



SIKA AT WORK

METRO LINE DUDULLU-BOSTANCI, ISTANBUL, TURKEY

PRODUCTS FOR TBM: Sika® Foam TBM 510 LS

BUILDING TRUST



SENBAY-KOLIN-KALYON, ISTANBUL, TURKEY



PROJECT DESCRIPTION

The City of Istanbul selected a group of experienced construction companies for the excavation of the new Metro Line Dudullu-Bostanci in the Asian side of the city which includes the construction of a double Metro Line of around 14 km with 13 stations.

TBM DESCRIPTION

For the excavation of this new line it was decided to use 4 different EPB TBM machines from two different manufacturers with an excavation diameter of over 6,57 m. Two machines are always excavating in parallel and the other two machines move in the opposite direction. Material is removed using a conveyor belt to a central shaft.

PRODUCT DESCRIPTION

Even the excavated material may vary from one section of the tunnel to the next, during the tests and application of the Sika foaming agent, mainly grey clay with some rocks was excavated.

Sika® Foam TBM 510 LS, which is a foaming agent for high cohesive soils, has been recommended and used with very good results. During tests in one of the TBMs with our foaming agent and after stabilizing the excavation conditions and the parameters of the TBM, the dosage of the foaming agent was maintained in a good level, the average advance speed of the TBM has not been reduced and the torque of the cutting wheel remains within the required values. Specially the quality of the final foam produced to condition the ground is much higher when using the sika foaming agent.

PROJECT PARTICIPANTS

Owner: City of Istanbul.

Client: Istanbul Metropolitan Municipality.

Construction: Senbay-Kolin-Kalyon J.V.

Supplier: Sika Turkey.

Our most current General Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.



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