



Introduction Micro-Surfacing

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St. Louis, Missouri September 28, 2006

Midwest Pavement Preservation Partnership

International Slurry Surfacing Association (ISSA)

- Represents Members from Around the World in Slurry Systems (Micro Surfacing & Slurry Seal)
- Established in 1963
- Slurry Systems usage in 36 Countries





Most Recent Event

September 6-8

Beijing International Convention Center



2006 ISSA 全球大会
暨 国际沥青路面维修养护技术研讨会

2006 ISSA World Congress

International Seminar on Asphalt Pavement Maintenance Technologies



2006 ISSA 全球大会

暨 国际沥青路面维修养护技术研讨会



Global Lead Markets

- United States - 200 million m²
- European Union - 100 million m²
- China - 30 million m²



Notable Global Markets

- Sustained tradition
 - Thailand
 - Canada
 - South Africa
- Potential fast growing markets
 - Russia
 - Brazil



European Union Market

- Total Size ~ 100 million m²

France : 40 000 000 m²

Spain : about 20 000 000 m²

Germany : about 6 000 000 m²

Other key countries: UK, Italy,

Growth markets: France, Eastern Europe



EU Trends: Micro for High Speed Roads

- Successfully used on German Autobahns for 20 years
- Speeds > 160 km/hr
- Average Daily Traffic > 70,000
- High Axle Weight Trucks



UNITED STATES Trends:

- **Steady growth**
- **Market shift from Slurry Seal → Micro-Surfacing**
- **Shift toward night work**
- **Increased use of continuous production pavers**
- **Increase awareness with Pavement Preservation Movement**
- **Growing focus on skid correction / surface friction**





Canada

Toronto, Ontario

Thailand



Bangkok Expressway



King Rama IX Bridge



South Africa



Russia



City of Kazan, Tartastan



Brazil

Salvador, Bahia State

MICRO-SURFACING

What is Micro Surfacing?

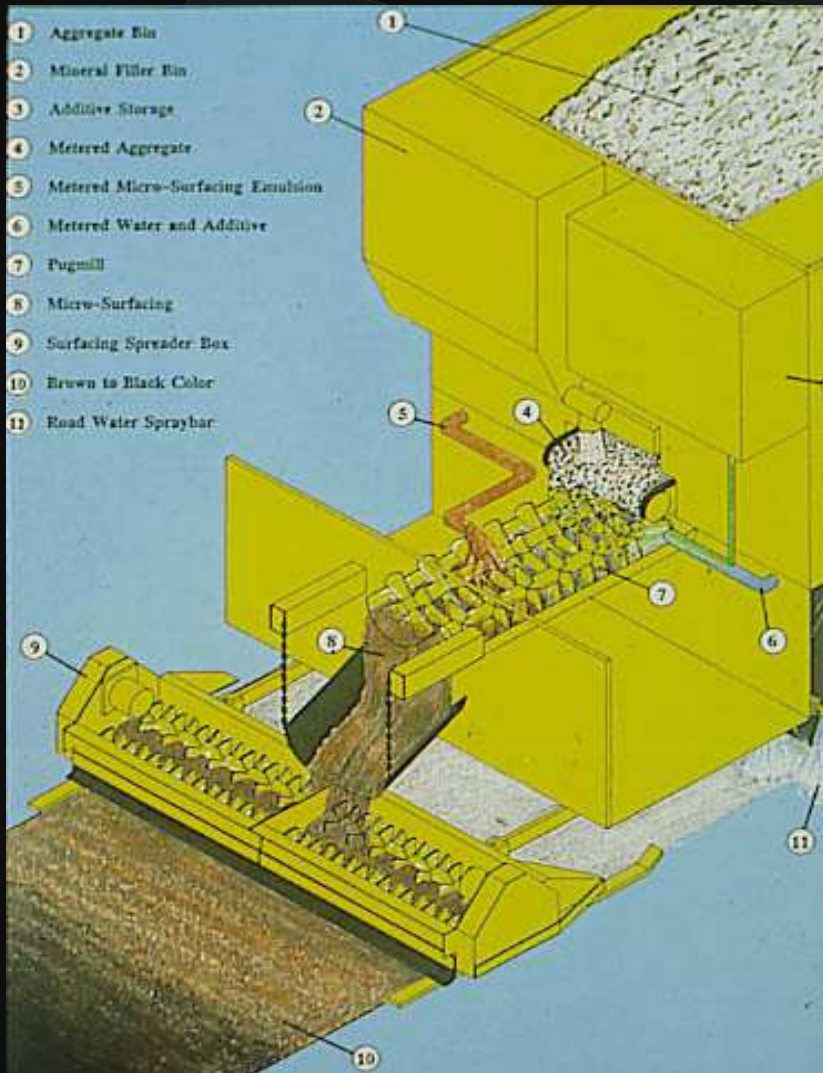
**Polymer-modified cold-mix paving system used
for:**

- **Filling Wheel-Path Rutting**
- **Restoring and Enhancing Surface Friction**
- **Minor Correction in Ride-Quality / Roughness**
- **Sealing and Protecting Existing Asphalt Pavements**
- **Cost Effectively Extending Pavement Life**
- **Maintaining Pavements in Good Condition**



MICRO-SURFACING

What is Micro Surfacing?



Cold Paving Mixture Consisting of:

- **Polymer Modified Asphalt Emulsion**
- **Quality Crushed Aggregate**
- **Mineral Filler (Cement)**
- **Mix Control Additive**
- **Mix Water**

**Laboratory
Designed
Mixture**

**A-143
Guidelines**



MICRO-SURFACING

What is Micro Surfacing?



Construction Process



**Quality
Construction**



MICRO-SURFACING

What is Micro Surfacing?

 **REPROFILING
RUTTED WHEELPATHS
WITH
MICRO-SURFACING**

For each inch of applied micro-surface mix
add 1/8" to 1/4" crown to each rutfill
to compensate for return traffic compaction.

Original Pavement Cross Section



Micro-surfacing Mix Micro-surfacing Mix

Ruts in Wheelpaths

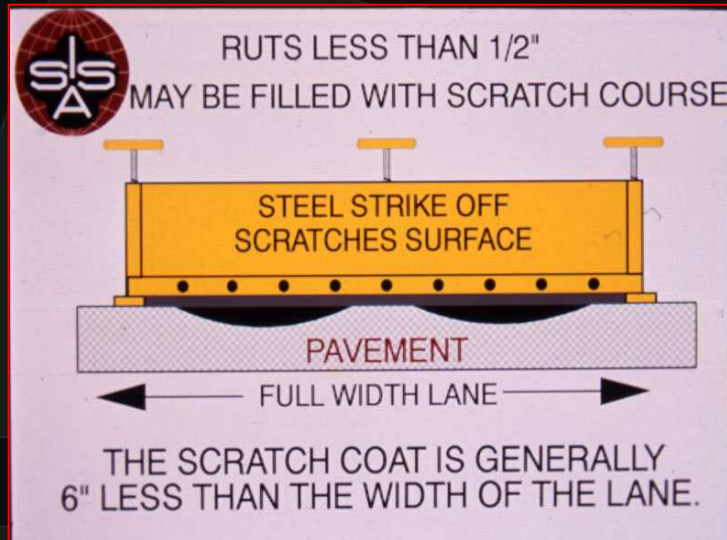
RUTS 1/2" & OVER MUST USE THE RUT BOX

Rut-Filling Course



MICRO-SURFACING

What is Micro Surfacing?



Rut-Filling

or

Leveling course



MICRO-SURFACING

What is Micro Surfacing?



Surface Course

Applications range from 3/16" (15 lbs.) to 1/2" (40 lbs.) per square yard.

Macro texture and friction properties are determined by aggregate size and finishing technique.

Premium hard aggregates are commonly used to provide long-lasting high friction properties



MICRO-SURFACING

What is Micro Surfacing?



Surface Course



High Quality Wearing Surface



MICRO-SURFACING

What is Micro Surfacing?

High Quality
Pavement Preservation
Treatment





Upcoming Events

Slurry Systems Workshop

Jan. 30 – Feb. 2, 2007

2007 AEMA-ARRA-ISSA

Joint Annual Meeting

February 14-17

Bonita Springs, Florida



THANK YOU !

**For more information
please visit
www.slurry.org**