Cold Rolled Steel Sheet for High Productivity Hot Stamp

**Effect**
Steel Sheet for High Productivity Hot Stamp, which Enables Continuous Multi-Process Press
- Press Speed × 5-10 (compared with conventional steel)

**Points**

- **<Concept>**
  - Conveyed to the Press
  - Start of Forming
  - 1st Process
  - 2nd Process
  - 3rd Process
  - End of Forming
  - Natural Air Cooling
  - End of Conventional Single Process Working

- **<Hardness Distribution>**
  - Hat Channel Formation Test
  - Hardness in the Part Has Less Variance

- **Our Proposal**
  - Developed Steel with Improved Hardenability compared with Conventional Hot Stamp Steel
  - Stable strength is obtained even with shorter lower dead point retention time (3).
  - Manufacturing with multiple processes using existing press machines (2) is enabled.

- **Conventional**

- **New Steel Sheet**
  - Lower Dead Point Retained for a Short Time

- **Example of Cross Section Hardness Distribution**
- **Distance from the End (mm)**
- **Vickers Hardness, HV**
  - Die R Area
  - (Lower Dead Point Retention=10 sec)
  - Conventional Steel Sheet
  - (Lower Dead Point Not Retained)