The (Dark) Art of Achieving Successful Outcomes with HRA Pavements

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HISTORY LESSON

Source: IAT Yearbook 2016. Thanks to North East and Cumbria Branch!
2015 - Big Advances in all machines
....except one!!
The Machine.
Under the Bonnet-so to speak!
The Material. Good

- 98% impermeable due to low void content
- Very durable with long service life if manufactured and laid optimally
- Good Skid resistance
The Material. Bad

- Unforgiving to errors in manufacture and laying
- Very weather/season dependent
- Noisy
- Very difficult to lay on restricted sites
  - Eg. junctions, low radius roundabouts, rural roads below 8m in width (even with road closures)
- Road Closures required more often than not to lay due to width of chipper
- Remember that in contra-flows the loader has to travel with live traffic!
Common Issues

- Joint Formation
- Compaction Control
- Tack Coat
- Workmanship
- Season/Weather
- Mix Stability
- Sources of Suitable sands
- Storage of Sands
- Binder Content optimisation
Solutions

- Better training of site-management and workforce.
- Realisation of limitation of application
- Co-ordinated approach to laying in the correct season to aid planning
HOW TO ACHIEVE A PERFECT PAVEMENT
CAUSES OF FAILURE – BOND COAT
CAUSES OF FAILURE - JOINTS

Start with This.

Finish with This.
CAUSES OF FAILURE – GUIDANCE

Good Guidance:

• New TII Specification for Road Works 900 Series

• Road Note 42. https://trl.co.uk/news/prev/3902
QUESTIONS

THANK YOU FOR YOUR TIME!

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