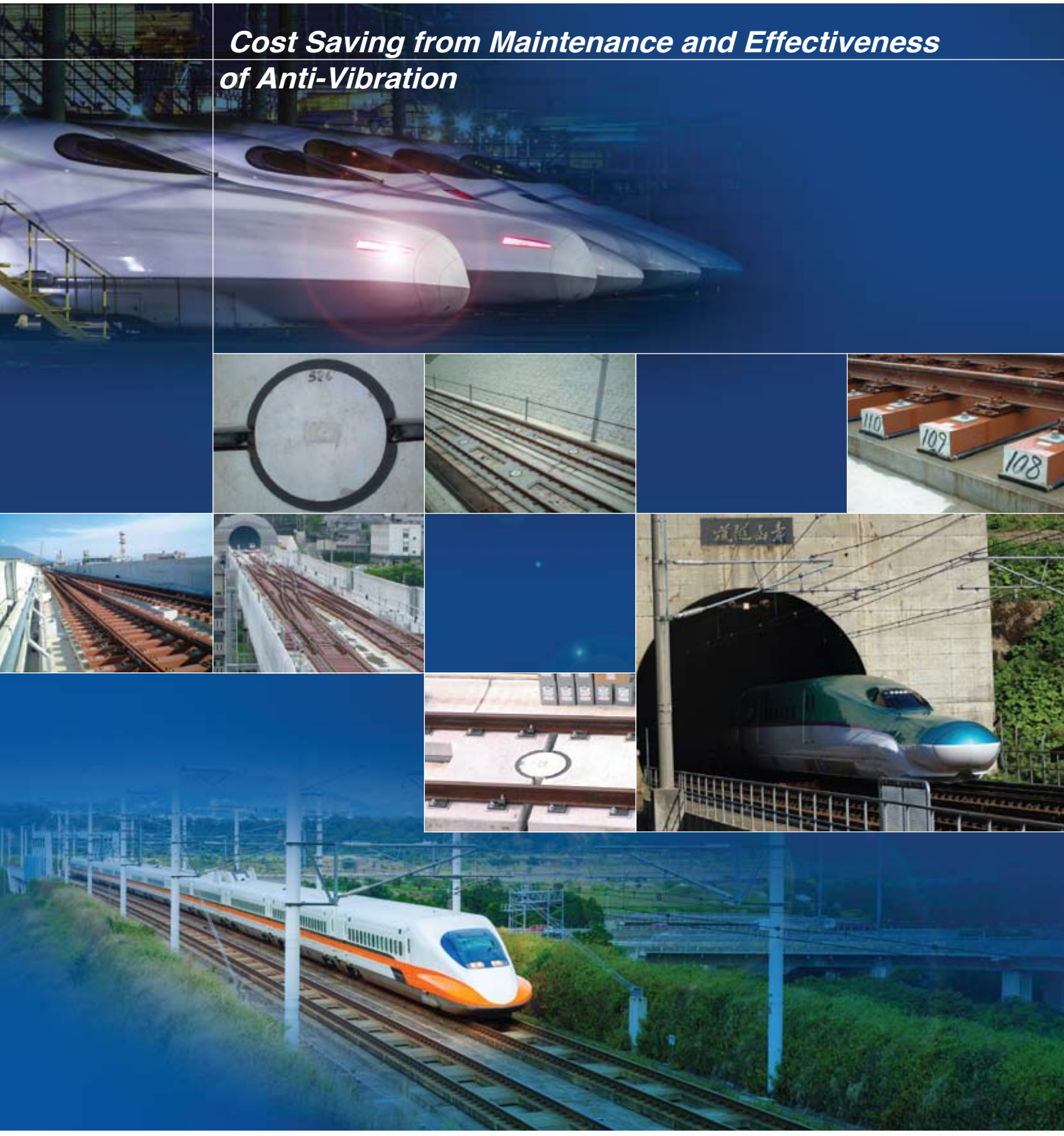
Filling Material for railways

CUS

Cost Saving from Maintenance and Effectiveness of Anti-Vibration



CHUGOKU MARINE PAINTS, LTD.

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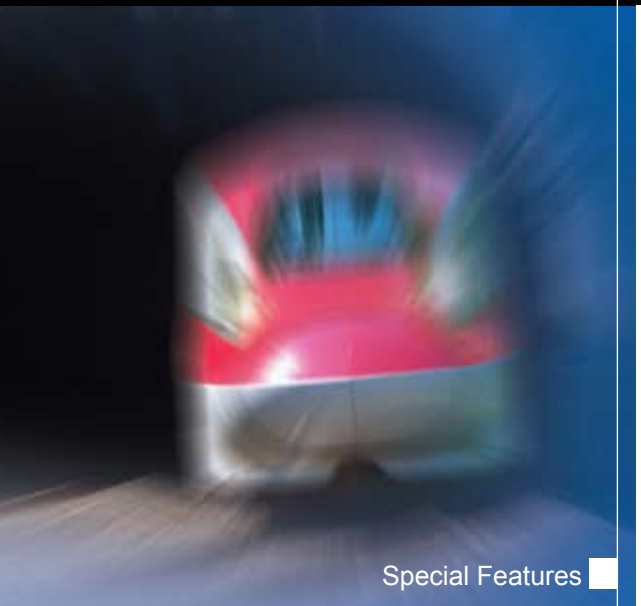

CUS, Polyurethane Filler, is specially designed for the rail bed to maintain and support a railroad sleeper and concrete slab, permanently. The role of CUS to fix a railroad sleeper and concrete slab with the rail track bed without any gap and also can absorb the vibration and impact from the running trains. The run speed of the train is increased by technological progress. On the other hand the materials used for a railroad have to satisfy the durability and safety. It's an important theme to reduce the vibration caused by trains and cost in maintenance of a railroad. CUS has been used for the railway track on the Shinkansen since 1974 as a filling material. It has been used also on the other railway lines as a binding, fixing and supporting material. CUS has excellent fatigue durability and weather resistance compared to the conventional filling materials such as CEMENT-ASPHALT MORTAR(CAM). CUS has excellent elasticity and can reduce vibration and impact caused by trains. CUS has contributed greatly to the modernization of the railway, such as Japan and Taiwan.

Special Features

1. Excellent fatigue durability to the vibration, bending and impact.
2. Vibration reduction and shock absorption
3. Diverse lineup
4. Easy Application
5. Saving worker and reducing cost of maintenance.

CUS series and its usage

Kind of Rail Track				Name of Product	Spring Constant (MN/m)
Slab track	For new construction	Under Concrete	at Turnout	CUS-UB10	9.8
			at Vibration control system	CUS-U024	2.4
		Around projection Concrete	With anti-vibration mat	CUS-UB10	9.8
			Without anti-vibration mat	CUS-U043	4.3
	For maintenance	Under concrete slab		CUS-UB20	19.6
				CUS-RE20	20
		Around projection Concrete	With anti-vibration mat	CUS-UB10	9.8
				CUS-RE10	10
			Without anti-vibration mat	CUS-U043	4.3
Direct laid track and turnout	Under wooden or synthetic sleeper			CUS-UB10	9.8
				CUS-RE10	10
	Under sleeper for Vibration control system			CUS-UC011	0.98
				CUS-UCN02	2.4
	Under type B Laid track PC sleeper			CUS-UB20	19.6
	Under PC sleeper at buffer section (slab ~ ballast)			CUS-UB20	19.6
				CUS-RE20	20
	LPC Track			CUS-UB20	19.6
Repairing material for small gap and crack less than 5mm				CUS-VE150	—
Bonding agent for implantation screw				CUS-EP150	—

Superior Durability provides safety during operation

Usages of CUS series as example

1 Concrete Slab Track
2 Filling under sleeper with "long-tube"
3 Repair of Concrete Slab Track
4 Synthetic Sleeper
5 Filling around projection concrete
6 #38 high-speed turnout
7 Filling under PC Sleeper
8 Filling into mold
9 Filling for LRT

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