

HOBAS Case Study

HOBAS CC-GRP Pipe Systems for Italian Railways

During 2003 HOBAS Pipe Italy supplied HOBAS CC-GRP Pipe Systems for a side-by-side (twin) pipeline of DN 2200, to underpass the railway in the urban area of the city of Milan.

The project was carried out in close cooperation of HOBAS Pipe Italy and Johnston Pipes/UK, which supplied the pipes.

Normally Italian Railways are sceptic to use new materials and GRP was a new material for them. However, the product advantages of HOBAS like the high flow rate, the optimum ratio between inner and outer diameter resulting in a low wall thickness of HOBAS Products, the availability of custom made bends and the fast delivery time convinced the



customer. The project was modified switching from concrete to the HOBAS CC-GRP Sewerline of DN 2200, which was the



maximum clearance available under the railway and, at the same time, the minimum possible size to guarantee the required flow-rate.

The original project of a huge square shaped concrete sewage line could not be implemented because the height available below the railway resulted insufficient to lay the concrete pipes. HOBAS CC-GRP Pipe Systems were the best solution for this problem.

On the construction site the big pipes were pushed into the coupling with a very small but effective device - a sort of winch (see picture above).

This project is a remarkable reference for HOBAS, since Italian Railway demand a great deal of features, particularly for any pipeline underpassing the rails. Totally 64 m of HOBAS CC-GRP Pipe Systems with DN 2200, PN 1, SN 5000 and 4 bends of DN 2200 were delivered.

Year of Construction	2003
Duration of Construction	1 month
Length of Pipes Laid	64 m
Pressure Class	PN 1
Diameter	DN 2200
Stiffness Class	SN 5000
Method of Installation	laid in an armored concrete container
Application	sewage, underpass of railway
Client	Comune di Milano together with Trenitalia
Contractor	Astaldi spa/Rome
Features	HOBAS as System Supplier