



Engineering Design Center

Who we are

- Established in 1994, Sutra is successfully serving International Customers in Japan and Europe.
- Sutra manages Offshore Engineering Design Center for Global Manufacturing Corporations.
- Strong experience in **Aerospace and Automotive Sector**.
- Engineering Design Support for Aircraft Interiors, worked on most Airbus, Boeing Aircrafts and Business Jets.
- Sutra is an **ISO 9001:2008 certified** company having international business experience.

Key Characteristics

- Sound engineering / manufacturing industry and technology background.
- Use of customizable utilities resulting in higher productivity & consistency.
- Web-based systems for efficiently managing the offshore work.
- Customer-centric methodologies.
- Successful and ongoing Engineering Design Centers for **Japanese and European customers**.
- Experienced **CAD/CAM/CAE** professionals.

Key Industries

- Aerospace
- Automotive
- Automation
- Construction
- Electrical & Electronics
- Manufacturing
- Printing

ISMS Policy

- Sutra values secrecy of Client Data/ IPRs to highest degree.
- Sutra has ISMS (Information Security Management System) Policy in place.
- Data Transfer using FTP / PDM Server.

Engineering Design Phases

- Benchmarking Reports
- Analysis / Simulation
- Prototype Drawings
- Prototype Test Cases
- Model Changes
- Final Analysis
- Manufacturing Drawings
- CNC Programming
- CMM / Other Manuals

Deliverables

- Benchmarking Reports
- Stress Analysis Reports, Load Reports
- Prototype
- Prototype test cases
- Models
- Design Validation Reports
- Manufacturing Drawings
- DelCAM, MasterCAM Programs
- Technical Documentation

CAD/CAM/CAE Services

- 3D Modeling
- Drafting & Detailing
- CNC Programming
- Wiring Diagrams
- Finite Element Analysis
- Meshing
- Stress Analysis Reports

Skill Set

I-DEAS, Pro/E, MasterCAM, HyperMesh, NISA, ePLAN

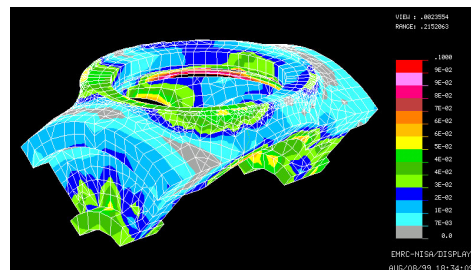
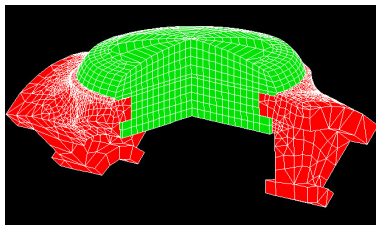
Dedicated Offshore CAD/CAM Center for a leading European Aircraft Interior company

Drafting & Detailing	2D drawing, View generation, Interference checking
Surface & Solid modeling	Component and assembly model building
Reverse Engineering	Automatic dimensioning, data generation
CAD Conversions	Supporting all major file format
Layout Design	Catering to 2D as well as 3D layouts
2-Axis Milling Operation	2-Axis milling operation for galley manufacturing

Dedicated Offshore Center for a leading Engineering company from Japan

Load Analysis	Modeling, Meshing Loading, CG Calculation Nastran run
Stress analysis	Individual analysis of all components and interfaces
Report generation	Generate consolidated reports as per industry standards Format report data as per client expectations

Sample Deliverable Outputs



Project Management using **HawkEye**, a Product developed by Sutra. A user friendly **web based project management software** for engineering design teams collaborating from different locations.