

KAWASAKI STEEL TECHNICAL REPORT

No.41 (October 1999)

*Advances in Iron and Steel Technologies,
Commemorating the 30th Anniversary of
Technical Research Laboratories*

Recent Activities in Research of Steel Sheets

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Synopsis :

The research and development activities of steel sheet in the last decade are reviewed by focusing mainly on a viewpoint of newly installed No. 3 hot strip mill at Chiba Works. The new products developed by using No. 3 hot strip mill are as follows: (1) Ultra high r-value cold-rolled sheet steel: Newly developed continuous and warm rolling technique combined with lubrication led to marvelously high r-value ($r=3.0$) cold rolled sheet steel. This steel has been applied to extra deep drawn shape parts. (2) TS/590 MPa hot-rolled dual phase sheet steel: Subdivided control valves in water cooling zone enabled to control cooling pattern precisely, which led to new hot-rolled high strength dual phase sheet steel. Mechanical properties, especially total elongation, have been much improved because of fine grains. (3) Hybrid dual phase sheet steel: Combination of the above mentioned dual phase steel and precipitation strengthening by using TiC in ferrite phase led to hybrid dual phase sheet steel. Hole expanding property and fatigue property have been greatly improved. (4) Highly formable thin steel for can use: Very thin and highly formable cold rolled sheet steel for can use has been developed using solute N. Improved product accuracy in strip gauge and crown using No. 3 hot strip mill backed up the development of the new products.

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The body can be viewed from the next page.

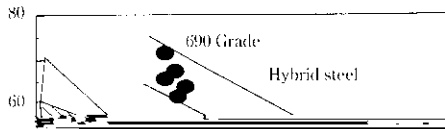
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Mounting cap
0.32 mm

