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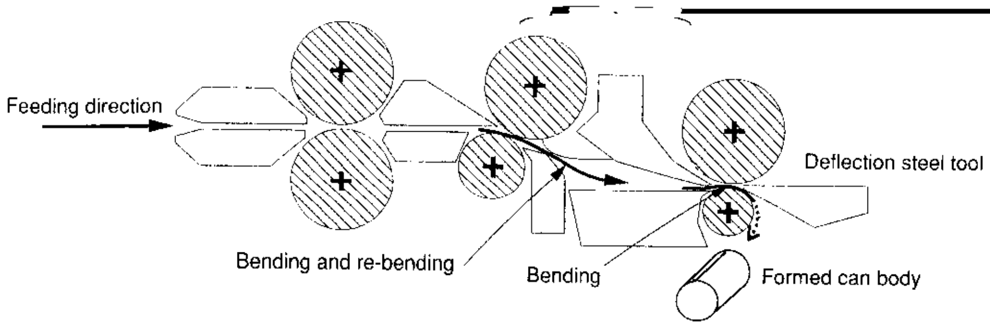
Thin -Gauge and High- Strength N -added High -Strength Tin Mill Blackplates with Good Canning Properties

$Ï • 'v#è(Akio Tosaka) ,¨1Â À <(Masatoshi Aratani) , ,e7•(Hideo Kuguminato)

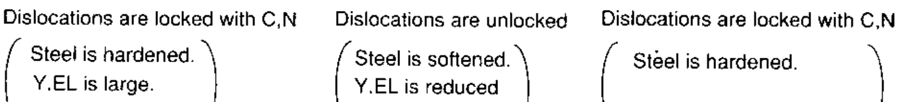
製缶性に優れた窒素添加高強度極薄缶用鋼板*

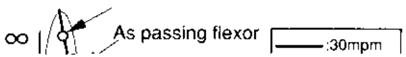
川崎製鉄技報
27 (1995) 3, 169-176

[illegible]

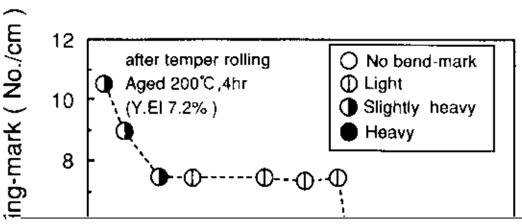


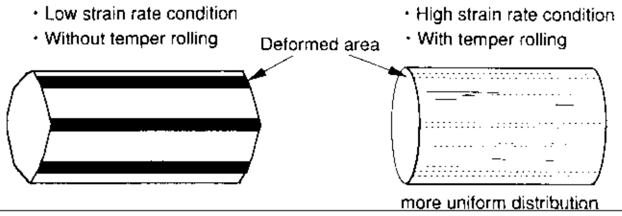
After baking





4. 1　実験方法


ing-mark (No./cm)
12
10
8
after temper rolling
Aged 200℃,4hr
(Y.El 7.2%)
○ No bend-mark
⦶ Light
◑ Slightly heavy
● Heavy


· Low strain rate condition
· Without temper rolling
Deformed area
· High strain rate condition
· With temper rolling
more uniform distribution

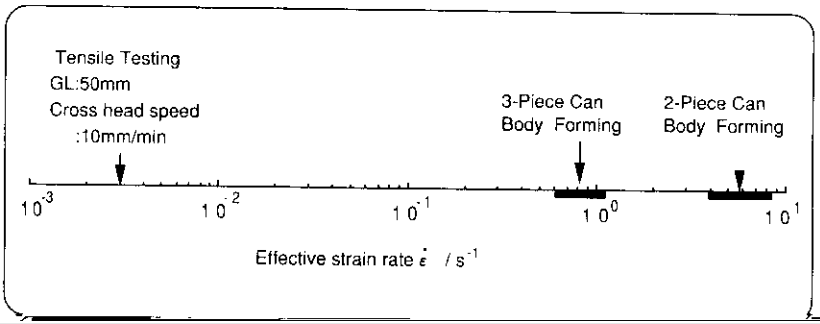
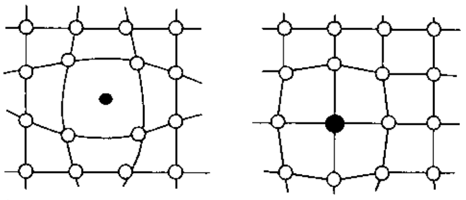
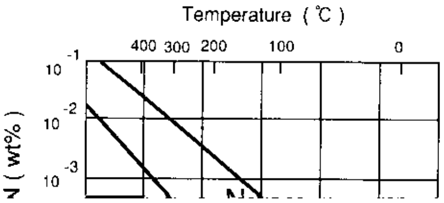


Fig. 10 Comparison of effective strain rate among some canning process



Interstitial solid solution



Temperature (℃)
400
300
200
100
0
10^{-1}
10^{-2}
10^{-3}
N (wt%)

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

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

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