case study: 01-2021

Location: Belgium, city of Namur

Dust control on demolition site in the City centre



BACKGROUND

One of the challenges of demolishing a building is ensuring that the release of dust is under control to avoid a public health hazard. We were approached by a construction company needing to demolish a tumbledown building which was located adjacent pedestrian streets in the city centre of a major city in Belgium. The company wanted a pump to spray water during the demolition in order to reduce the environmental hazard of dust for the neighbours and the pedestrians.

THE CHALLENGE

After a site inspection and a hydraulic analysis of the situation, we realised the client had a limited footprint and wanted to have the solution as compact as possible. We therefore crossed off an electric solution from our selection in an effort



to minimise the footprint of having a generator and/or a control box, and to avoid cables being in the way on the demolishing site. This left the only option of utilizing a compact diesel driven pump set.

The demolished tumbledown building was located adjacent pedestrian streets in the city centre of a majour city in Belgium

Because of the limited footprint the solution had to be as compact as possible.



THE SOLUTION

A large amount of dust is inevitable in any kind of demolition job, it is problematic and requires an efficient solution. We opted for a Gorman-Rupp diesel pumpset Prime Air assisted PAH3A60C pump to deliver the 100m³/h @ 8 bar required. The client rented the pump for 2 weeks until the demolition work was done.

Fortunately, the demolishing site was just next to the River "La Sambre", which was convenient as the pumpset could pump water directly from the river to spray water on the site. The long suction line was no challenge for this Prime-Assisted pump due to its ability to evacuate the air very efficiently. During the demolition, a specialist sprayed the point of demolition with handheld hoses to limit the amount of dust dispersed into the air. This compact and protected closed canopy pumpset perfectly met the needs of the client. The lockable sound-attenuated canopy also offered many complementary advantages such as emitting a low noise, and preventing vandals from accessing the fuel, engine and controls.



The demolishing site was just next to the River "La Sambre", which was convenient as the pumpset could pump water directly from the river to spray water on the site.

GORMAN-RUPP NETHERLANDS

Zandweistraat 19 NL-4181 CG Waardenburg Tel: +31 (0)85 7730080 Email: GREsales@gormanrupp.com

www.grpumps.eu

GORMAN-RUPP BELGIUM

Rue des Métiers B-5020 Suarlée (Namur) Tel: +32 (0)81 779977 Email: infobe@gormanrupp.com

