

Application Technology Center

Through dialogue with our customers, we understand the challenges of various structures of modes of transportation and buildings and develop as well as propose solution technologies related to structural design, forming, and joining technologies using steel, aluminum, and composites etc..

Multi-Material Structural Design

- Lightweight Design
- Full-Car Structural Analysis
- Evaluation Technology for Collision and Welding

Forming

- Forming for High Strength Steel and Aluminum
- Improvement of Forming Accuracy

Joining

- Joining and Welding for High Strength Steel and Aluminum
- Joining for Dissimilar Materials

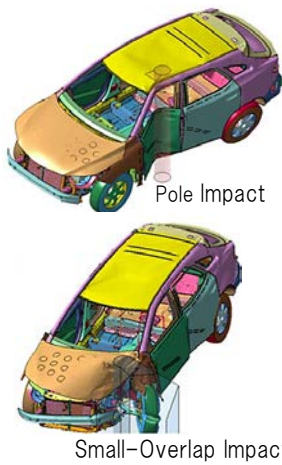
Concept

Design Development

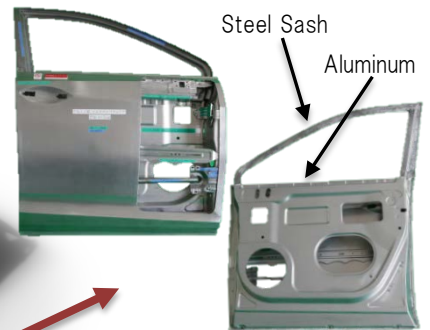
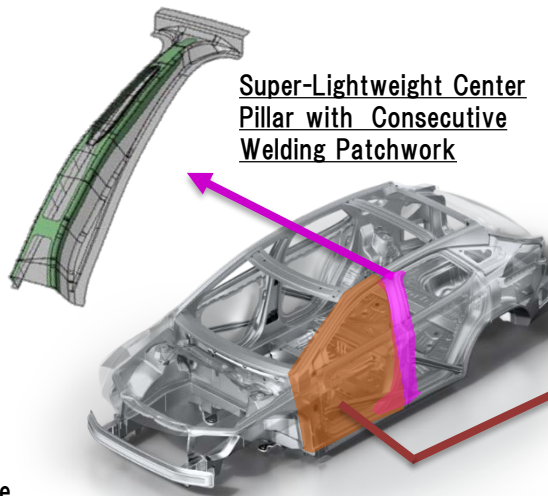
Prototype & Evaluation

Application Development

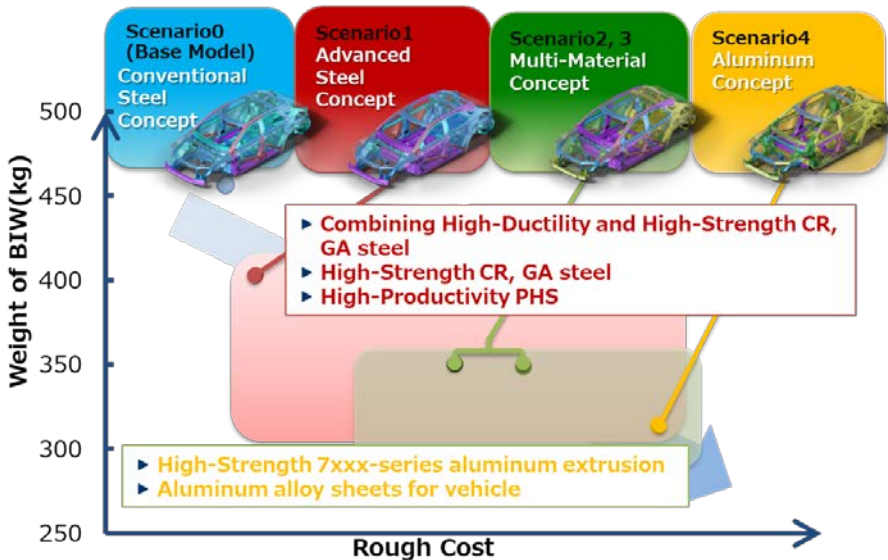
Commercialization



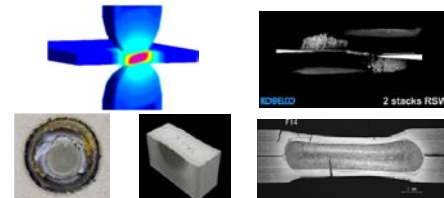
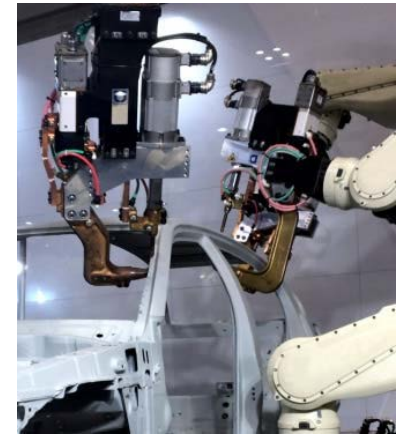
Crash Simulation for Full Vehicle



Aluminum/Steel Multi-Material Door (Lightweight & Saving Cost)



Kobelco Lightweight Body Concept



Analysis of Crack Defects for Resistance Spot Welding

Applications to Products and Processes

- Materials for automobile, vessel, beverage can and electronics (steel, aluminum, welding wire, copper)
- Application technologies for structure design, forming and joining