Rehabilitation

Surface Distress Hot In-place Recycling AR2000





Economics	More economical than prevailing conventional Mill & Fill method		
Environment	Reduction of CO ₂ emission (40% reduction compared with conventional method*) No smell, no smoke, no fire under usual operation		
Resource	Reuse 100% existing pavement (Usually 70% reduction of new asphalt mixture compared with conventional method)		

* A Delhi project in Sept. 2007

Pavement Preservation Guidelines

	Type of Activity	Increase Capacity	Increase Strength	Reduce Aging	Restore Serviceability	
	New Construction	×	X	×	×	
Pavement Preservation	Reconstruction	×	×	×	×	Applicable Area Hot In-place Recycling Hot In-place Strengthening
	Major (Heavy) Rehabilitation		×	×	×	
	Structural Overlay		X	×	×	
	Minor (Light) Rehabilitation			×	×	
	Preventive Maintenance			×	×	
	Routine Maintenance				×	
	Corrective(Reactive) Maintenance				×	
	Catastrophic Maintenance				×	

Structural Distress Hot In-place Strengthening[®] HISART Source : US FHWA





Process patent application in Japan (No.2007-292914)

Trial paving by HISART

Transforming

Hot In-place Transforming[®] (Dense to Porous): HITONE[®]



Train of Hot In-place Transforming® Machines



Process patent granted in Japan (JP3849124) International patent application (PCT/JP2004/018450)





Traffic Safety & Noise Reduction



■ Noise Absorption of Porous Asphalt Concrete



Reduction of CO₂ Emission



Source : MLIT Japan

Removing

Noiselessly Removing Bridge Deck Asphalt Pavement Induction Heating In-place Removing®







Exploration & Cutting



Heating



Resource

Peeling



Removing



Economics	Substantial construction time saving
Environment	Huge reduction of noise operation Huge reduction of mineral dust emission

IHIR works with simulated steel deck at test yard



Removed asphalt mixture to be recycled at a plant