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KAWASAKI STEEL GIHO
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Thin -Gauge and High- Strength N -added High -Strength Tin Mill Blackplates with Good
Canning Properties

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Kuguminato)

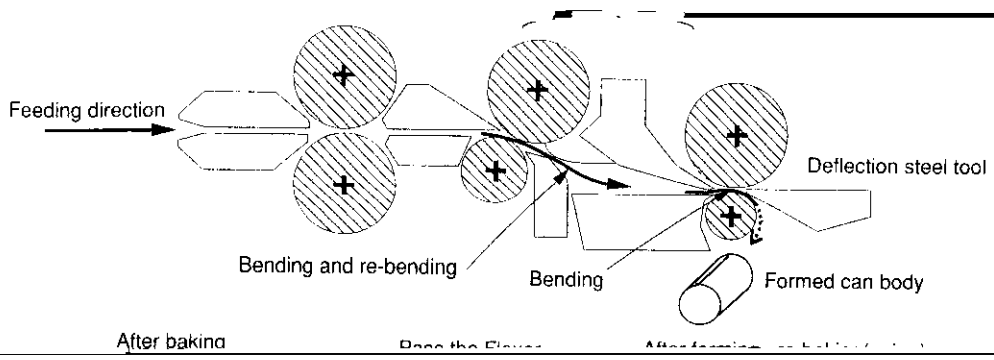
製缶性に優れた窒素添加高強度極薄缶用鋼板*

川崎製鉄技報
27 (1995) 3, 169-176

【附表】鋼板の機械的性質 (TTC 2000) 単位: N/mm² (kgf/cm²)

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Dislocations are locked with C,N


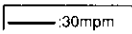
(Steel is hardened.
Y.EL is large.)

Dislocations are unlocked

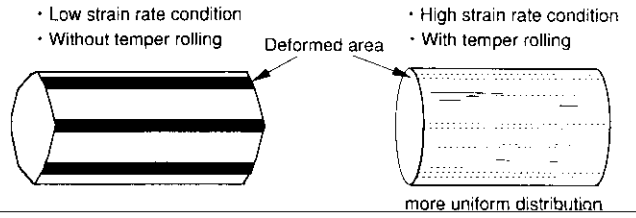
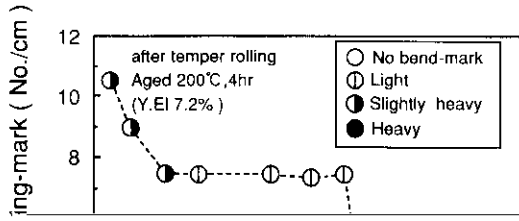
(Steel is softened.
Y.EL is reduced)

Dislocations are locked with C,N

(Steel is hardened.
)

∞ |  As passing flexor  :30mpm

4.1 実験方法



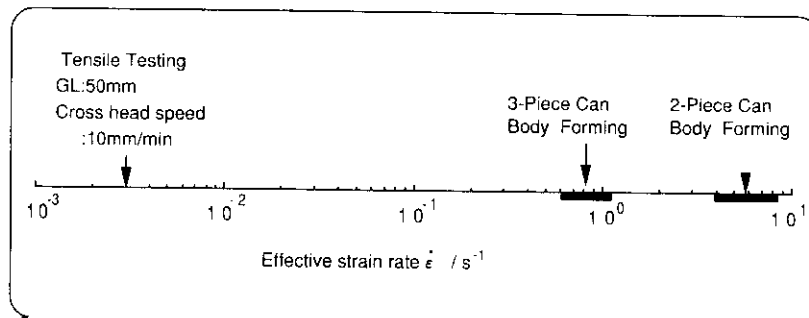


Fig. 10 Comparison of effective strain rate among some canning process



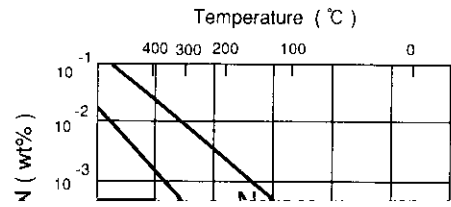
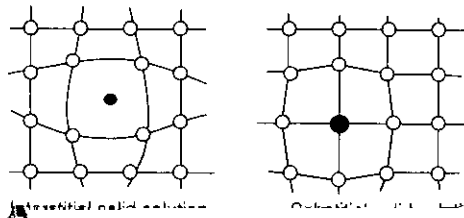


Table 2 Mechanical properties of continuously annealed low C Al-killed steel

Steel	As temper rolled			After aging (at 210°C)		
	YS (MPa)	TS (MPa)	El (%)	YS (MPa)	TS (MPa)	El (%)
Conventional With 100ppm	314	416	25	402	409	27

短時間の連続焼鈍工程においても窒化アルミの析出は進行するため再結晶温度直上の焼鈍が望ましい。

7 結 言

低炭素 Al キルド鋼に N を 100 ppm 程度添加した鋼は以下の点