

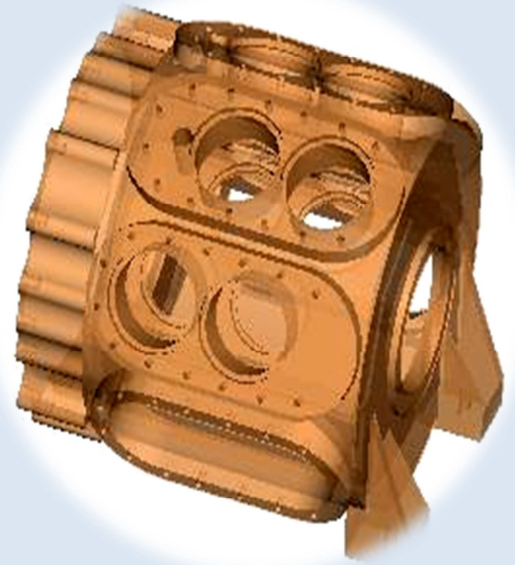
Compressor Housing - 3D Modeling

Scope

To create casting & machining 3D model for Compressor housing with associative drawings for a 6-cylinder reciprocating compressor

Input

2-D paper drawing of Compressor housing, customer's drawing standards and requirements



Modeling Approach

- 1 Study the entire drawing and understand the nature of work and complexity involved in part modeling
- 2 Next step was to thoroughly understand the assembly requirements and constraints
- 3 To check for any deviations, concurrently the detailing was started and various cross-sectional views were used to check the correctness of the intricate inside details.
- 4 The housing part was completely detailed using associative characteristics and the drawings were thoroughly checked to maintain specified drawing standards
- 5 All the dimensions put on the drawing were directly taken from the solid model ensuring that there is no discrepancy between model & drawing

Challenges Faced

- To study and understand the complex casting part from a 2-D paper drawing was a major challenge.
- To understand the assembly fits and constraints correctly based on the paper drawing attributed to significant time being spent in the study phase itself.

Achievements

- Part model and detailed drawings were completed and delivered within prescribed time frame with high degree of accuracy
- The solid model was robust enough to ensure automatic update of Part due to parametric modeling practice