

## Dissimilar & Similar Joining Process "RuBulge™"

### Benefits

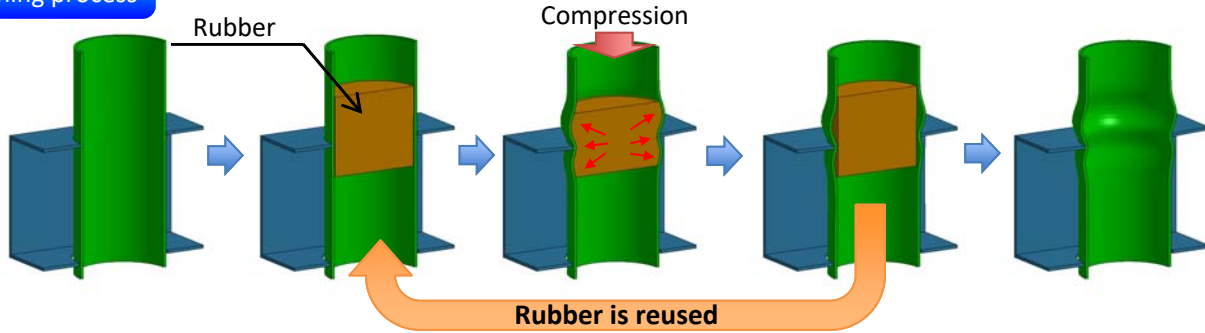
- Partially expanding pipe using elastic deformation of rubber.
- Welding is unnecessary.



### Key Point

■ Rubber is inserted into the hollow member and then compressed, thereby enlarging the diameter of the hollow member and mechanically joining it with the outer member.

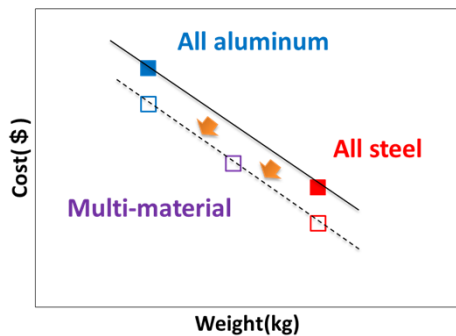
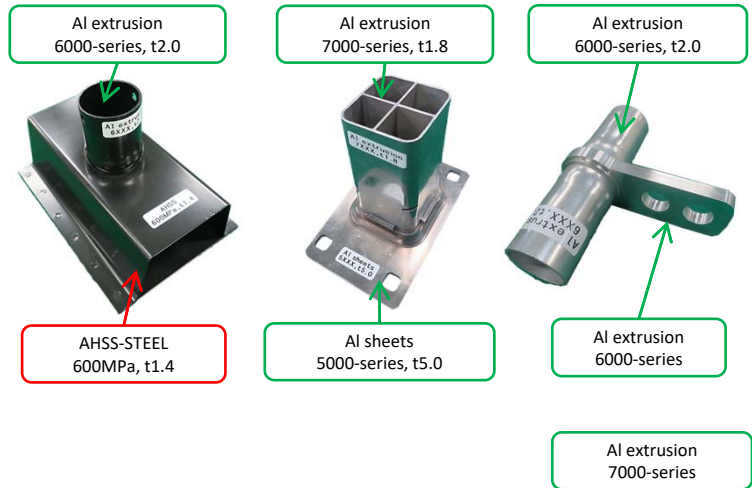
### Joining process



### Features

1. Feasible for materials  
⇒ Steel and Aluminum, etc.
2. Feasible for various section parts  
⇒ Multi-room section etc.
3. Formable with current facilities  
⇒ Press machine etc.

### Trial production



Graph showing **economic advantage** gained from using this technology

