

# LOHER

## Reference Hitzacker

Many of us still remember the disastrous flood which overwhelmed the Elbe, Oder and various other rivers in April 2006. Especially the city of Hitzacker was the focus of the media because its old town was completely flooded.

Hitzacker is located between the Elbe and the Jeetzel and therefore it is especially vulnerable for flooding.

So it was very surprising that in January 2011 the water level not only was the same, it even surpassed the level of 2006.

And still the German newspaper „Hannoversche Allgemeine“\* had the chance to release an article with „Hitzacker – unusual calmness at the floodwater front“ as its topic.

After the flood of 2006, precautions amounting to 30 million Euros were taken in order to prevent any further flood damage.

Among these precautions there was a nearly 1 km long flood protection wall, a flood barrier which separates the Jeetzel from the Elbe, and a pumping station which is used in order to pump the Jeetzel's water „up“ into the flooded Elbe.

The pumping station is equipped with 3 pumps, which provides the customer with a delivery rate of 60m<sup>3</sup>/sec.

The drive technology was delivered by Loher/Siemens which consists

of 3 motors of the Loher Vario (vertical mounting type, frame size of 500). They all deliver an output of 1200 kW.

The motors are supplied by the corresponding inverters of the Loher Dynavert T series with upstreamed power transformers.

Right from the start this project distinguished itself not only because of the interesting drive task, in fact lots of obstacles arose from project specific requirements:

Besides the observation of stringent noise values for motors and inverters, the strictly limited vibration values for vertical mounting types and the requirement of high reliability after a longer shutdown of an installation, the power supply's standards also had to be maintained.

The pumping station's energy supply can be effected in two ways: Commonly via a transmission line from a nearby power plant and – if this possibility fails – in a case of emergency via the local mains system of Hitzacker. For the second possibility, it is intended to merely use 2 pumps. Nevertheless as a result of the low local short-circuit capacity, competitive actions - in form of a special configuration of the mains transformer - had to be introduced.

The use for our customer consists of a complete projection and design of the drive technology in order to fulfill the final customers specifications. Besides the punctual delivery of the equipment the customer specific documentation, the factory approval and last but not least the on-site installation are also part of the Loher/Siemens scope of delivery. The use for the citizens of Hitzacker should be obvious.

\* Hannoversche Allgemeine = A daily newspaper with various articles (politics, culture, economy, community etc.) for the area around Hanover.