



## AD-here Blended Additive—Project Profile, Erie County, PA

### AD-here LOF 65-00<sup>®</sup> with CECABASE<sup>®</sup> RT 945

#### Project Information:

Agency: Pennsylvania Department of Transportation

Project Location: Route 505 Erie County, PA

Date Placed: July 2012

As part of the Penn DOT review process for warm mix additives, a field trial was recently conducted in Erie County Pennsylvania using AD-here LOF 65-00 with CECABASE RT 945 additive. Road Science, Division of Arr Maz Products, partnering with Mayer Brothers construction paving a test section of Route 505, beginning at Route 97.

Mayer Bros. elected to pave the Northbound travel lane (12 foot width) and Northbound shoulder (4 to 5 foot width) in a northbound direction with the flow of traffic.



Weather: At 8:20 AM under a sunny sky the beginning ambient temperature recorded was 77F and the existing milled surface temperature was recorded as 89F. At 10:15am the ambient temperature was recorded as 81F and the surface temperature was 102F. At 11:20am the following conditions were observed. Under a sunny sky the ambient temperature was 82F, Relative Humidity was 32%, the Dewpoint was 39, winds out of the WNW at 5mph and surface temperature was 81F in the shade & 111F in the sunlight.

Workability of the warm mix replicated a conventional hot mix. The material dumped easily into the paver hopper, passed through the paver to the screed and was struck off to grade with absolutely no difficulty. The mat was very consistent in finished texture coming out of the back of the screed. Where handwork was necessary, the laborers doing the shoveling and luting, commented that the mix was very friendly. Other observers noticed the same "user friendly" capabilities of the mix. Target thickness of this Scratch Course was for a little over 1/2" (60 lb/sy). Due to inconsistencies in the milled surface the average depth across the mat was running about 3/4" with placement of the first three loads of mix by the fourth load the thickness was running closer to 1/2" to 5/8" and remained consistent through the next 17 loads.





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### Field Data:

The rolling train consisted of a 12 ton steel wheel double drum Sakai SW850 as the breakdown roller, an Ingersol Rand 271 Rubber Tire Roller as the intermediate and a small 4 ton steel wheel double drum Sakai SW320 as the finish roller. Since this was a scratch course; PennDOT does not hold the contractor to any minimum density requirements. All rolling passes with the breakdown and finish rollers were done in static mode. The pattern consisted of one static movement up and one static movement back on each pass before moving over to start the next pass. Rolling was done from the high side to the low side across the mat.



To complete the equipment list, Mayer Bros. used a Blaw-Know 3200 Rubber Tire Paver, and an Etnyre Tandem Distributor applied the CSS-1 (diluted) tack coat at about .08 gallon per square yard. Seven haul trucks (triaxles) were used to provide mix from the plant to the hopper of the paver. It was observed that the haul time from the plant to the project ran between 20 minutes to one half hour depending on traffic.

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