

KAWASAKI STEEL TECHNICAL REPORT

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Production of Hot Rolled Steel Sheet for High Strength Steel Pipes with Good

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High strength steel sheet for high strength steel pipe which is used for automobiles, motor-cycles and various structures has been developed. The high strength steel pipe has been practi-

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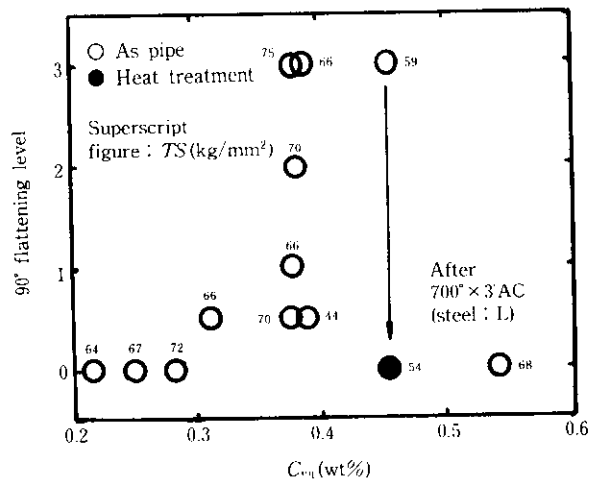


Fig. 6 Effect of C_{eq} and TS on 90° flattening properties

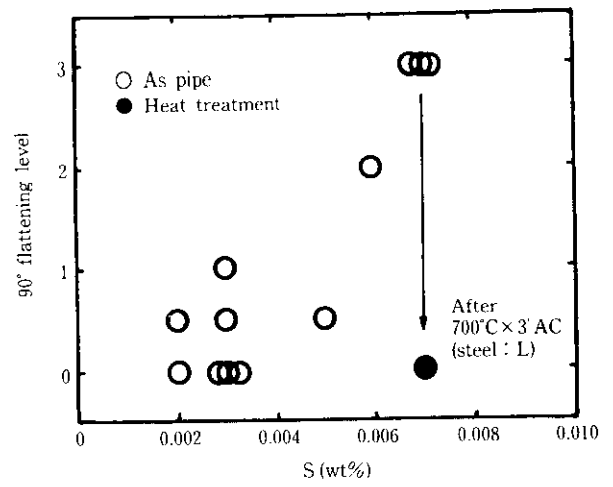
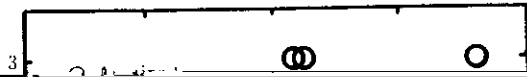
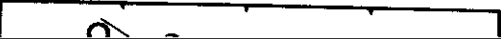
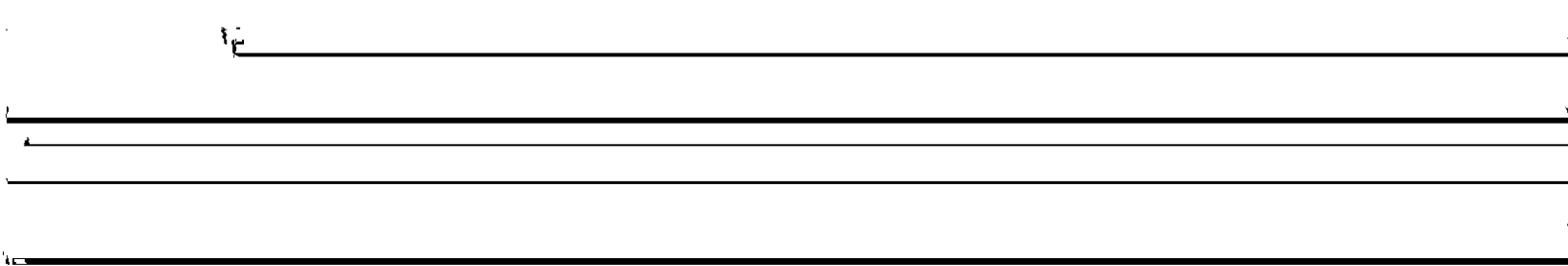
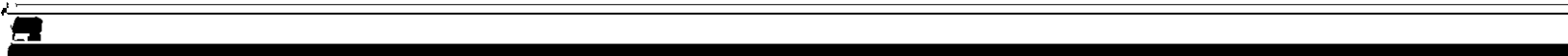
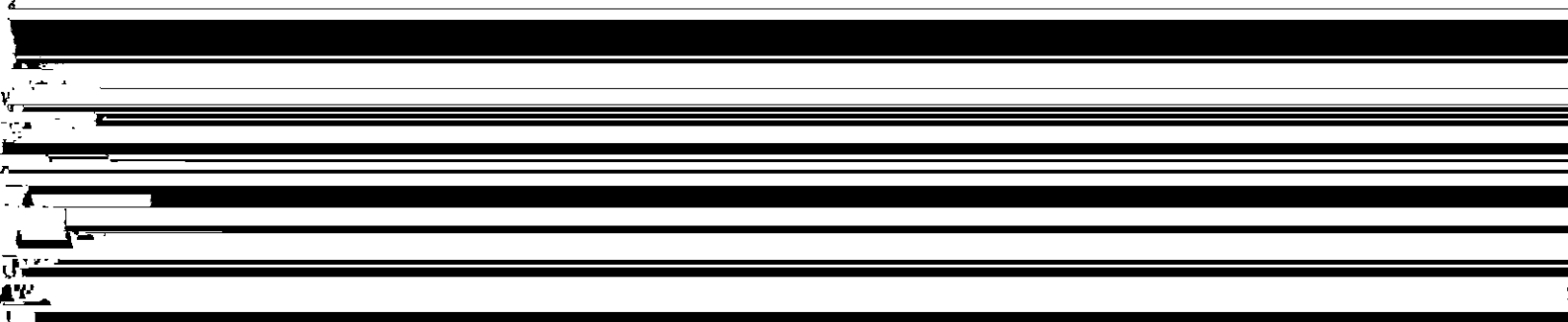


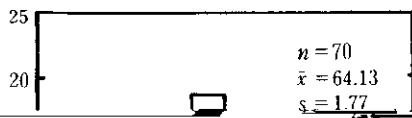
Fig. 8 Effect of S contents on 90° flattening properties





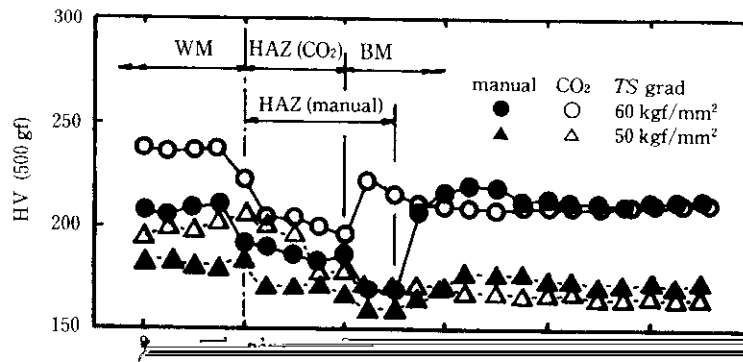
being equal. Although the weld hardness of softening-





3.2 Welded Joint Properties

Steel pipe applications often require welding. For



Distance from bond (mm)
Fig. 15 Hardness profile of manual-arc-welded and CO₂-gas-arc-welded joints

60 TS60 1000/mm²

reversed load control and a repetitive frequency of 8 Hz

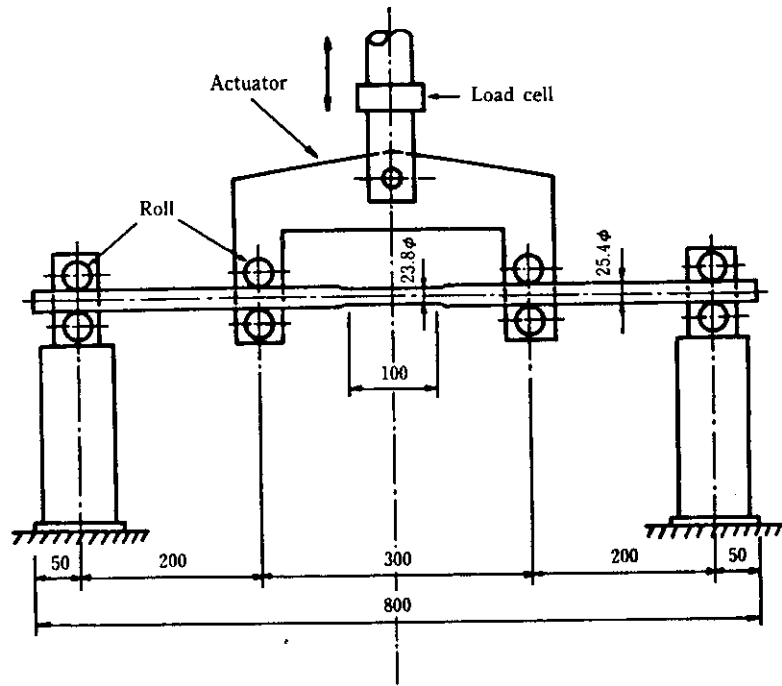


Fig. 17 Bend fatigue test method of pipe

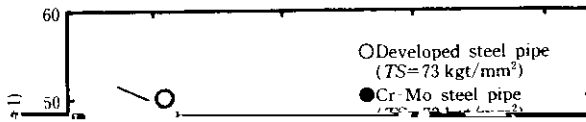


Figure 20 shows the test results. The fatigue strength of the high strength steel pipe is slightly lower than that of the Cr-Mo steel pipe on the low cycle side, but is higher on the high cycle side. The fatigue limit value of

500

○ Developed steel pipe

the newly-developed steel. The figure indicates that with a larger diameter, thinner walled pipes the increase in