

## As long as the Yangtze

Yiwu is a city of around 1 million people in the greater area of the Yangtze delta. It was founded during the Qin dynasty around 200 B.C. very close to Hangzhou, the capital of the province Zhejiang. As trading area of Shanghai it is today known as one of the most influential economic areas in China.

Due to the region's leapfrog development over the last years, the maximum capacity of the local sewer system was soon reached. Apart from this and despite the city's large scale investments in the network, the line was in such bad condition that the groundwater was threatened to be polluted. It was therefore absolutely essential to establish a new main leading to the local treatment plant. 12.6 km HOBAS SewerLine® were installed for this purpose in the Yiwu district Choujiang. The undertaking was quite challenging, since the soil in the coastal area of the South China Sea was weak and therefore difficult for installation.

The project was conducted in three parts. 2.3 km HOBAS CC-GRP pipes DN 1200 to 2000 were installed for the first part, the second section consisted of 2.9 km DN 800 to 2000 and the third and longest part was established utilizing 7.4 km HOBAS pipes DN 800 to 2000. The complete line was built with gravity pipes and a stiffness of SN 15000. This enabled a cost efficient installation in great depths and weak soils. A maximal trench depth of no less than 18 m and an average depth of 7 m were required for the project. The extra-strong HOBAS pipe proved to be an intelligent and flexible solution that also ensures long-term stability.



Several reasons let the municipality Yiwu decide for HOBAS centrifugally cast, glass fiber reinforced pipe systems. The mentioned weak soil conditions, for instance, would have made the use of heavy equipment elaborate. However, CC-GRP pipes weigh a lot less than other materials and are



easily installed without special equipment. Also the additional challenge posed by a road nearby the pipe route was overcome due to the easy handling of HOBAS Pipes. The installation had to be quick, space-saving and flexible at this point to avoid any traffic disruptions. No problem with HOBAS. Leak tightness was a further important criterion for the right material choice: the groundwater should not be endangered. HOBAS Pipes and couplings run through stringent short and long term tests and are provably leak tight. Corrosion resistance was yet another crucial factor in the decision making process. Pipes are often exposed to external influences especially in coastal areas. HOBAS Pipe Systems are highly corrosion resistant and therefore easily withstand environmental influences.



Ground was broken for this demanding project in July 2008. It shall be finalized and commissioned beginning of 2009. HOBAS is the sole provider of centrifugally cast GRP pipe systems in the Chinese market supplying clients with the material as well as planning and installation expertise. This package already proves to yield fruit in this project for all involved parties are highly content with product choice and cooperation.





Overview	
Year of Construction	2008 – 2009
Length of Pipe	12,612 km
Pressure Class	PN 1
Diameter	DN 800 – DN 2000
Stiffness Class	SN 15000
Installation Method	open cut
Application	SewerLine <sup>®</sup>
Client	City Yiwu
Advantages	light weight, high stiffness, simple cost effective installation also in large depths, absolutely leak tight, corrosion resistant