KAWASAKI STEEL TECHNICAL REPORT

No.19 (November 1988)

Steel Pipe

High Frequency Electric Resistance Welded Pipe for Offshore Application

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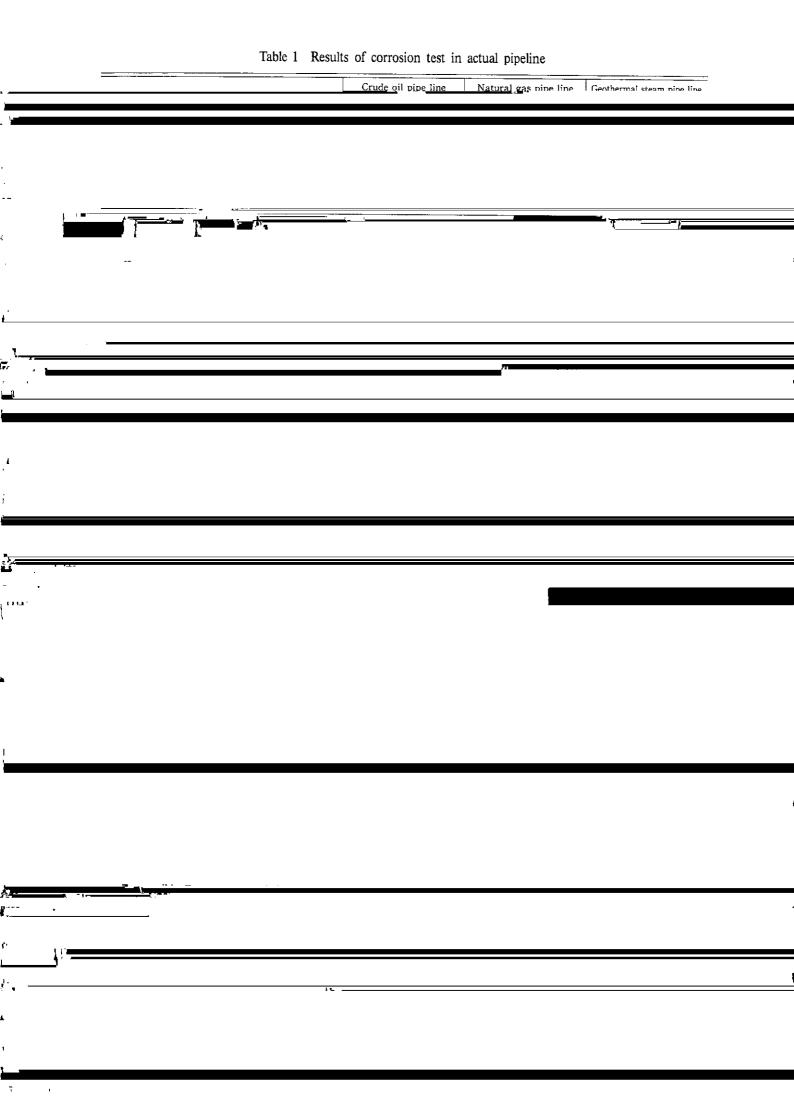
Synopsis :

With the recent remarkable progress in the areas of steel making, hot coil rolling, pipe making, and quality assurance systems, high frequency electric resistance welded (HF-ERW) pipe has become a standard component of Arctic, CO2 and sour service linepipe applications. However, HF-ERW pipe has not been used for a long period in offshore applications largely due to problems of corrosion and weld quality reliability.

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(a) Before welding	(b) At welding	(c) After cutting of	





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	1	High speed camera Thyristor control unit Power supply (500 kW, 250 kHz)		
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Table 6	Mechanical properties of ERW offshore	
	linepipe (API 5L X52, $16'' \times 0.625''$)	

Table 7 Charpy impact test results of ERW offshore linepipe (API 5L X52, 16" × 0.625", 32°F, full size)

	Direction	Location			n	x	٥	Acceptance limit		full size)		
			YS	(psi)	28	66145	1340	52000~72000	Location	Direction	Energy (J)	Shear area*2
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