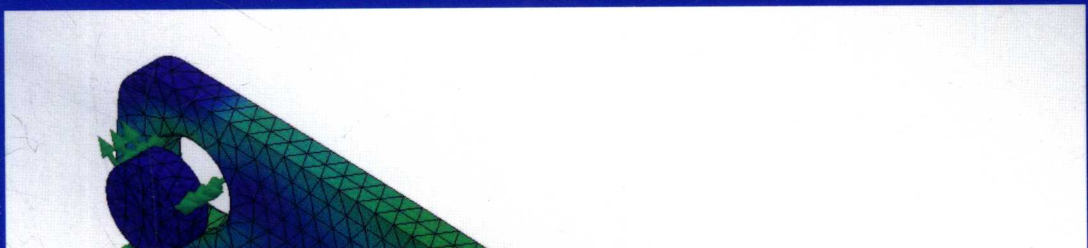
Finite Element Analysis with SOLIDWORKS Simulation®



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Finite Element Analysis with SOLIDWORKS Simulation®

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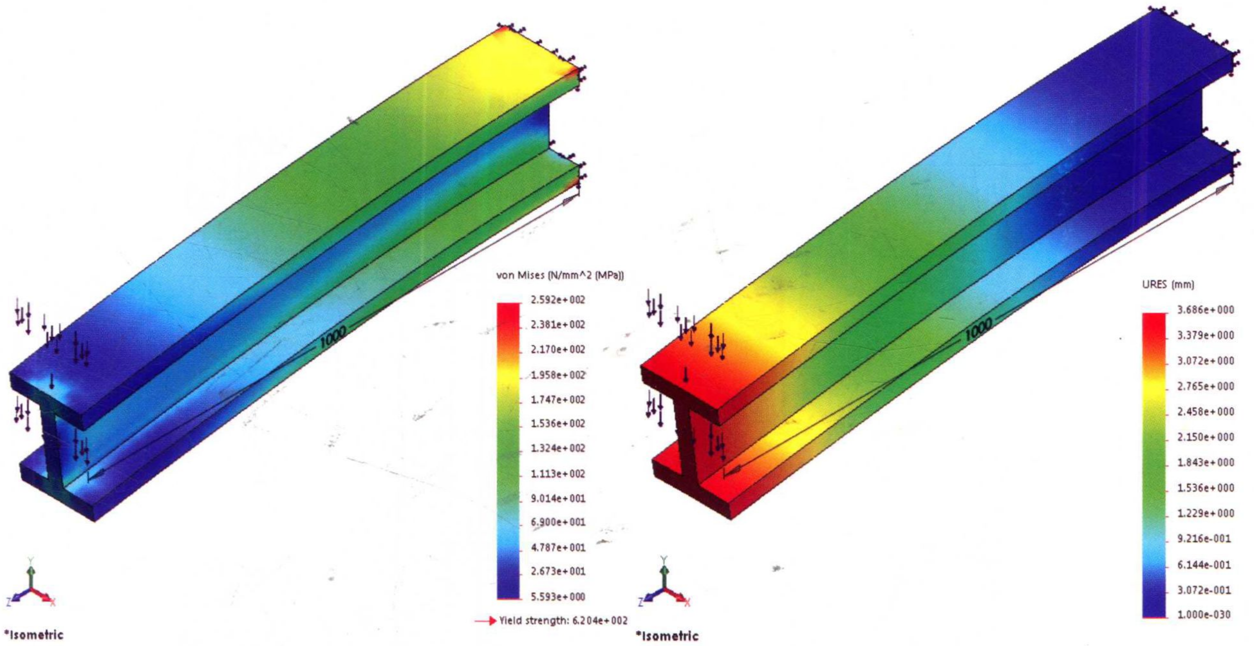

Figure 1.17 Stress and displacement results plots

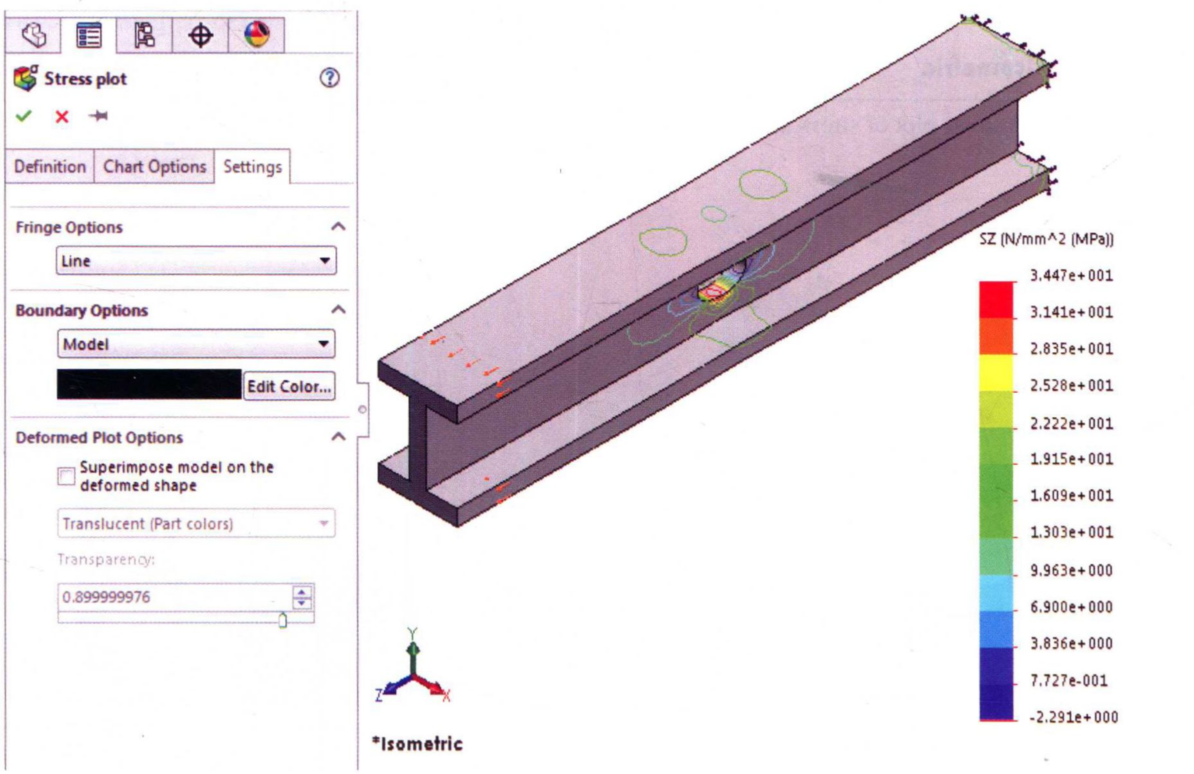

Figure 1.27 Stress concentration around the hole in the model

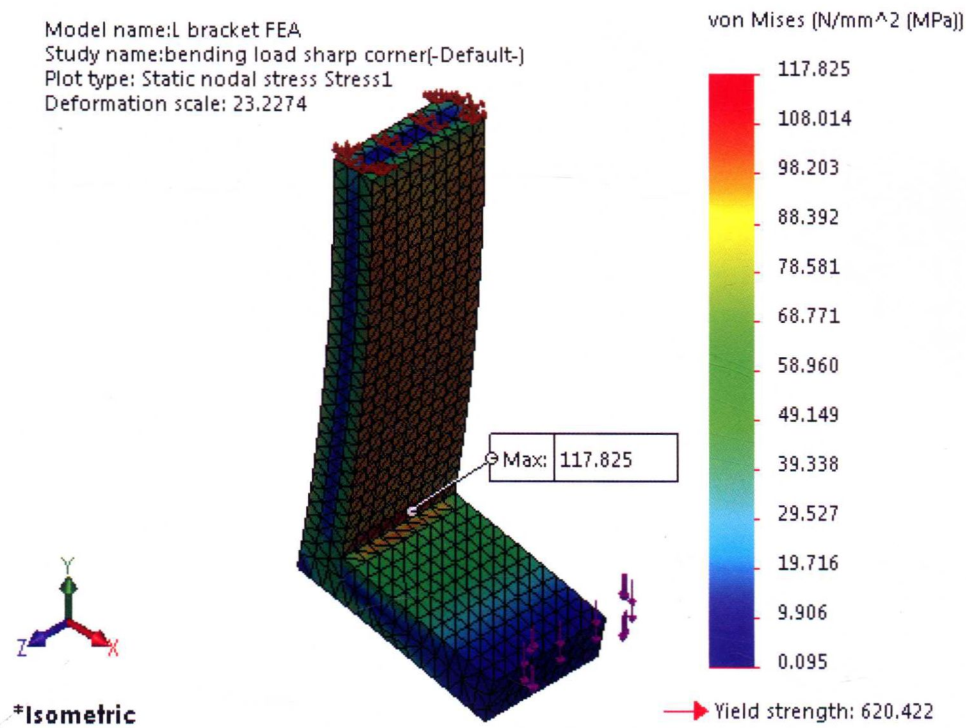

Figure 1.31 vM stress plot of stress intensity at a re-entrant corner

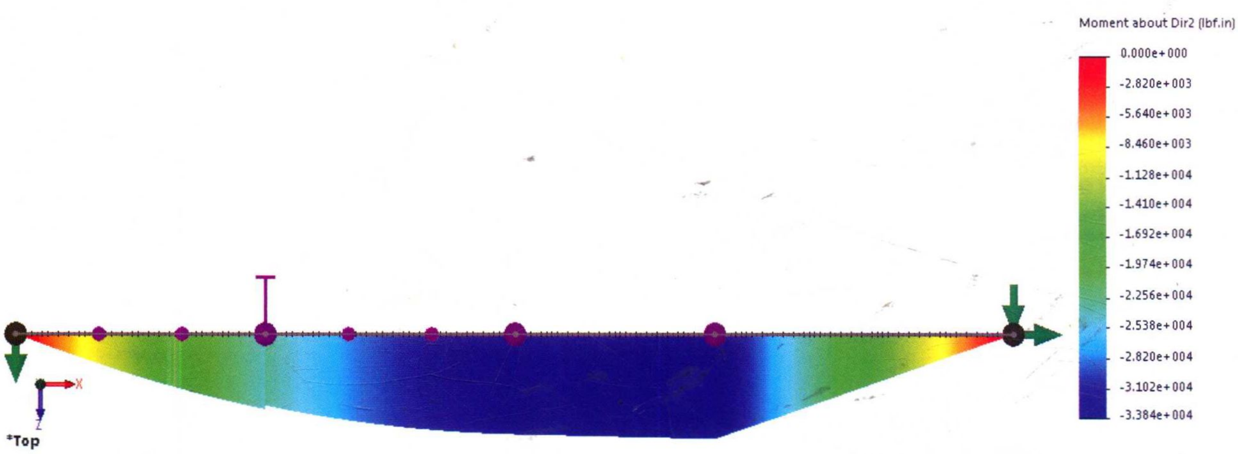

Figure 3.54 Moment diagram results plot

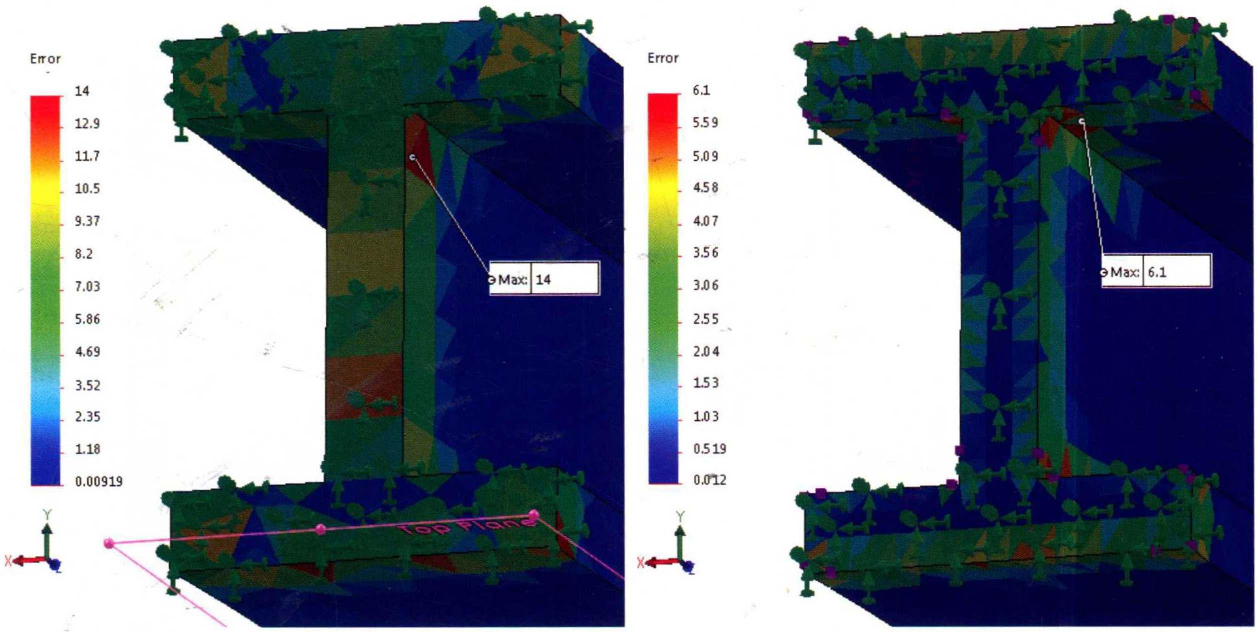

Figure 4.15 The effect of mesh control on energy norm error

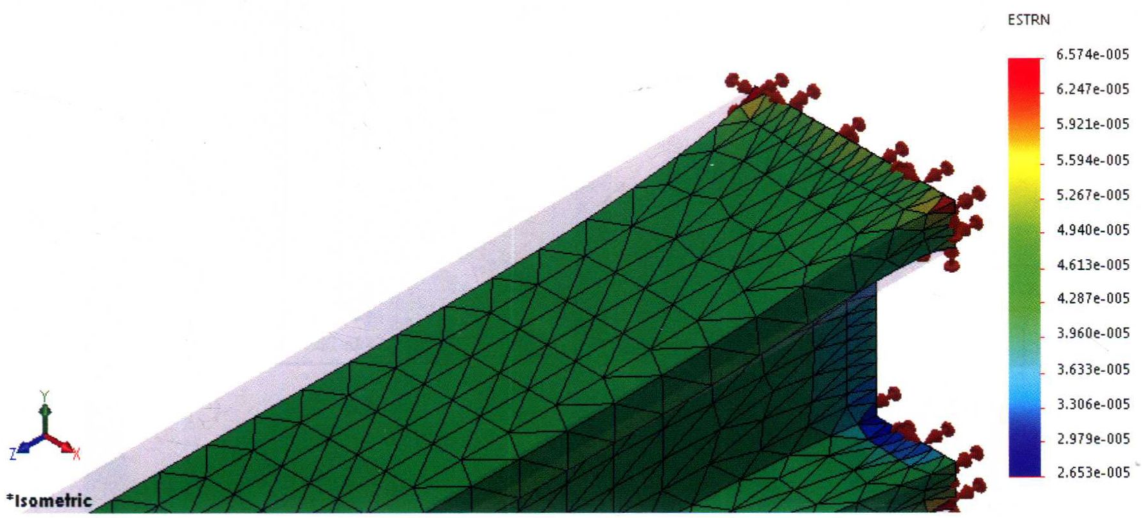

Figure 4.43 Equivalent strain plot showing original and deformed shapes at 10,000 deformation scale

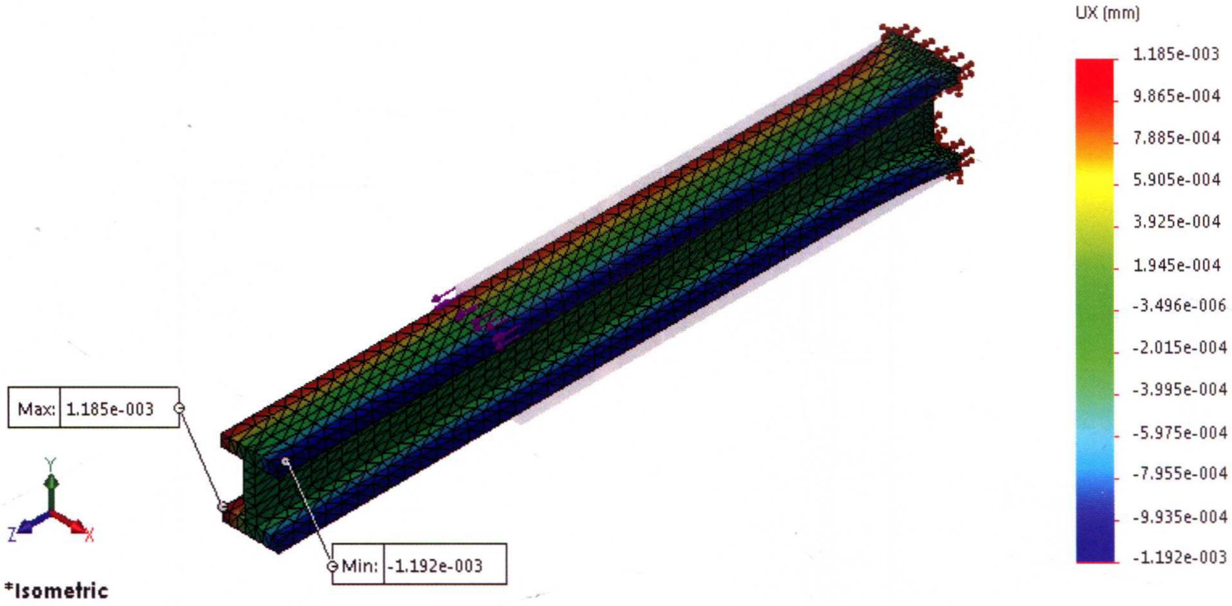

Figure 4.44 X displacement contour plot of mesh-control I-beam model

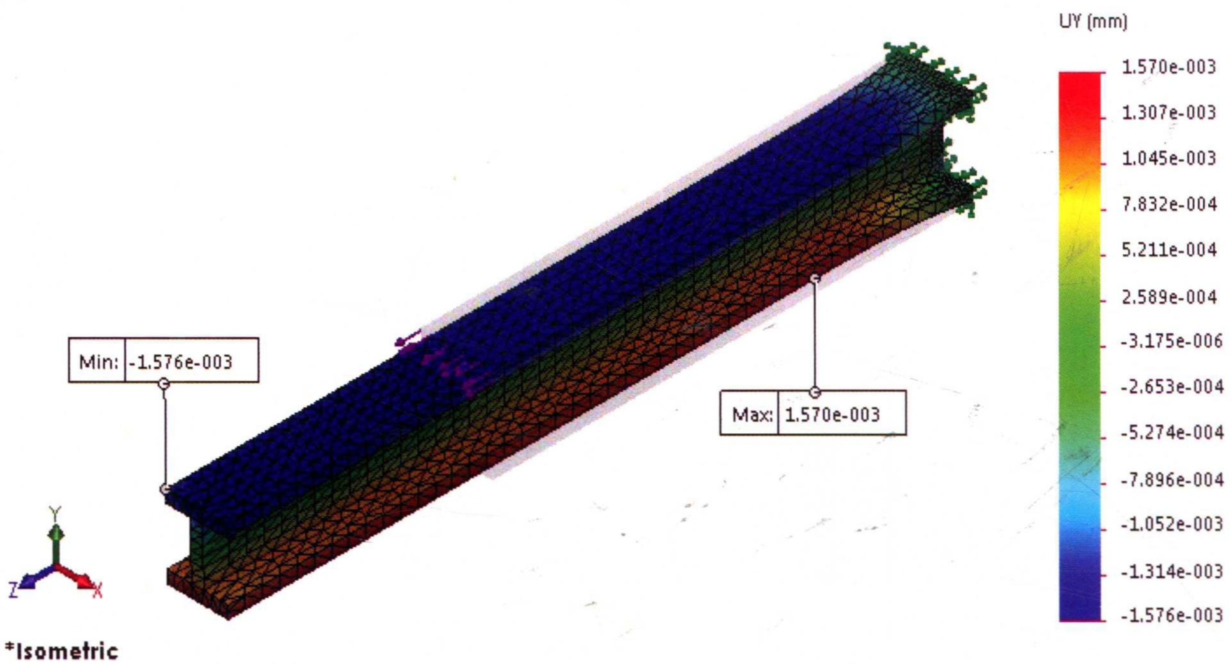

Figure 4.45 Y displacement contour plot for the mesh-control I-beam model simulation

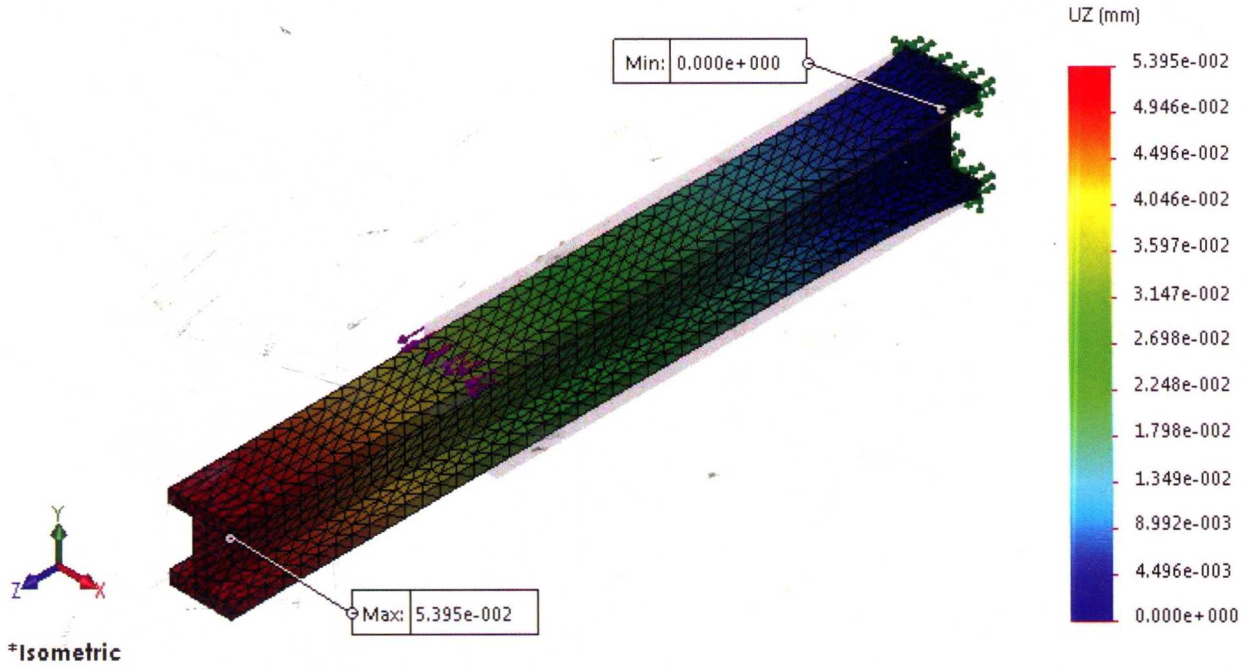

Figure 4.46 Z displacement contour plot of mesh-control I-beam model simulation

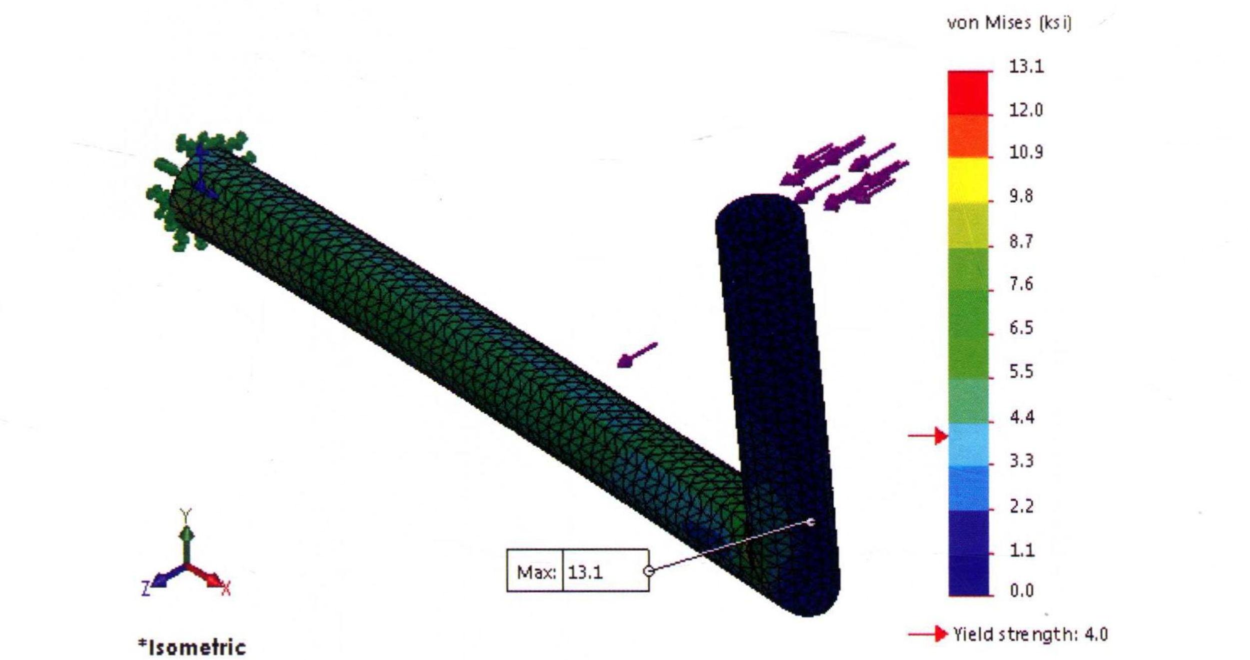

Figure 4.52 vM stress plot results from the L-pipe model analysis with default mesh

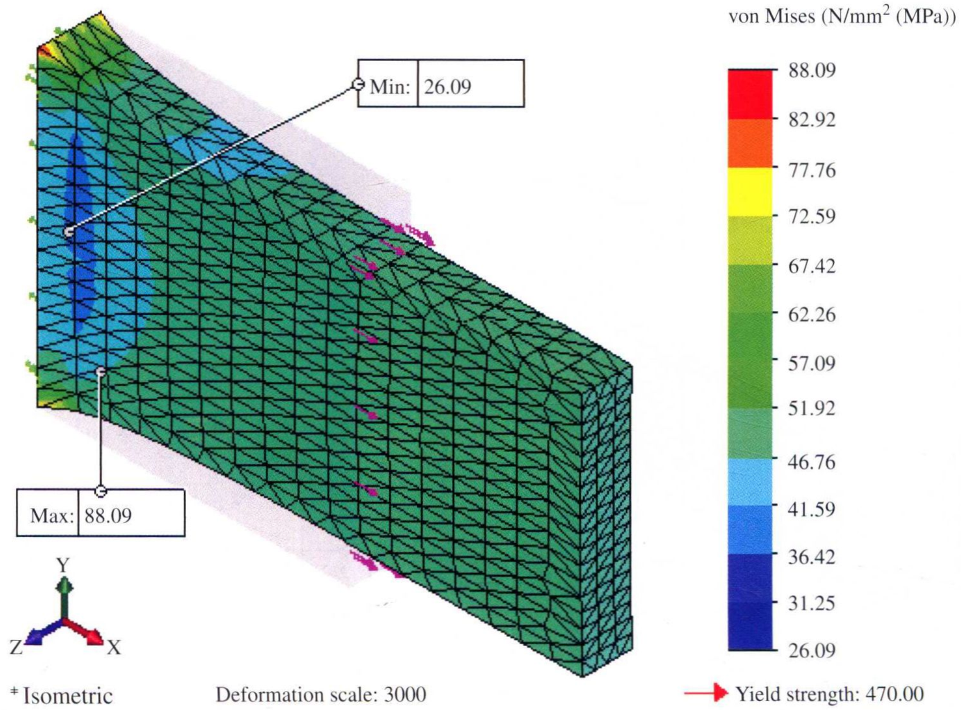

Figure 6.24 vM stress results plot from analysis with a fixed-geometry restraint

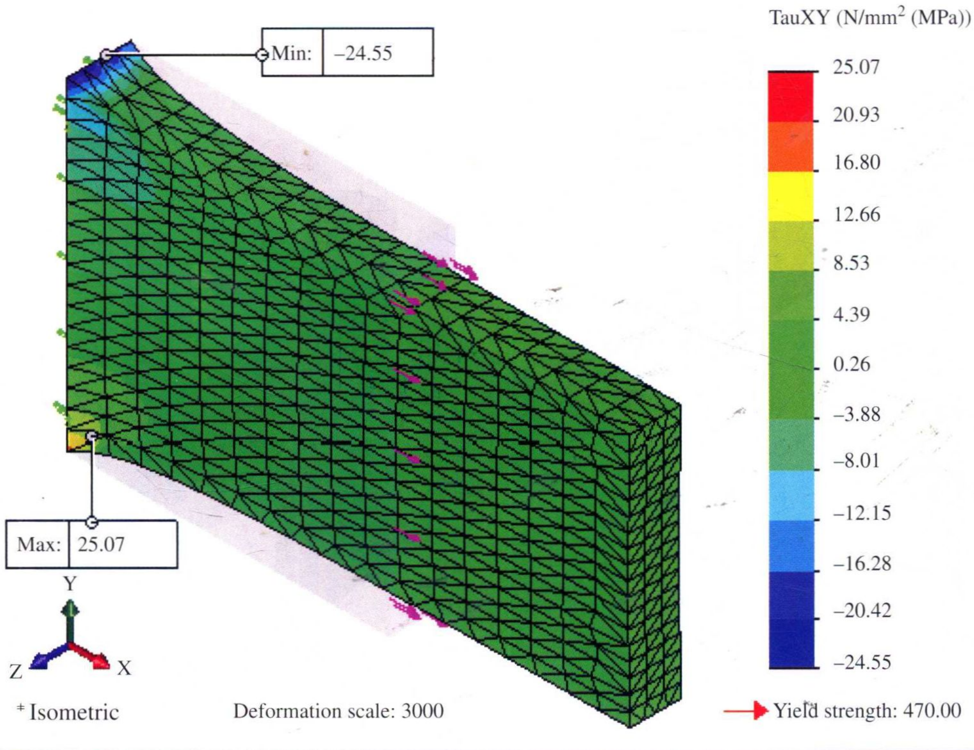

Figure 6.25 TXY results plot from analysis with a fixed-geometry restraint

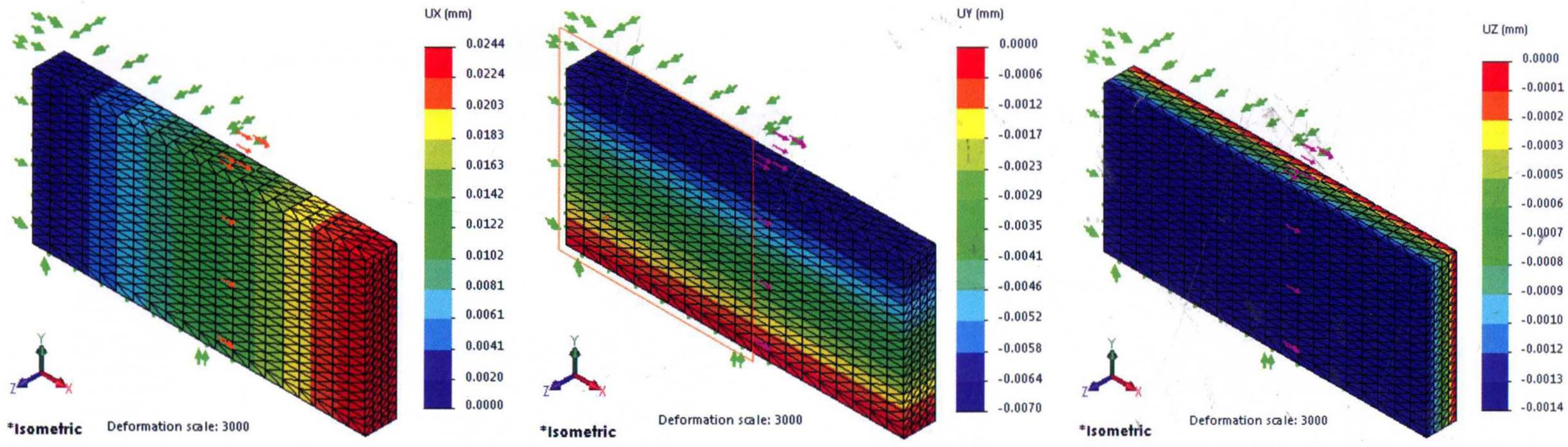

Figure 6.29 UX, UY, and UZ results from analysis with roller/slider restraints

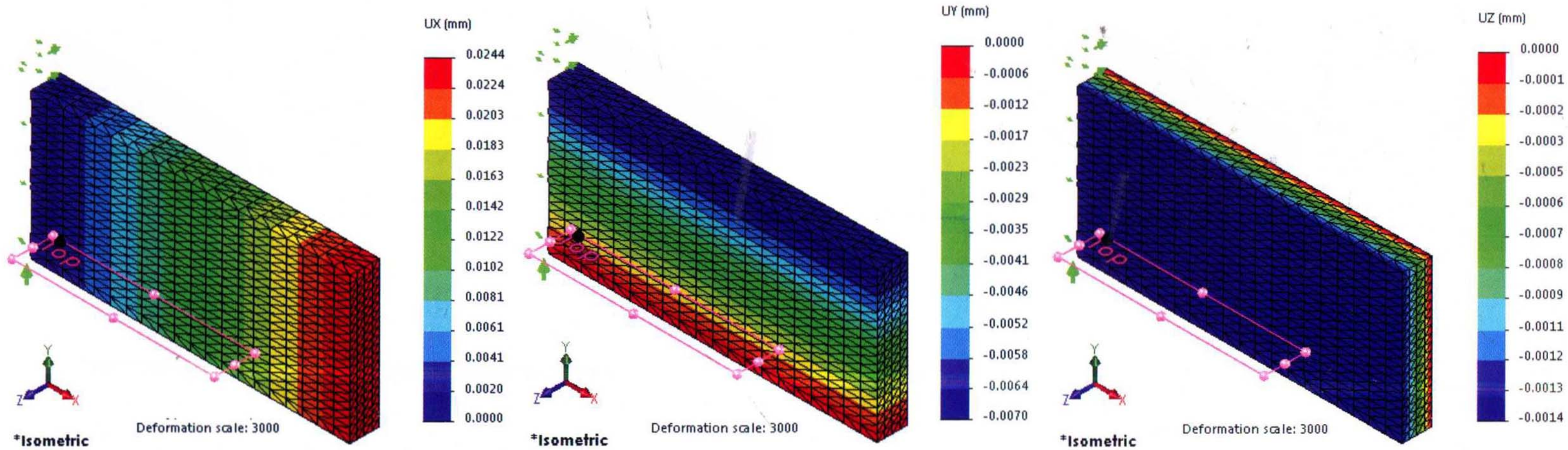

Figure 6.33 UX, UY, and UZ displacement results from analysis with a roller/slider restraint on the restraint end and edge restraints to prevent rigid-body motion

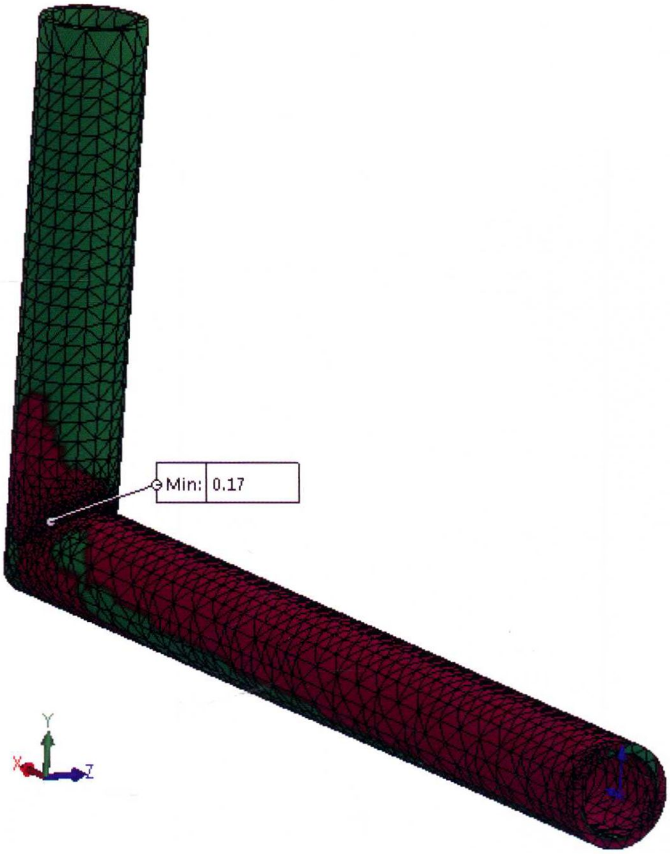

Figure 7.11 Above-and-below FOS plot for vM stress criterion

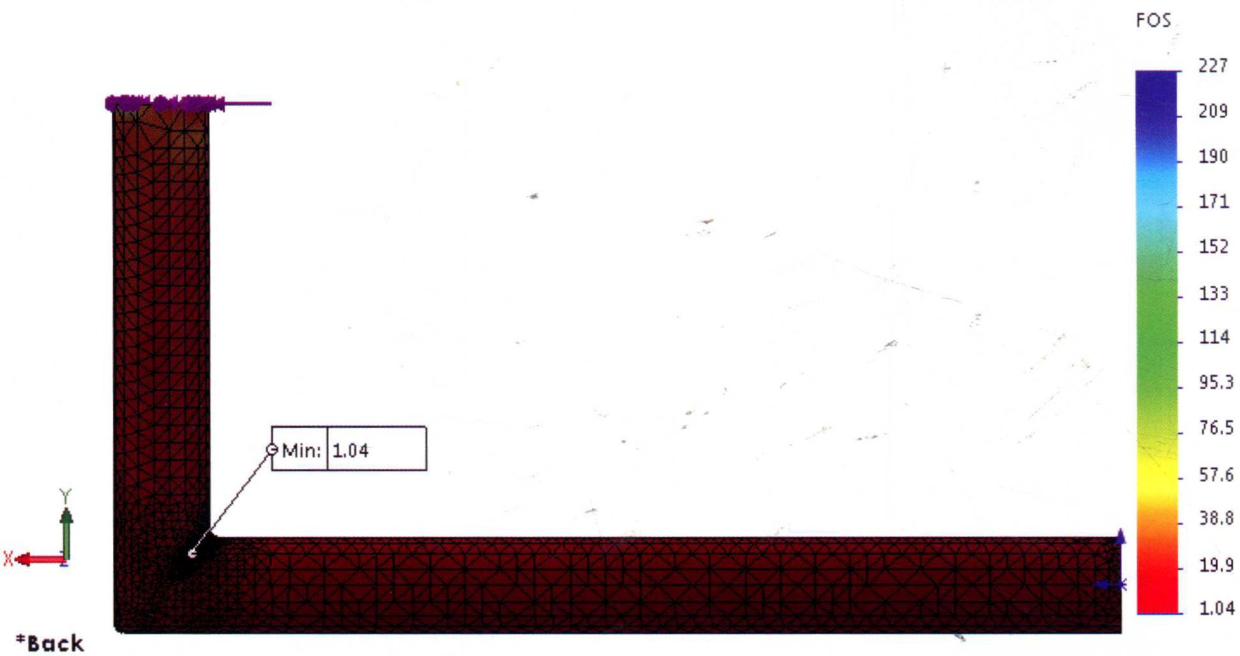

Figure 7.21 Reduced-load L-pipe model with FOS > 1

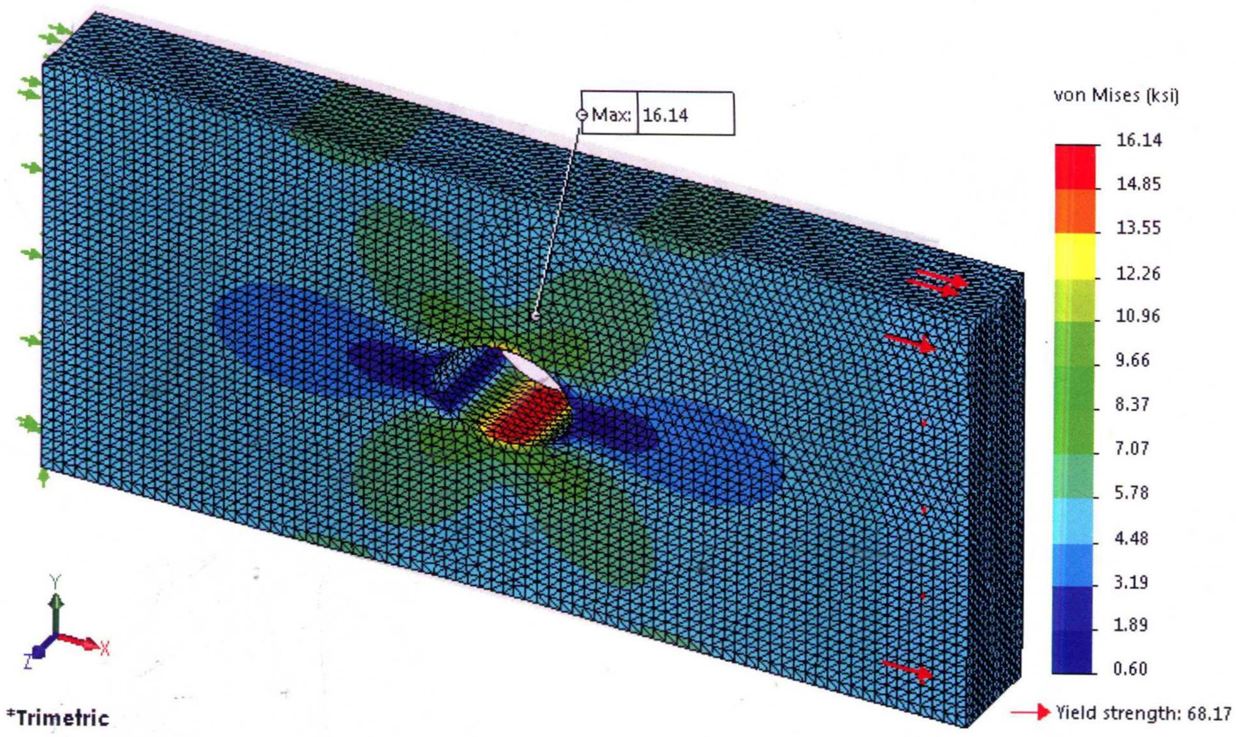

Figure 8.2 vM stress results plot from the full-model analysis

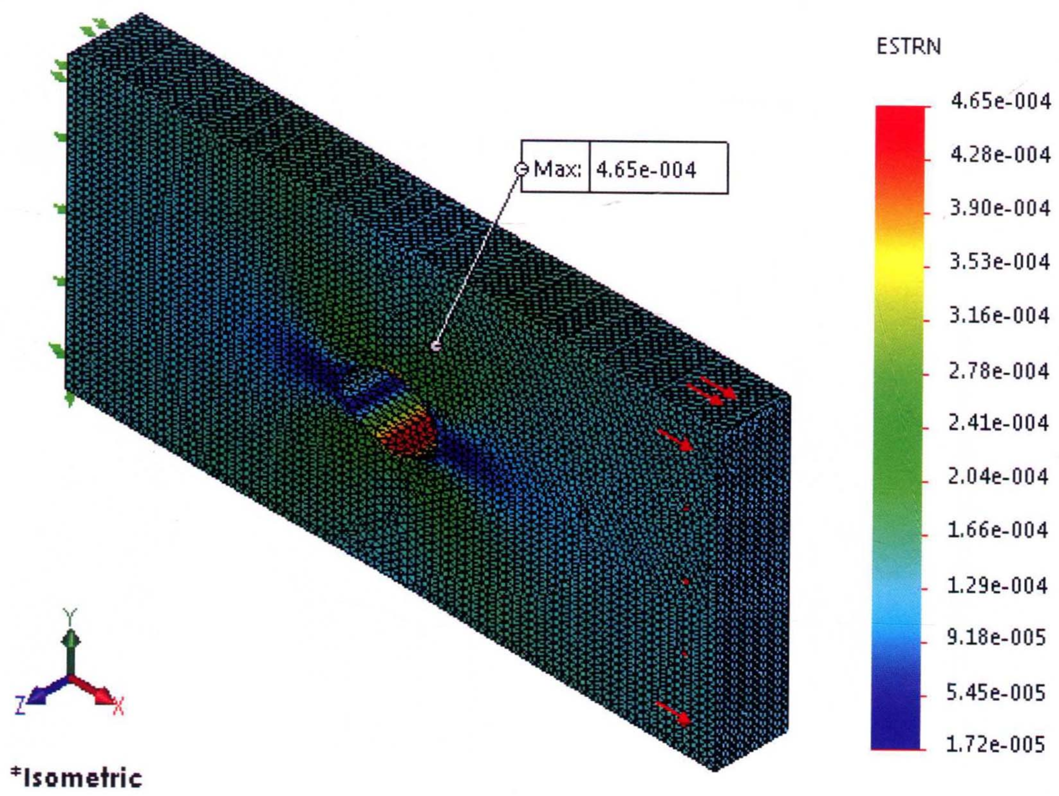

Figure 8.3 Equivalent strain results plot from the full-model analysis

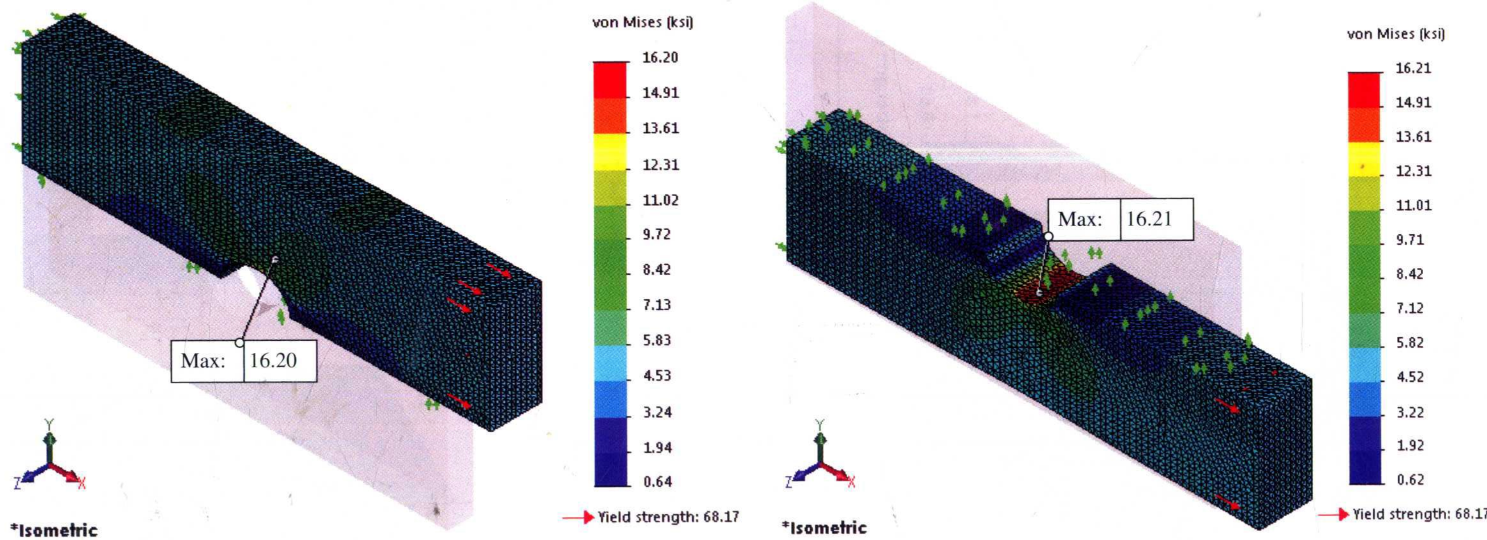

Figure 8.14 vM stress results plot from the XZ plane half symmetry model analysis

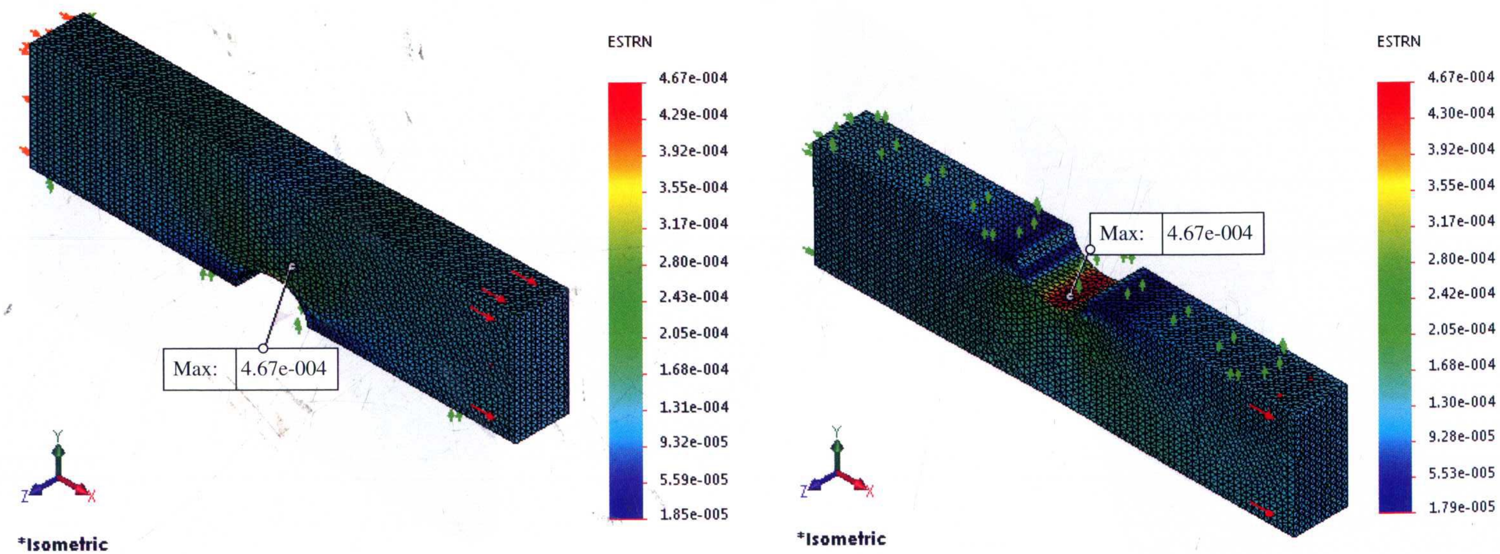

Figure 8.15 Equivalent strain results plot from the XZ plane half symmetry model analysis

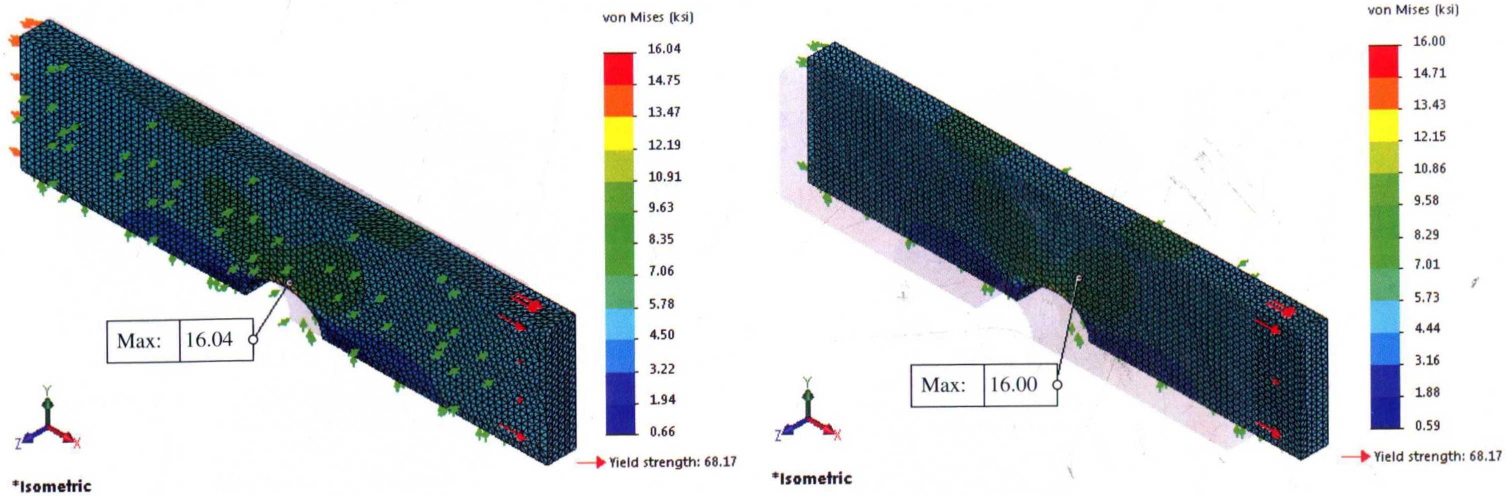

Figure 8.17 vM stress results plot from the quarter symmetry model analysis

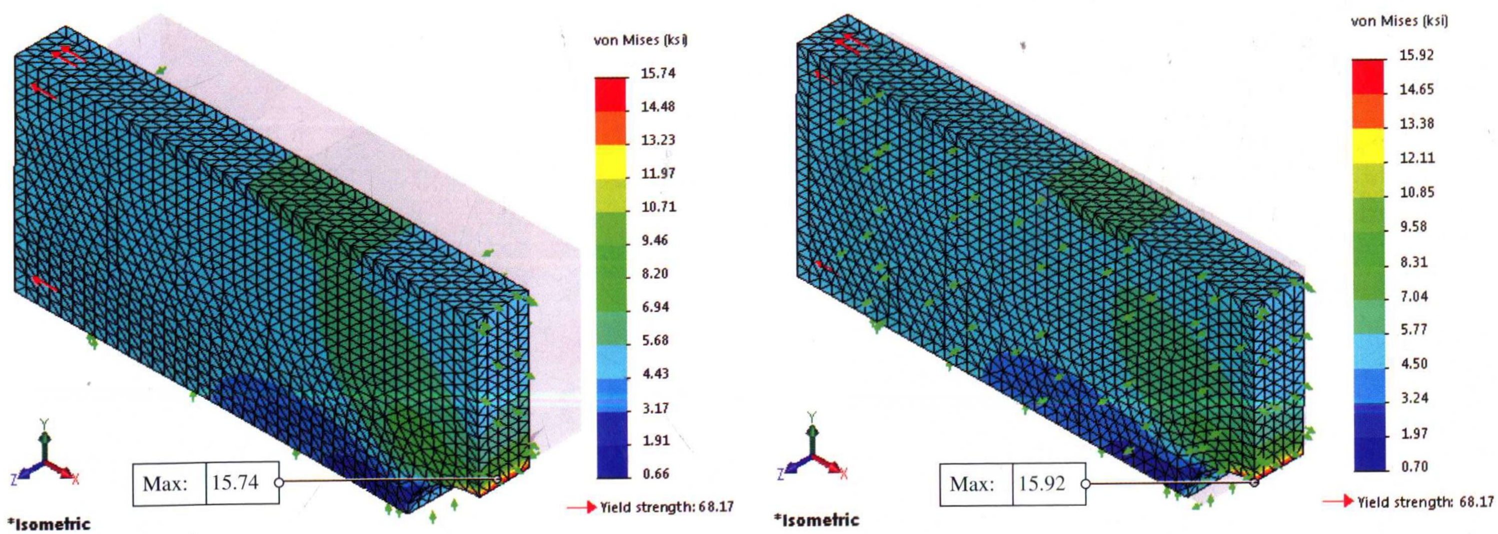

Figure 8.20 vM stress results plot from the eighth symmetry model analysis

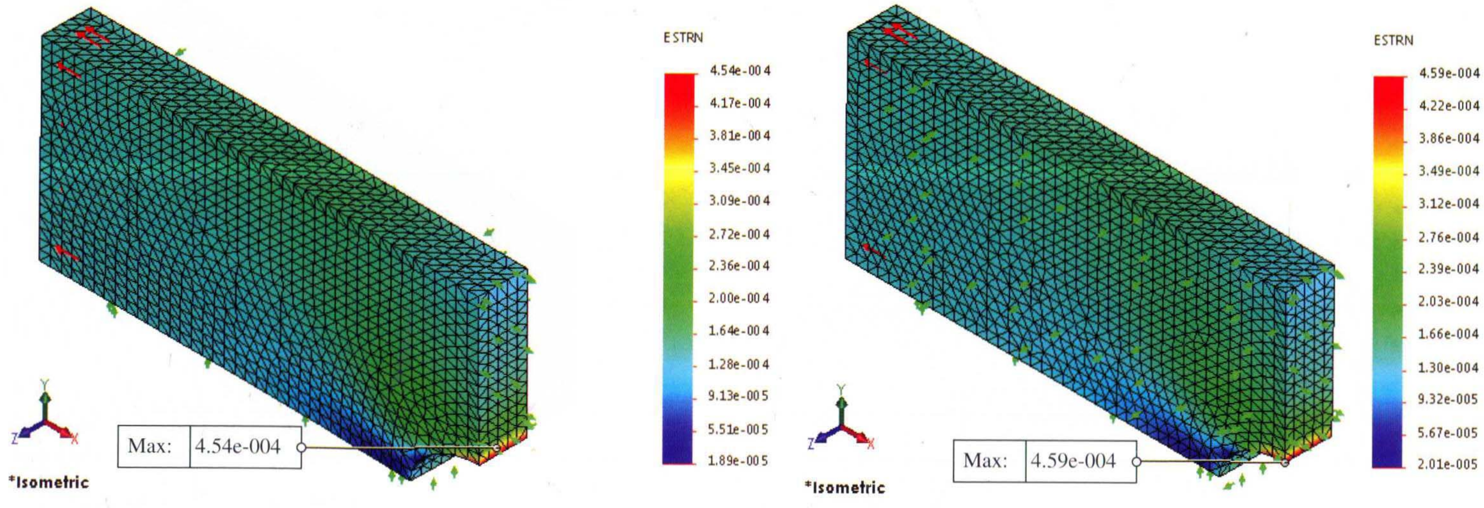

Figure 8.21 Equivalent strain results plot from the eighth symmetry model analysis

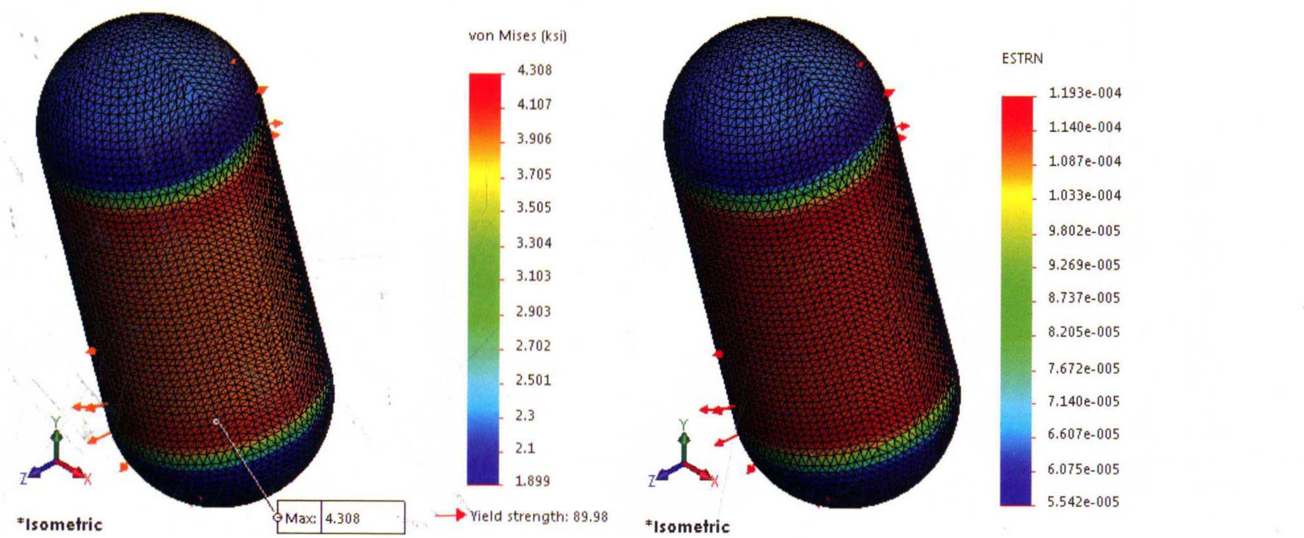

Figure 8.33 vM stress and equivalent strain results plots for the full pressure-vessel model

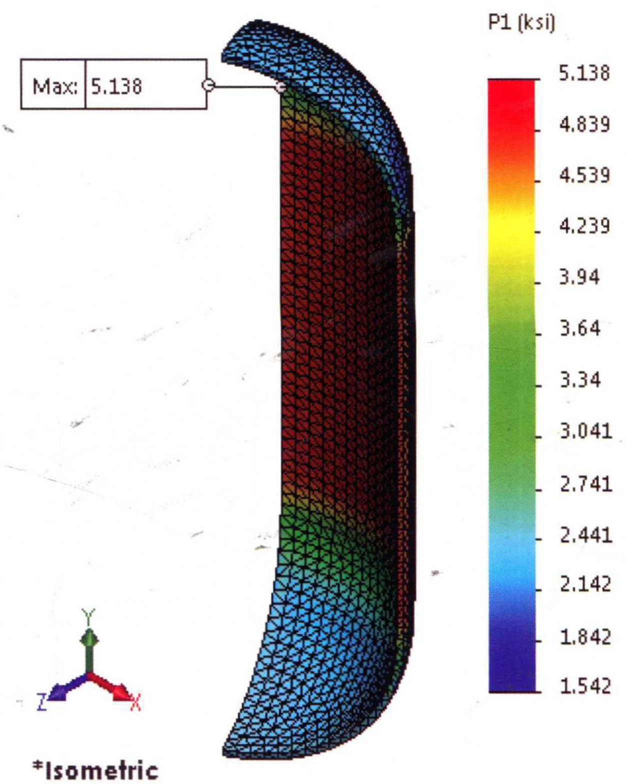

Figure 8.36 P1 stress results plot from the pressure-vessel symmetry model analysis

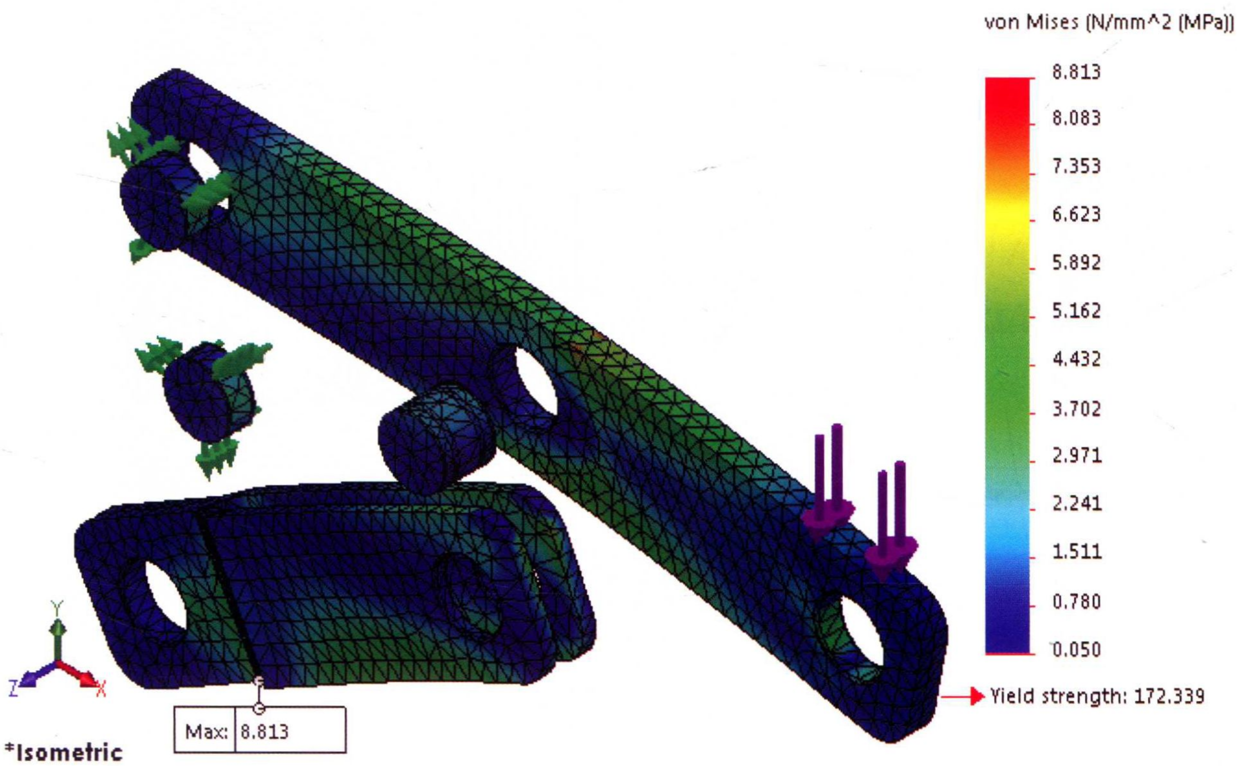

Figure 9.25 Beam assembly vM-stress results plot from analysis with global-bonded contacts

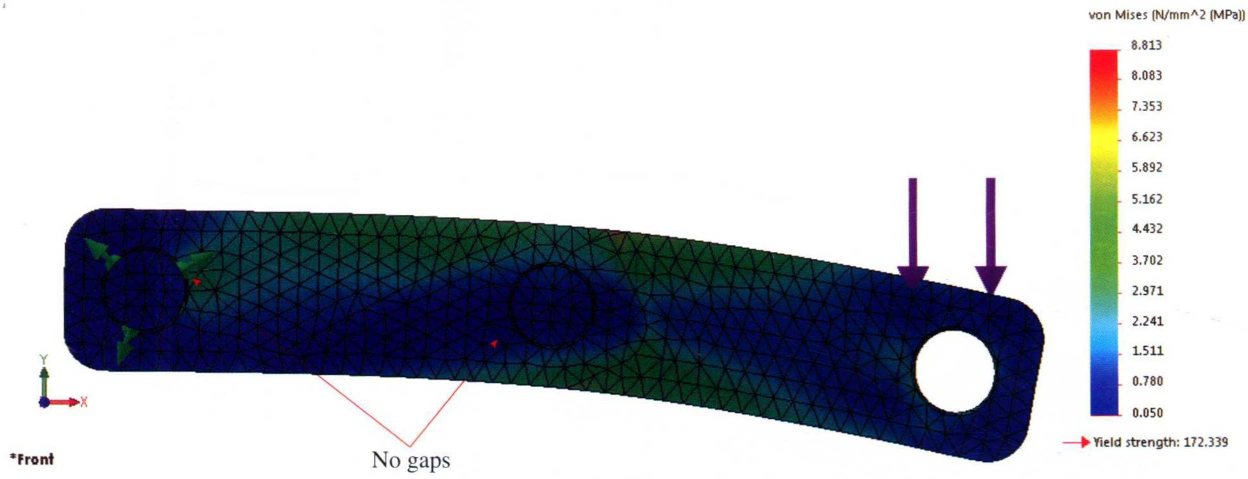

Figure 9.26 No gaps around pins with global-bonded contacts

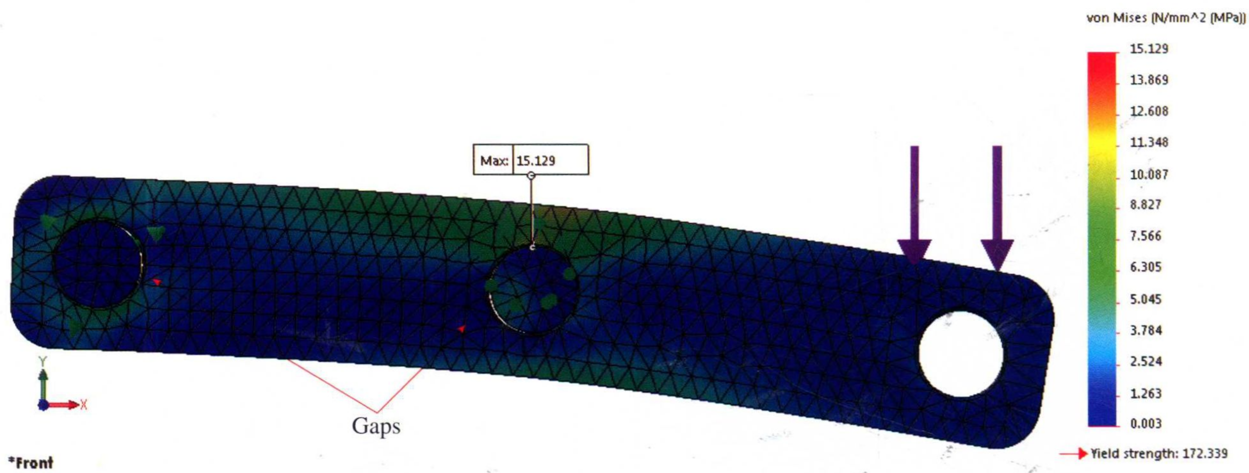

Figure 9.28 Gaps appear above pins with global no-penetration contacts