

Russian Railways Authorize HOBAS® Products GRP Pipes Jacked under Railway

Only few pipe producers offer a broad range of technical solutions and are authorized to install their products beneath Russian rail tracks. In order to receive approval, the products need to comply with the requirements and standards of the Russian Railways (RŽD), worldwide one of the three largest rail companies. Safety is absolutely essential.

In summer 2012, RŽD granted HOBAS the permission to implement a pilot project on the railway section between Surgut and Tobolsk in the Russian oblasts Samara and Tjumen. A second rail track is under construction in this area, and the old culvert running beneath it needed to be replaced, since the old corrugated steel pipe showed heavy signs of corrosion that had affected its structural integrity. In addition to this, the contractor asked for the installation of protective measures against flooding during the construction works and not to alter the natural riverbeds. Disruptions to rail traffic should be avoided as well.

Given the circumstances, the contractor decided for HOBAS Pipes De 1434 which should be jacked directly next to the old pipe beneath the railway track by means of auger boring. It was planned to first dispose of the spoil with an auger transporting it through a steel casing. Once the boring head had made its way through to the receiving pit, HOBAS GRP Pipes were connected to the steel casing in the thrust pit and driven to the receiving pit. Subsequently, HOBAS Pipes De 1638 were installed in open trench. For the duration of the construction works on the rail around the site, trains were slowed to 40 km/h. Thanks to trenchless installation, train traffic could be maintained.

HOBAS Products not only scored with their structural properties and corrosion resistance (especially in regard to stray currents) but also a long service life and easy installation. The construction works were completed in October, within four months only and to the complete satisfaction of everyone involved.

After this project's success, RŽD gave HOBAS Russia the official authorization for the utilization of HOBAS Products on future projects that run beneath the Russian railway.

Fmd:
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Year of construction
2013

Construction time
4 months

Pipe length
137 m

Diameter
D_e 1414 and 1638

Pressure class
PN 1

Stiffness class
SN 32000 and 40000

Application
Culvert beneath rail tracks

Installation method
Jacking, open trench

Client
Российские железные дороги (Russian Railways – RŽD)

Advantages
Corrosion and abrasion resistance, high structural integrity, easy installation