

Cold Rolled Steel Sheets with Ultra High Lankford Value and Excellent Press Formability*



Synopsis:

It is well known from laboratory experiments that lubricated ferrite rolling in hot-rolling is effective in

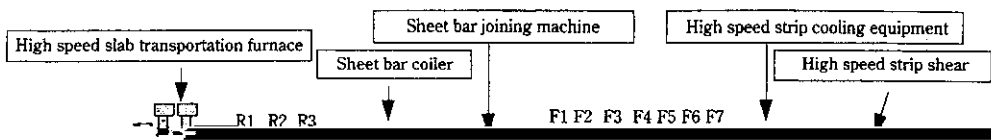
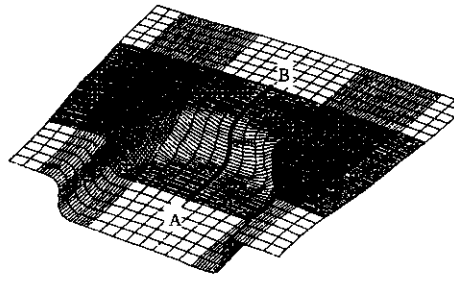




Table 1 Typical mechanical properties of newly developed cold rolled steel sheet ($t = 1.2$)

Fig. 9 Model of real floor panel and analysis conditions



Name of FEM code: LS-DYNA version 940
Number of nodes: 2 701 (sheet), 375 (tools)
Number of elements:
2 592 (sheet) Belytschko-Tsay shell element, 300 (too
Hardware: SUNW, Ultra-1
Punch diameter: 600 mm
Radius of punch shoulder: 50 mm
Radius of die shoulder: 40 mm
Sheet thickness: 0.7 mm
Yield strength: 140 MPa

