

## 3D modeling & Detail Drawing Development for Casting Components

### Case Study Highlights

#### Client Profile:

Heavy Engineering Company

#### Objective:

To develop 3D model and detail drawings for casting components

#### Challenges:

- Maintaining dimensional accuracy for proper casting
- Ensuring appropriate development of surface profiles as per the specifications
- Maintaining proper geometrical dimensioning and tolerance

#### Solution:

Comprehensive digital design solution was provided to the client with 3D models and detailed manufacturing drawings for casting components with accurate information on dimensions and tolerances.

**Software Used:** SolidWorks

Manufacturing drawings provide comprehensive information about the component being manufactured. An error-free detailed drawing with appropriate dimensions and tolerance details ensures development of the component as per the conceptualization.

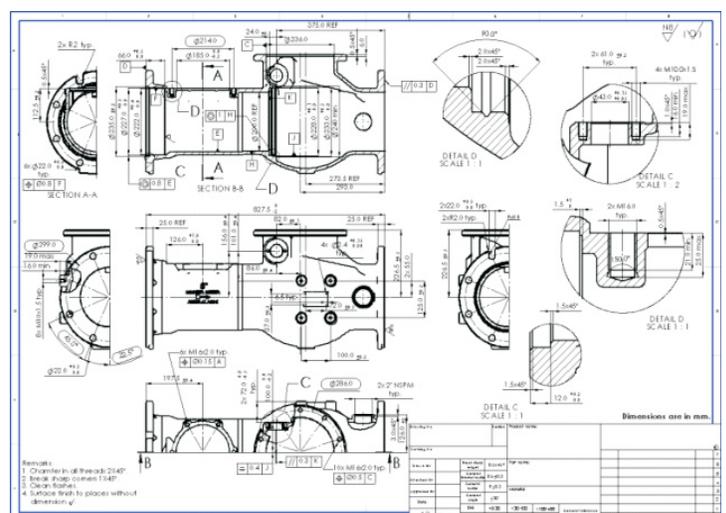
Hi-Tech partnered with a leading casting component manufacturer to provide digital design solutions as per their required standards of dimensioning and manufacturing needs.

### Solution

Based on the inputs received from the clients in terms of sketches and PDF drawings, the casting components were re-designed using CAD tools, with appropriate dimensioning and tolerance details. 3D models of the components were developed along with detailed manufacturing drawings considering the requirements of the production team.

### Benefits

- Comprehensive design information made available to reduce manufacturing time
- Easy design modification for future requirements



### About Mechanical 3D Modelling

Mechanical 3D Modelling is an India based company that caters for global clientele and plans to penetrate deeper into the existing and emerging markets. Proficiency lies in offering qualitative, cost effective and time bound mechanical engineering design services, including 2D, 3D CAD drafting, 3D solid modeling, FEA, CFD, rapid prototyping, reverse engineering. Professional and highly experienced team can handle all kind of CAD projects with the use of AutoCAD, Wildfire, 3D Max, Inventor, Solid Works, Solid-edges and Pro-e tools.