

[REDACTED]

[REDACTED]

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### Development of On-Line Wall Thickness Gauge

1. [REDACTED]

[REDACTED]

[REDACTED]

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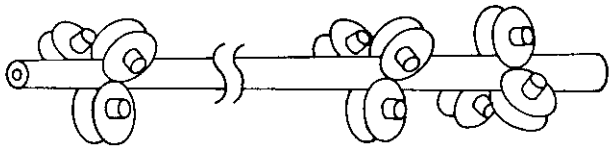
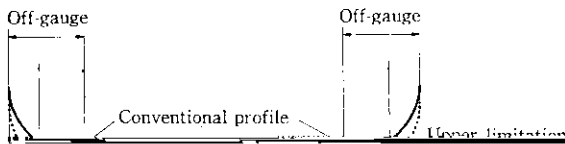


Fig. 1 Schematic illustration of rolling process of stretch reducing mill



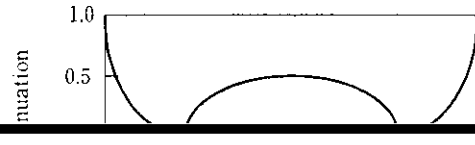
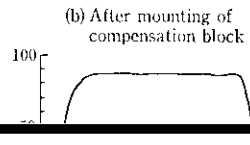
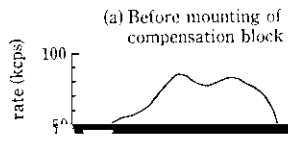
Items		Specifications
Diameter	(mm)	21.0~177.8
Wall thickness	(mm)	2.0~ 35.0
Length	(m)	6~ 67
Tube speed	(m/s)	2~ 8
Tube temperature	(°C)	600~950
Tact time	(s)	Min. 15
Response		0.01 s or 100 mm
Accuracy		±0.1 mm 100 mm $\phi$ × 10 mm $t$
Allowance of swing	(mm)	±10

Table 2. Composition and selection of the...

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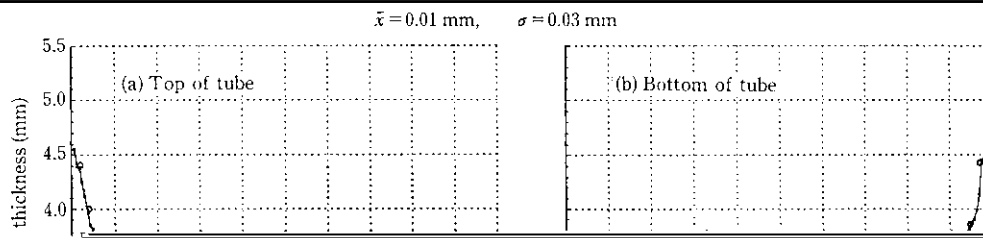
this characteristic function is given by Eq.(2), it is

99 ————— Photo multiplier tube



Tube size : 101.6  $\phi$   $\times$  3.45 t (mm)

Manually measured data    Quality control thickness



Length in longitudinal direction (m)