

Diagonal Adhesion Insulated Rail

Aims

- To decrease rail maintenance work offering railway devices less affecting environment.

Features

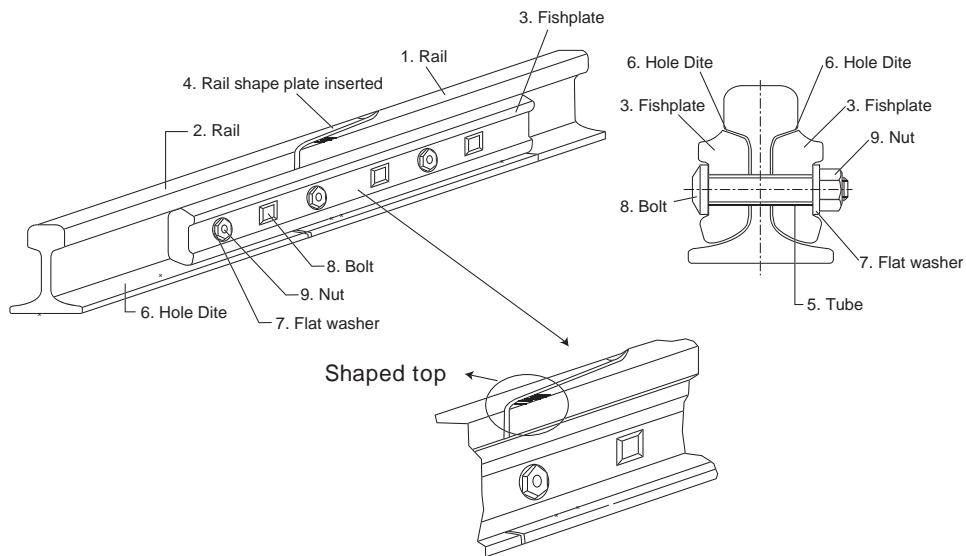
- 1) Less damage of rail shape with the impact of wheel passing through.
- 2) Less sound and vibration.
- 3) Less reform shaping of rail edge, decreasing maintenance cost.

Structures

- Right angle rail joint is changed to slant face, that provides smooth ride of wheel on the rail.



Structure



Performance data

	Arc	Flow	Insulation damage	Noise	Maintenance	Cost
Diagonal Adhesion Insulated Rail	Yes	Bevel diminished	Non	85-90 dB less by 10 dB max. 1 month after installation	0	20% less
Conventional Insulated Rail	Yes	MAX1.5(mm)	Yes	6 months (right rail) and 2 years (left rail) after installation 90~96(dB)	1	--

Installation records

Site	Date of Installation	Load	Rail	Type	Direction	Tip shape	Aring
Yaita -JR East Japan	Nov. 26, 1999	117 million tons (28 million tons/year)	60 k (HH340)	Curved R600m	Backwards	Top and side of tip end was shaped by 2mm and cut vertically	Less
Nozaki -JR East Japan	Nov. 25, 1999	117 million tons (28 million tons/year)	60 k	Straight			Less
Mukogaoka -Odakyu	June 8, 2001	10 million tons (15million tons/year)	50 N (HH340)	Curved R400m 1/40 Cut			Frequent
Mukogaoka -Odakyu	Aug., 2001	15 million tons (30million tons/year)	50 N	Straight			Less
Soshigaya-Okura -Odakyu	Jan., 2002		60 k	Straight up		Without	Less
Soshigaya-Okura -Odakyu	Jan., 2002		60 k	Straight down 1/40 Cut			Not investigated
Kyodo -Odakyu	Mar., 2002		60 k	Straight			Not investigated