

Innovative Steps to Excellence.....







Innovative Steps to Excellence....

Departments

AESAUTOMOTIVE DIVISION

BIW FIXTURE DESIGN

ROBOTIC SIMULATION



Innovative Steps to Excellence....

About Us

AES Automotive group is well trained with good understanding of Automotive BIW Welding Fixture and Robotic simulation concepts, and can work for different customer standards and requirements.

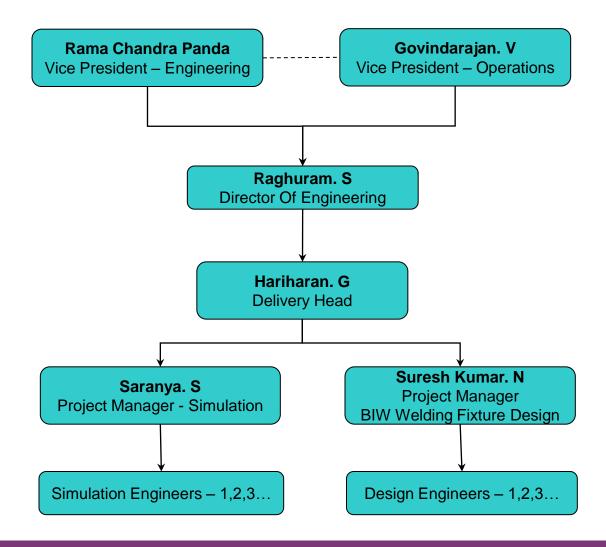
AES uses its proven methodology of onsite and offshore resources to deliver value to its customers.

AES manages and executes various ongoing design and analysis projects with onsite project coordinators and offshore engineering staff located in India to provide better, faster and more cost-effective solutions to its global customers.



Innovative Steps to Excellence.....

Project Organisation





Innovative Steps to Excellence....

Services

Providing various application services for Robotic Simulation of Automotive Components.

Operations

- Material Handling
- Spot Welding
- Sealant Application
- Stud Welding
- Pedestal Applications



Innovative Steps to Excellence.....

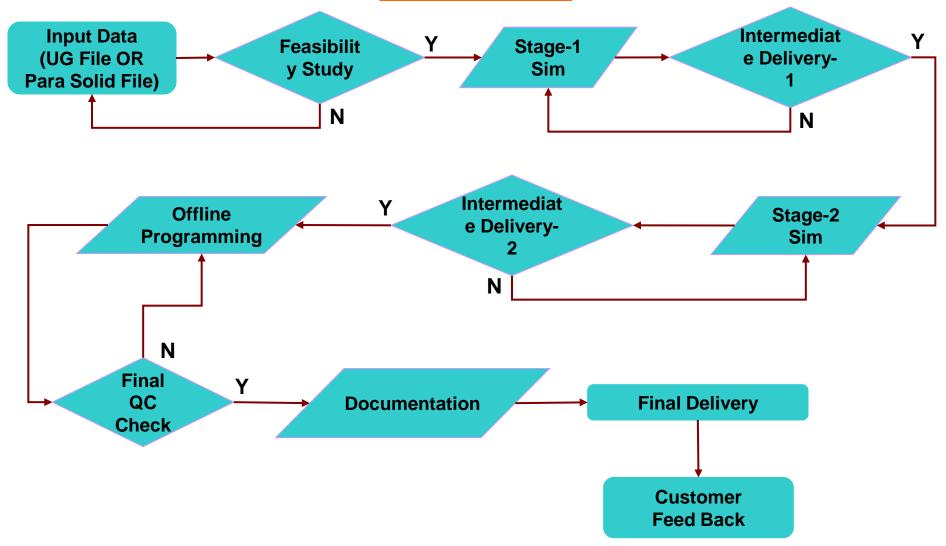
Project Services

- Feasibility Study
- Process Simulation
- Design Simulation
- Design Validation
- Process Optimization
- Work cell Layout Design & Modeling
- Motion Simulation of Robots & Mechanisms
- Sequencing
- Weld Spots Distribution
- Offline Programming



Innovative Steps to Excellence.....

Process Flow





Innovative Steps to Excellence.....

Feasibility Study

- Reacheability study with the input tools
- Placement of the tools and the robots
- Feasibility study of spots



Innovative Steps to Excellence.....

Stage1 Simulation

- Approval of Tooling and Facility Designs
- Initial Path Creation
- Swapping of the Spots if Needed
- Initial Programming
- Process under cycle.



Innovative Steps to Excellence.....

Stage 2 Simulation

- Robot Path Finalization
- Collision free Workcell
- Finalization of Robot and Tooling Placement
- DXF out of the tool placement
- Swept volume Creation
- Payload Entry



Innovative Steps to Excellence....

Offline Programming

- Final Programming
- Attributes entry according to customer standards
- Fixture Programming
- Sequence Creation
- I/O Connection
- Cycle time under Control



Innovative Steps to Excellence.....

Documentation

- Weld Matrix Creation
- Robot Data Sheet Creation
- SIM Status Report Creation
- Open Issues Report Creation
- Cycle time Report Creation



Innovative Steps to Excellence.....

Simulation Software

- UltraSpot
- Robcad
- Igrip



CAD Software

- Pro E
- Unigraphics
- Catia V5
- Solid Works
- Inventor
- Autocad



Innovative Steps to Excellence.....

OUR OFFICES

Development Centers In India

Registered Office

303, Golden Heights Sector 12, Pocket 8 Dwaraka, New Delhi - 110 075 Tel: +91 11 4281 5274

Chennai

15, Goutham Towers, 1st Floor General Patters Road, Chennai - 600 002 Tel: +91 44 4322 7171 / 72

Bangalore

335/1, Gokul Complex 3rd Floor, Sampige Road, 13th Cross, Malleshwaram Bangalore - 560 003 Tel: +91 80 4168 9581



Corporate Office

253 Lychee Ct. San Jose, CA 95111, USA Mobile: +1 408 386 3278

Tel: +1 408 226 6918

Proposed Offices

Europe : Germany

Asia-Pacific: Japan / South Korea