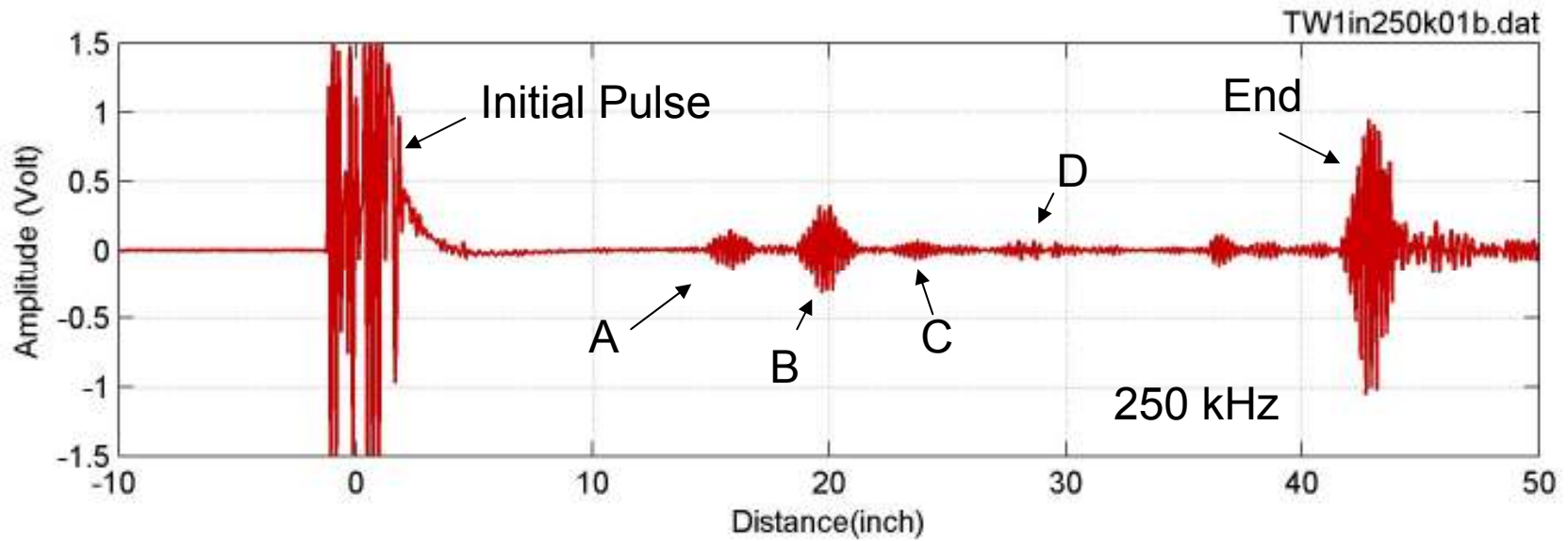


Defect C
0.32x0.4x0.065" max
notch
5% CSA
at 24" from the
sensor end

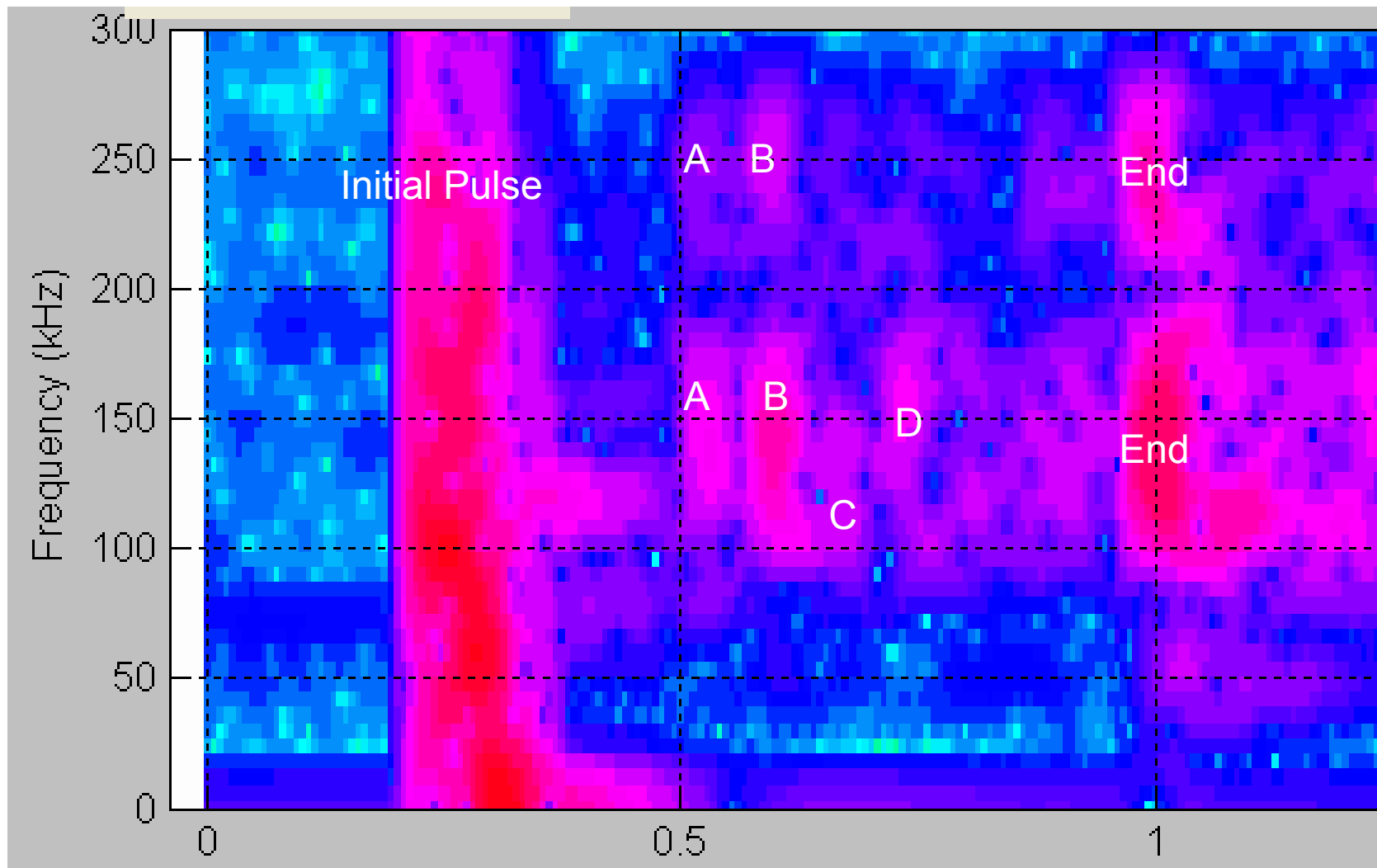


Defect D
0.125" hole
4 % CSA
at 28" from the
sensor end

MsS T-Mode Data from 1"OD, 0.085"wall Twisted S.S Tube



T-Mode Dispersion Properties in the Test Sample



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