

# Manifold Pipe

# Ductile Iron, Green Sand Casting

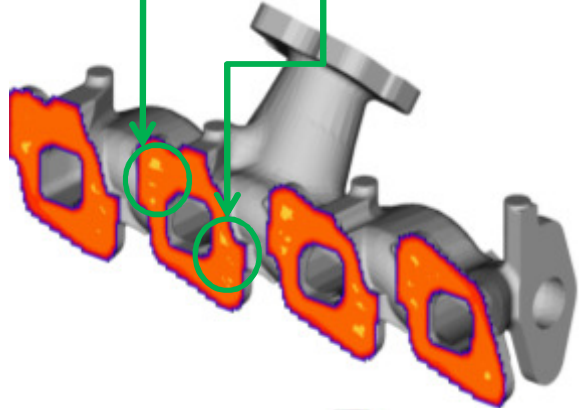
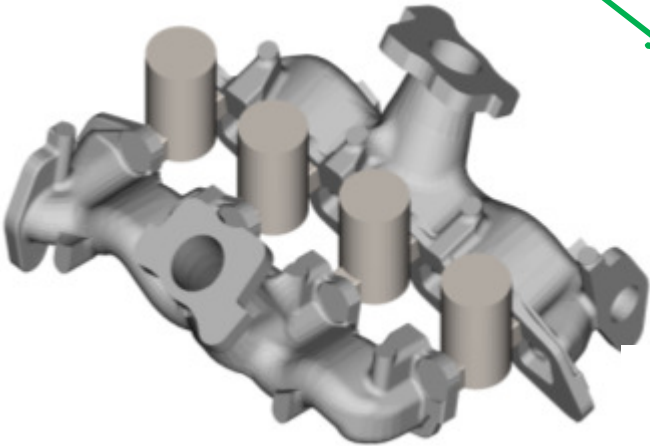
The DI Manifold casting of overall size 377 mm x 140 mm x 156 mm weighing 2.45 kg is has a fairly complex geometry with sharp junctions and is prone to internal defects.



Thickness contour analysis of the part shows maximum thickness of 22 mm.



Solidification simulation shows isolated hotspots at the thickest sections, which match the defect observed in the actual casting.



The suggested methoding includes two parts per mold, with 4 common side feeders of 50 mm diameter and 75 mm height. The solidification analysis of this layout shows defect free casting with a yield of 72%.

