

## MONITORING SYSTEM FOR QUAY WALL GRONINGEN SEAPORTS

Groningen Seaports has assigned to Inventec the order for supplying and installing a monitoring system for their quay-wall along the Wilhelminahaven at the Eemshaven location in the utmost North of The Netherlands. This quay-wall will be utilized by BOW Terminals of Terneuzen for the handling and transshipment of heavy turbine parts destined for windfarms in the North Sea. In order to accommodate the existing quay-wall for loads up to 10 tons/m<sup>2</sup>, the area behind will be excavated over a length of 220 m and be backfilled with so-called bims, a light weight gravel of volcanic origin coming from Iceland.

The monitoring system mainly consists of a wide array of Total Pressure Cells that continuously measure the load on the full area behind the quay. The measurement data will be available online through Inventec's web platform Livesense. Alert and alarm functions are automatically raised as soon as preset load levels are reached.

