

ON-SITE ENGINEERING AT OEM

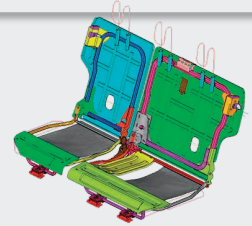
PRODUCT ENGINEERING

Areas of expertise

Body in White, closures, dashboard, seats, interior/exterior trims

Activities

- ▶ Internal and supplier management in terms of quality, cost, planning and performance
- ▶ Simultaneous management of the part design with TIER suppliers
- ▶ CAD and product evolution approval
- ▶ Problem-solving using engineering tools such as FMEA, 8D and Six Sigma



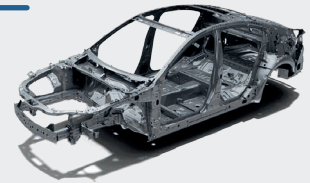
BODY IN WHITE GEOMETRY WELDING FINE TUNING

Areas of expertise

Body in white welding (structure, platform, side) & assembly

Activities

- ▶ Analysis & solution of geometrical issues using FMEA, 8D & Six Sigma tools
- ▶ Tests definition and performance
- ▶ Welding tools fine tuning to achieve the tolerance requested
- ▶ 3D-Measurement machine offline and online programming



QUALITY

Areas of expertise

Body in White, closures, dashboard, seats, interior / exterior trims

Activities

- ▶ Lead the quality management systems
- ▶ Ensure a capable process at supplier's plant
- ▶ Responsible for alerting in case of potential design issues where product/process design would have a negative effect on the product quality / functionality



LOGISTICS

Areas of expertise

Complete lines, manual & automated, including: dashboards, doors, motor, windscreen...

Activities

- ▶ Flow definition and set-up
- ▶ Container / Packaging definition
- ▶ Design and implementation of logistic shopstock



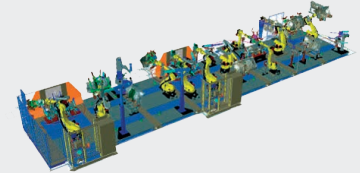
ASSEMBLY LINE

Areas of expertise

Body in White, closures, dashboard, seats, interior/exterior trims

Activities

- ▶ Development & improvement of production line processes
- ▶ Application of Lean Manufacturing concepts
- ▶ Definition and preparation of all production methods and job sheets
- ▶ Balancing, lay-out, equipment implementation, ergonomics



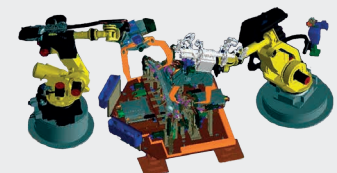
WELDING PROCESS AUTOMATION

Areas of expertise

Body in White: structure, platform, side

Activities

- ▶ 3D definition & automation of processes
- ▶ Robotics simulation & industrial process analysis
- ▶ Off-line & on-line programming



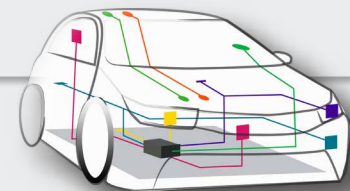
ELECTRONICS

Areas of expertise

On-board network

Activities

- ▶ Work on production tools (benches, vehicle recording tools, diagnosis tools...)
- ▶ Support in solving problems in vehicle launch phase, industrialisation & product life
- ▶ Use of the main tools for on-board network analysis (CANALYZER, CANOE, CANAPE, MUXTRACE, etc.)
- ▶ Development of specific data loggers



EXPERIENCE

- ▶ Experience in Automotive project launching
- ▶ Teams located in Spain, France, Germany and Portugal
- ▶ Support from Spain - Remote expert service

