

JOB REPORT

MACHINES



BRIDGE COMPACTION REQUIRES PERFECT AMOUNT OF VIBRATORY FORCE

Compacting asphalt on a bridge is an extremely sensitive undertaking. The operator of the roller needs to bring just the right amount of vibration. Too little force and targets won't be reached ... too much and the bridge can be damaged.

Crews faced such a challenge during a recent bridge repair project on Road II/268 near Mnichovo Hradiště – Mimoň in the Czech Republic.

The bridge had undergone repairs, and a new top layer of asphalt needed to be placed. Supervising the project was Mr. Hloušek, the asphalt site manager for USK Mladá Boleslav.

An Ammann EasyBatch Asphalt-Mixing Plant provided the mix. The mobile plant has a capacity of 120 t/hour. It utilises cold recycling technology and has equipment for introducing granular additives.

Haul trucks transported the materials to an Ammann AFT 700-3 Asphalt Paver, a technologically advanced tracked machine. The paver placed a smooth 4.5 cm surface layer at a length of 150 metres and a width

of 9 metres. About 170 tonnes of mix were placed on the bridge.

Then it was time for the moment of truth: compaction. An Ammann ARX 110 Tandem Roller handled compaction behind the paver. The machine features a heavy-duty, two-stage vibrator and easy adjustment of amplitude and frequency.

The crew from USK Mladá Boleslav took advantage of the optional ACE^{force} Intelligent Compaction system, which provides a host of benefits including measurement and documentation, evaluation of material stiffness and operator guidance.

This information proved crucial while compacting on the bridge. The operator was able to gently work the surface, yet also be confident that proper compaction had been achieved. The machine worked in the lowest vibratory setting, an approach the operator would not have been confident of without ACE^{force}.

The project was a success, with a smooth, properly compacted mat the final result – thanks in no small part to Ammann's proprietary compaction measurement system, ACE^{force}.

AFT 700-3

EU Stage V | EU Stage IIIA

Technical details:

Operating weight: 18 500 kg (40 785 lb)
Standard paving width:
2 550 – 6 000 mm (100 – 236 in)
Max. paving width with extension:
9 000 mm (354 in)



AFT 700-3



ARX 110

EU Stage V | EU Stage IIIA

Technical details:

Operating weight: 10 560 kg (23 280 lb)
Maximum weight: 12 010 kg (26 480 lb)
Drum width: 1 680 mm (66.1 in)
Engine: Deutz TCD 3.6 L4 – 74.4 kW (100 HP)



ARX 110

