



Technical Paper

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A 17m long submerged vertical pump as part of a new safety concept at the Kemira Kemi plant in Helsingborg, Sweden

Author:

Dipl.-Ing. Stephan Näckel
Technical Manager (R&D)
FRIATEC AG - Division Rheinhütte Pumpen
65203 Wiesbaden, Germany

Co-Author:

Per Karlsson
Process Engineer Sulphur Area
Pulp Chemicals Production KPP
Kemira Kemi AB
SE-251 09 Helsingborg, Sweden



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Summary

A few years ago an accident happened at the plant of Kemira Kemi AB in Helsingborg, Sweden. A damaged water supply pipe caused strong ground erosion resulting in a collapsing sulphuric acid tank.

The site was flooded with sulphuric acid and the tank farm including the horizontal pumps installed on the ground were heavily destroyed.

As a result of this, a risk analysis was carried out and a new safety concept was developed.

Also part of the safety concept included a special design of the molten sulphur tanks. One main issue of the concept was, that the pump had to be installed from the top to avoid tapping the tank at the bottom.

This requirement led to a custom engineered pump with a high level of technical demands.

This paper will present the background of the design, technical layout and installation of this 17m long vertical pump in this new tank.