

HOT-IN-PLACE RECYCLING

Presented by:

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Gallagher Asphalt's Hot-in-Place Recycling Options:

- Re-HEAT
- Surface Recycling (Heater Scarification)



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What is the Hot-in-Place Recycling



METHOD?

Re-HEAT is an on-site, in place, pavement rehabilitation method that consists of **heating** the existing pavement, **removing** the top surface course, **adding** an asphalt rejuvenating emulsion, **mixing** the material uniformly in an on-board mixing drum, **re-laying** the recycled material, followed by **compacting**.



Step 1: Heating the Existing Pavement

- The road surface is softened with radiant convection heat.





Step 2: Removing Top Surface Course

- A rotary blade system dislodges the material for processing.





Step 3: Adding Asphalt Emulsion

- Additives are injected to reconstitute the rejuvenated asphalt.





Step 4: On-Board Mixing Plant

- A heated mixing plant uniformly blends the additives with the asphalt.





Step 5: Relaying Recycled Material

- The rejuvenated asphalt is immediately placed to the correct slope and grade.





Step 6: Compaction

- While still hot, the newly recycled asphalt pavement is rolled to final compaction.



Open to Traffic. . .



Rejuvenating Agent Application Rate

Both HIR process will introduce a rejuvenating agent typically at the rate of 1/10th gallon per square yard.

Pre-requisites for HIR:

- Pavement must be structurally-sound with no base failures
- Pavement must have at least 3” of hotmix asphalt

Hot-in-Place Comparison

	Re-HEAT	Heater Scarification
Need for Surface Treatment /Overlay	No	Yes
Materials Added During Process	Asphalt Rejuvenator	Asphalt Rejuvenator
SYs per Day	4,500	9,000
Pavement Penetration Depth	Up to 2" (Depending on Surface Course Thickness)	Up to 1.5" (Depending on Surface Course Thickness)
In-Place Mixing Capability	On-board drum mixer	Scarifying Tines & Augers
Thermal Bond Effect	Moderate - High	Low - Moderate
Mat Re-Placement	Conventional paving screed	Conventional paving screed
Compaction Equipment	Double Drum Vibratory Roller	Double Drum Vibratory Roller
Budgetary Price per SY	\$7.00 Total	\$3.50 plus Surface Treatment/Overlay

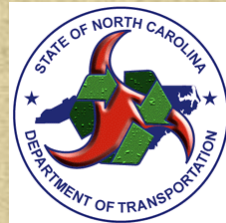
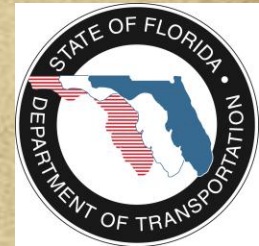


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