



## Easy-to-handle asphalt concrete for a highway viaduct (A31)



In the framework of a maintenance contract, SCREG EST and COLAS EST joined forces to complete a project involving the rehabilitation of the wearing course on the Belleville Viaduct located on highway A31 in eastern France.

The structure combines a steel deck and a hollow-core slab, which led the customer to forbid the use of vibrating rollers during the application of asphalt concrete.

In order to comply with the contractual specifications in terms of densification, the SCREG EST and COLAS EST laboratories found that adding 0.5% of CWM to the bitumen binder greatly improved handling capacity when the mix was manufactured at conventional temperatures (between 165 and 170°C).

Over 12,000 m<sup>2</sup> of class 3 BBM B 0/10 (EB 10 Bitulastic EC wearing course) were applied in two phases (one phase for each direction of traffic) and with no vibration. Quality control findings show that the final result is in compliance with contractual thresholds.

- ⇒ Average sand depth = 0,86 mm
- ⇒ Average air void content = 10,5%  
(void content)

(Mini = 0,66 / Maxi = 1,02)  
(93,2% of measurements range from 7 to 12% air void content)



**For further information, please contact:**

SCREG - Technical Management  
SCREG EST – Nancy Agency  
SCREG EST – Lorraine Laboratory  
COLAS EST – Technical Management  
COLAS EST – Meurthe and Moselle center  
COLAS EST – Nancy Laboratory

M. Bertaud  
M. Detammaecker  
B. Bolot  
C. Leroux  
T. Lartisan  
R. Clerc

☎ 33 1 39 30 93 51  
☎ 33 3 83 50 48 18  
☎ 33 3 83 50 48 80  
☎ 33 3 89 20 75 03  
☎ 33 3 83 55 62 00  
☎ 33 3 83 55 62 20

[bertaud@dt.screg.fr](mailto:bertaud@dt.screg.fr)  
[detammaecker@heillecourt.screg.fr](mailto:detammaecker@heillecourt.screg.fr)  
[bolot@heillecourt.screg.fr](mailto:bolot@heillecourt.screg.fr)  
[leroux@siegest.colas.fr](mailto:leroux@siegest.colas.fr)  
[lartisan@nancy.colas.fr](mailto:lartisan@nancy.colas.fr)  
[clerc@nancy.colas.fr](mailto:clerc@nancy.colas.fr)