Technology to Improve with Cracking of Ultra High-Tensile Strength Steel Sheet by Stretch Flanging: In-Plane Excess Metal Strain dispersion Technology

**Effect**

- Improving Stretch Flanging Flangibility of Arms and Frames
- Strengthening and weight reduction of parts by adopting ultra high-tensile strength steel sheets

**Progress**

1. Under Development
2. Development Completed
3. Commercialized

**Points**

Stretch deformation is dispersed by adding in-plane excess metal at the blank to improve the stretch flanging.

Sheet Parts have many Stretch Flanging area

![Diagram showing normal blank and excess metal effects](image)

- No Excess Metal
- Excess Metal 5 mm

**Graphs**

- Hmax, Total H (mm)
- ΔHmax, ΔHmin, H+ΔH

- A Material ΔHmax, A Material ΔHmin
- B Material ΔHmax, B Material ΔHmin
- A Material H+ΔH, B material H+ΔH

- Total H

- H8, H7, H6