

I took office as the new president of the Welding Company of KOBE STEEL, LTD. on April 1, 2004. The former president, Mr. Hiroo Shimada, is now the president of Kobeconologiaral Grap Milithing Brof Grap Billing Banch Global gration "as the primary targets for this year, we will strive to build solid foundations for the



Technical Highlight

KOBELCO WELDING TODAY

The joints of nozzle necks on vessel walls are believed to be most susceptible to SR cracking because of higher stress concentration; therefore, such welds are commonly finished by grinding to form gradual transitions to the base metal to prevent stress risers at the weld toes, thereby preventing SR cracking.

PWHT determines the mechanical properties (tensile strength, impact toughness, hardness, and creep rupture strength) of weld metals. As shown in **Fig. 10**, there is an almost linear decrease of tensile strength and yield strength with an increase of temper parameter. Impact toughness increases as temper parameter increases to a certain level, but excessive PWHT causes adverse effects as shown in **Fig. 11**. These adverse effects are attributed to precipitation of ferrite bands.

Table 3 shows Kobe Steel s recommendation for PWHT with Kobelco welding consumables (refer to Kobelco Welding Today, Vol. 7, No. 1) for general applications. This table also contains PWHT requirements of the international code, ASME Section 1 (R-a117ing trucpitationpoo a



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