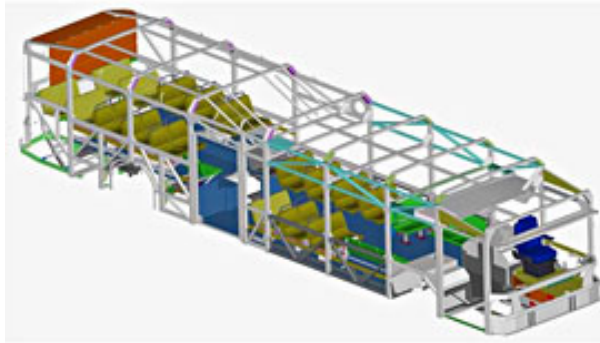


Product engineering design (CAD)



Styling feasibility

- Verification that both legislation and internal OEM standards requirements have been met

Technical feasibility

- Verification that production and structural requirements have been met

Stamping feasibility

Weld access

Assembly sequencing

Section areas

Material thickness

Paint access

Paint drainage

3D component design

BIW-space frame

- Space frame design for small or special vehicles
- Body and chassis frame design for buses and coaches

BIW

- Bodies with stamped components

Closures

- Bonnets
- Hinged doors
- Sliding doors
- Tailgates
- Filler doors

Exterior and interior trim

- Dashboard elements
- Cockpit modules
- Frontend modules
- Front and rear bumper systems
- Side door trims

Package, gaps and offsets

Design

Volume definition

Ergonomics

Tolerance calculations

- Trunk elements
- Front seats
- Rear seat systems

Process quality control

- Weld gun access studies
- Stamping feasibility
- Mold flow investigations
- Studies and optimization of tolerances

2D assembly sequence schemes

- A4 format for ease of handling intended for both design and process engineering use

2D detail and assembly drawings / Explosion drawings

Assembly instructions.

- Final assembly process sheets