

Reference

New Building of a Track Foundation Plate, Railway Station Olten/SO

Construction of a track foundation plate with rapid-hardening concrete
Concretum® Q-FLASH 2/20



Concrete placement...



...during normal operation

Facts

Product:
Q-FLASH 2/20

Project duration:
September 2008

Authority:
SBB

Engineer:
A. Aegerter & Dr. O.
Bosshardt AG,
Ingenieure und Planer

Building contractor:
Vanoli AG Zofingen

Concrete supplier:
Baustoffzentrum Olten/
Zofingen BOZ

Initial Status

Railway station Olten is one of the most important through stations of Switzerland. In the area of the railway station Olten the route is curved which leads to a high transverse loading of the track foundations. Therefore it was necessary to construct a new track foundation plate (9.10 x 2.40 m) above the subway. The train transportation service should be kept as undisturbed as possible during the repair works. The drying period of the concrete and thus the waiting period until the sealant could be applied determined the cut-off time of the track concerned.

Solution and evaluation

To keep the cut-off times as short as possible, the concrete used to renew the track foundation plate had to harden and dry as quickly as possible. Therefore, Concretum® Q-FLASH 2/20 was selected. The fresh concrete was well workable for about 75 minutes and could be placed without any problems during this period of time. Only 3.5 hours after the placement, the compression strength was already above 20 N/mm² and the moisture content below 4.0 CM-%. Consequently, the working process could be continued and the sealing system type OS 11 could be applied.

Using Concretum® Q-FLASH 2/20, the construction



time could be reduced to an absolute minimum. This system, which has so far mainly been used for the repair of landing fields, has optimally proved of value for other time-relevant concrete applications.

↓ Film SBB, Olten with Q-FLASH 2/20 (SWF, 11643 kb)

