



**Product Line: Automated Machine Design of Cap & Screw Tube**

**Objectives:**

- The primary objective of this project is to design the different operation system.
- And the secondary objective is selecting the suitable accessories & validate the design by Simulation.

**Inputs Provided:**

- Customers has shared the 3D models of Production part to develop the concepts
- Design functionality of given model.

**Project Methodology:**

- Along with Customer, the best concept was selected for detailed Design
- We expertise of Mechanical, Electrical and Pneumatic components and Selecting the suitable accessories & validate the design by Simulation Value Engineering & Robustic Design and Cost Analysis.
- Manufacturing drawing was created for all child and assembly components
- The prototype was built at customer facility and all required testing was performed.
- During Prototype, OMS (Operation Method sheet – Assembly procedure) was created with necessary hand drawings and photo graphs of real components.
- 3D models and 2D drafting are modified/fine tuned and the new BOM is generated.
- Models, drawings and BOM are released through ECN process.

**Solution Provided:**

- AES has presented the concepts with its Pros and cons, cost of manufacturing, Strength and Robustness of the process machine.
- Selection of appropriate material thickness and type of material are selected based on the detailed design calculation.
- After validation the Design was fine tuned to address the real time problems.
- Quality review happens at each and every stage & Quality checklist were followed for Modeling & Drafting.

**Benefits:**

- Increased Revenue
- Reduced Production Unit Cost
- Project was completed on time
- Customer was delighted in all stages of the project starting from Design to Final release of the drawings.
- Modeling and Drawing quality were exceptional
- Our customers have relied on us to provide them specifically designed to meet their exact production requirements, machines that will provide cost effective and repeatable results