



Germany, container terminal Burchardkai, Hamburg - port transport surfaces

High performance
cost effective
solutions for
container
terminals

Product:	Sealoflex® SFB 5 -50 (HS)
Construction period:	2000
Quantity:	30.000 m ²
Location:	Burchardkai terminal Hamburg
Layer structure:	60 mm Sealoflex® Stone Mastic Asphalt 0/16 80 mm Sealoflex® binder asphalt 0/16 300 mm unbound (recycled) granular subbase 0/32

The vehicles used to transport containers – mainly AGVs (automatic guided vehicles) and reach stackers – cause loads on the pavements which exceeds the individual loads of heavy goods vehicles on "normal" roads. Resulting in early rutting and cracking.

After extensive studies commissioned by the Hamburger harbour authorities (HHLA) a new asphalt construction was selected containing Sealoflex® SFB 5-50 (HS) polymer modified bitumen.

Dimensioning calculations showed the benefits of the Sealoflex® 5-50 (HS). The number of stress cycles that could be tolerated was about 4-6 times higher than for a standard asphalt layer due to the excellent fatigue performance. For this reason, relatively thin asphalt layers were proposed, which were regarded with considerable scepticism by many experts. However, after more than 10 years in use there is no doubt that these designs have stood the test of time.

The binder Sealoflex® 5-50 (HS) is characterised by outstanding elastic properties and very good low temperature behaviour. The special characteristics of Sealoflex® 5-50 (HS) are due to the high quality SBS polymers and Sealoflex® blending technology. It has been demonstrated that Sealoflex® 5-50 (HS) still has its tough properties even after a long service time.

According to the local site supervisors, this container terminal is the only one that has lasted more than 10 years practically without any maintenance and has stood the test of time better than all other pavement constructions. It can be assumed that the asphalt construction can be used for another 10 years. That means an extension of the normal service life of such a construction by almost a factor of 2.5.

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