

Product Design & Development

- Interior/Exterior/BIW/Chassis components
- Class A surface / Class B design services
- Appearance customization packages
- DVP&R development
- Component and system level validation
- DFMEA/PFMEA development
- Turnkey closures

Tool & Process Engineering

- Weld fixturing & process studies
- Cycle times & ergonomic studies
- Injection mold tools
- Stamping dies
- Geometric dimensioning & tolerancing
- Safety & maintenance standards
- Investment reduction analysis

Simulation

- Discrete events
- Throughput analysis
- Virtual factory
- Robotics
- Complete work cells
- Impact / Crash
- Tooling evaluations

Installation & Launch Support

- Resolve field installation issues
- Master scheduling
- Coordinate and manage equipment suppliers
- Enforce program timing discipline
- Perform start-up, debug and training
- Document "as-installed" drawings
- Develop and maintain punch lists

Localization Development

- Governmental regulatory compliance
- Manage production transfer to new sites
- Setup of new lines (BIW, Paint and Assembly)
- Tooling removal - logistics transfer
- Supplier selection and process setup (PPAP)
- ANPQP
- Training

Global Tool & Parts Sourcing

- Die design, build and commissioning
- Injection molds
- Stamped and cast parts
- Assembly jigs
- Check gauges
- Laser trimming, laser welding
- Prototype and low-volume parts specialists

Sample clients:



Mercedes-Benz



HONDA



Mahindra



Volkswagen



RENAULT



FIAT CHRYSLER AUTOMOBILES