

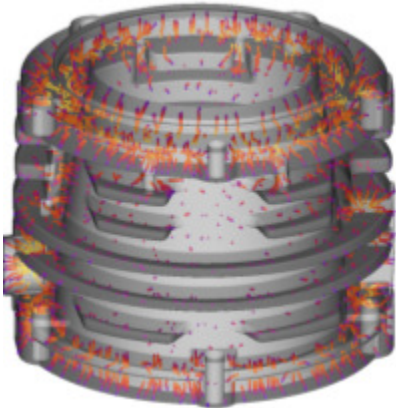
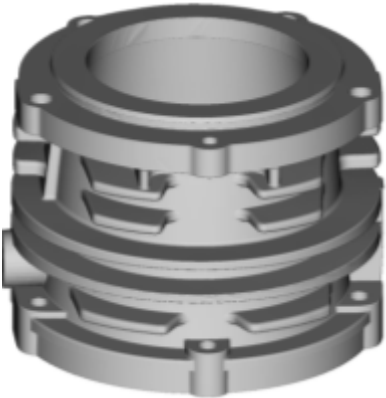
Seperator Body

Cast Iron, Green Sand Casting

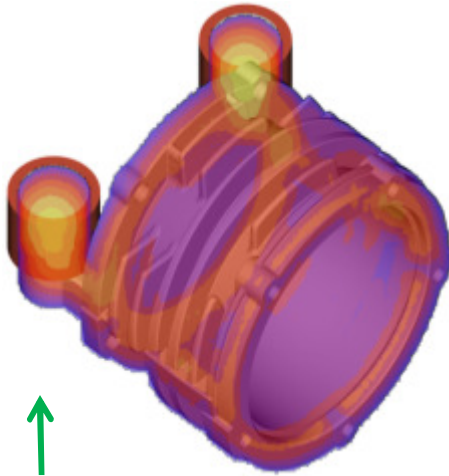
A damaged oil filter separator body of dimensions 100 mm x 140 mm x 140 mm weighing 3 kg, used in an old equipment, had to be reproduced without any drawings being available.



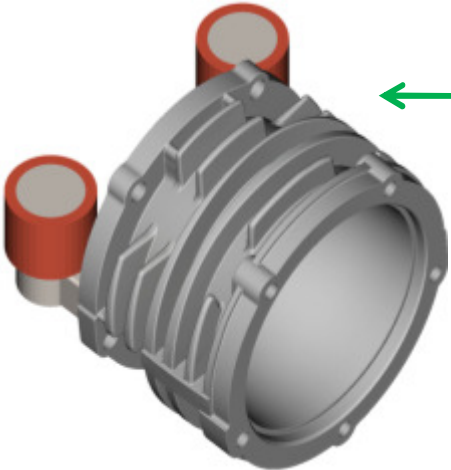
The CAD model was created by reverse engineering, and filling up the broken region.



Solidification and feedpath analysis showed convergence of feedpaths at the top section, leading to possible defects.



To ensure a good-first casting, two side feeders of size 50 mm height and 30 mm diameter, enclosed by exothermic sleeves of 5 mm thickness, were used.



Solidification analysis clearly shows the hotspot region completely inside the feeders ensuring defect free casting.

Since the order quantity was one, and the lead time was short, the casting pattern was produced by Rapid Prototyping machine, and used for producing the casting

