Make things happen. HOBAS®

At the Source of the Tiber

A first-class irrigation system using HOBAS CC-GRP Pipe Systems was to be completed in the Central Italian region of Umbria by the end of 2000. The project involves building a secondary network connecting the drainage system from the Montedoglio dam with its twelve equalizing reservoirs to the tertiary pipes for the agricultural irrigation plant.

The impressive pipe system is situated to the north of the town of Castello, at the border between the two wine-growing regions of Tuscany and Umbria. Although world famous as it flows through the Eternal City of Rome, here the Tiber is still a river like any other. For the local agriculture, however it carries a vital resource.

Fertile valleys

In the seventies it became evident that the upper Tiber valley in Umbria required reliable water systems to provide irrigation for the crops on the fertile valley floor. As a result the Tiber was dammed near the village of Montedoglio. The dam is not only of tremendous importance for supplying water to the farmland, but also for controlling the river and maintaining the groundwater level. Located in a narrow part of the valley, the giant reservoir stretches over a length of 7.5 km and covers a total area of 800 ha. The impounded water volume is no less impressive: 142.5 million cubic meters, of which 102 million cubic meters are set aside annually for irrigation.

Tobacco plantations

The actual benefit of the dam however depends on the efficiency of the pipe network that distributes the valuable resource to the extensive tobacco plantations on the valley floor. Consequently, a primary pipe system consisting of DN 3000 steel pipes connects the dam to twelve additional storage basins sited at various altitudes, which serve as equalizing reservoirs. It is from here that the water is then piped to the farms.

HOBAS pipes laid in alluvial sediment

Following in-depth comparisons with other types, HOBAS CC-GRP Pipe was finally chosen for building this secondary pipe system comprising diameters of between DN 300 and 900. Decisive were the wide application range, high corrosion resistance and flexibility of the pipes in the native soil, which consists primarily of alluvial sediment. The Italian planners also praised the short delivery times for special HOBAS CC-GRP Fittings in particular.

Water for wine growing

In the interim the Umbrian authorities are also considering using water from the Montedoglio dam to irrigate the wine-growing area of Torgiano - a white wine that is hugely popular among the locals from Rome to Florence. Their track record to date could pave the way to the next project for HOBAS CC-GRP Pipe Systems.

Overview	
Year of Construction	1998-2000
Construction time	2 years
Length of Pipe	48,756 m
Pressure Class	PN 10
Diameter	DN 300 – DN 800
Stiffness Class	SN 10000
Installation Method	Open cut
Application	Irrigation
Client	Umbria Region
Contractor	Calzoni Lamberto S.a.s, Fontignano (PG), Phases 1 and 3 Pauselli Marsilio, Umbertide (PG), Phase 2 Planning: Dr Andrea Vincenti, Studio TECNIMP S.r.l., Cittá di Castello (PG)
Advantages	Efficient pipe network, Wide application range, High corrosion resistance, Flexibility of the pipes in the native soil, which consists primarily of alluvial sediment, Short delivery times for special HOBAS CC-GRP fittings