

WARM MIX ASPHALT WITH POLYMER MODIFICATION IN MISSOURI

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Why Warm Mix?



- Bump Problems
- Contractor Initiated Solution.





Bump



Original Lift

Benefits Reported

- Better/Easier Compaction of Mixture
 - More uniformity
 - Higher pay factor
- Fewer Emissions
- Lower Plant Operating Expense
- No Bumps

Specification Changes

- Permissive (not excluded)
- Lowered Mixing and Compaction Requirements



Typical in Missouri

- Chemical – Shear reduction, adhesion improvement; Mixed in-line with liquid (Evotherm)
- Wax – Shear reduction; Blown in mixing chamber (Sasobit)
- Foamed – Shear reduction; Foamed in mixing chamber (Various)

2010 Warm Mix Tonnage

458,673	PG 64-22
122,687	PG 70-22
105,516	PG 76-22
686,875	Total



Summary

- Initial Goal Accomplished
- Less Likely to Heat Damage Polymers
- Performance Approximately Equal
- Allowable Substitution
 - More Expensive
 - Cost Trade-Off
- Extend Asphalt Season
- Environmental Advantages