

Measurement of ship induced flow in the waterway to Drachten, the Netherlands

The Province of Fryslân (located in the north of the Netherlands) investigate the possibility to upgrade the waterway from the Prinses Margiet Canal to Drachten, from a class 4 to a class 5 inland waterway.

Part of this investigation is the execution of field measurements duirng several test passages in the waterway to Drachten, with a class 5 ship called "Concordia". The passages are performed with the Concordia in three different loading conditions. The ship dimensions are L = 110 m, B = 11.5 m and D=3.5 m.

During the test passages of the Concordia from Kruiswaters to Drachten, 39 measurements of the ship induced flow and the water level change were performed from an accompanying vessel. The equipment used was a Valeport Impeller Current Meter (type 106) to measure the ship induced flows and a Diver Pressure Gauge to measure water level changes.

The results are used to assess any erosion risks of the canal banks and to identify possible bottlenecks in the waterway.

Client

Province of Fryslân / Grontmij

Location

Prinses Margriet Canal, the Netherlands

Date 2008

Services

Measurements of ship induced

