

WARM STUDY TOUR OF EUROPE RPF REPORT BACK

WMA INTEREST GROUP – SOUTH AFRICA

RPF

NOVEMBER 2010

PRETORIA



Why did we go?

- SA has done 2 national trials.
- Busy with 3rd national trial.
- Compare our experiences.
- See what they are doing at the 'koel' face.
- Adjust our direction?
- Build and cement peer relationships for knowledge exchange.



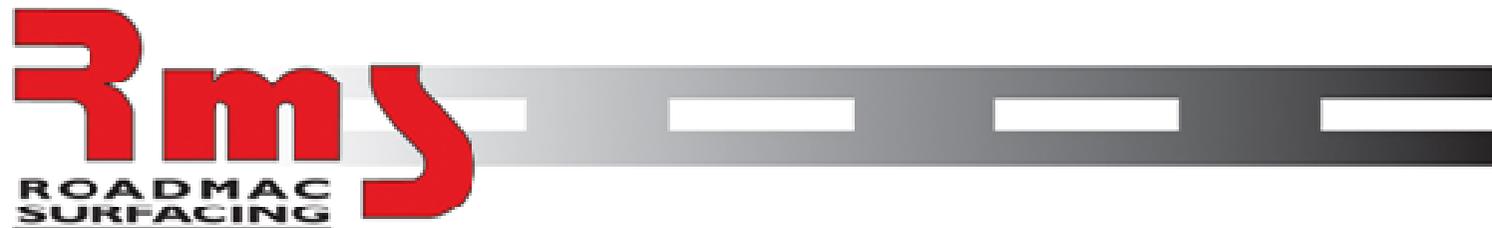
19 August to 5 September 2010

Mode of travel

- Plane
- Train
- Taxi
- Bus
- Tram
- 2 feet good
- 4 feet better



Who went ?



LONDON



HAMBURG



AMSTERDAM



PARIS



BORDEAUX



LYON



MILANO



WMA STUDY TOUR: EUROPE 2010



We visited:



London - Eurovia



- WMA getting consideration since 18 months ago.
- Legalisation and carbon trading talk is catalyst.
- No organised industry push for WMA.
- WMA paved on trial basis.
- Some clients “Heard about it, tell me what it’s about”.
- Crazy about Shell–grip in intersections.
- Foreman earns about £45 000 / 6months.



Bordeaux - Eurovia



- Network management done by private sector.
- Proprietary WMA process – water based tech.
- Proprietary software to optimise use of WMA –
mixing temp = f (ambient temps, delivery distance,
etc)
- Clients are insisting on WMA – driver?
- WMA driving innovation.
- Is WMA less hot HMA or a product on its own?

Bordeaux - Eurovia

- Have not optimised compaction effort as yet, focussing on getting WMA accepted, then onto site matters
- ECO comparator – online dbase for clients to compare technical solutions - product owner populates dbase.







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Bordeaux - Eurovia

Crushing & Screening

- Plants strategically located.
- Multiple suppliers.
- Material categorised as black or white.
- Bricks not a problem – Los Angeles Abrasion.
- Plaster needs to be controlled.
- Sulphate content biggest risk.





Paris - COLAS



- Paris uses WMA, HMA only on special order.
- Will we get bitumen to spec or have to take whatever we can get?
- No new quarries in France for last 10 years.
- Innovation is important and managed affair, Public Admin person in charge of co-ordinating & initiating innovation.
- WMA guideline document will be out in 2 years.

Paris - COLAS

- Looking beyond water based technologies – because of coating and performance considerations.
- Still to gather definitive figures for fume emissions
- No standardised approach to measuring workability



Lyon - Eiffage



- Proprietary half warm asphalt tech— below 100°C.
- Water based technique.
- Workability measured using French workability test – based on Nynas developed test.
- Undertaking fume measurements using LCPC method.
- Current test sections with PMB's, expecting French certification in about 3 years.

Workability test



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Lyon - Eiffage

- By next year 20 of 340 UK plants to adopt LEA, in 5 years 100 plants.
- Reported that WMA debate has not even started in UK, National client body not talking about it.



Amsterdam - BAM



- Proprietary water based – mechanical + chemical ?
- Similar skills movement and age gap problems.
- Initial driver was to reduce cost of asphalt - progressed to environmental considerations.
- State has targetted CO² reduction of 40% within 5 years for road engineering in general.
- Environmental considerations are formally rewarded - 10% max of price set aside. **SABITA to investigate for industry discussion.**

Amsterdam - BAM



- Contractors buy RA from road owner.
- No system to rate the life of surfacing.
- H-WMA was ready for a number of years but clients were not willing to pay for CO² reduction.
- Debating how to decide which product is more environmentally better than another.
- Find ways to define additional benefits & reduce the price to get the market moving, you do not need more techniques.
- Techniques other than foaming have other benefits.
- Techniques may or may not get driven because of technical expertise, change required to manufacturing plants or patents?

Bologna - Marini



- Plant implemented Shell WAM foam.
- Improved system to form proprietary product Greenfalt.
- Co-operation between company, Marini & Shell.
- Not all tender documents allow WMA.
- Using drop in manufacturing temps to allow longer haul distances 250km with 75°C compaction temps.
- Achieving 18000 to 23000Mpa stiffness with technology.

Hamburg - SASOL

- Product first introduced for rut resistance, secondary effect WMA.
- Germans are moving away from bitumen testing and towards mix testing
- Safety concerns for emission catalyst for WMA
- WMA guideline available
- WMA technical guideline being drawn up
- Sort of VO being put into HMA spec to give spec WMA, not ideal but forward movement.



Hamburg - SASOL



-  Reusing RA is a fine art
-  Rejuvenator being used for almost 22 years.
-  Hamburg is aiming to be the green capital of Europe.

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