

Job Report

Crawler Tractor

PR 776

Litronic®

Coal pit operation

at Liviero,
Vanggatfontein Colliery (RSA)



LIEBHERR



Commencement of production of the PR 776 at Vanggatfontein Colliery

Situation

The Liviero Group is South Africa's largest privately owned multi-disciplinary construction company. With the headquarters in Johannesburg, South Africa, the Group also has several regional offices providing agile and rapid support to its clients and operations throughout South Africa. One of Liviero's customers is Keaton Energy Holdings Limited who operate a mine site at Vanggatfontein Colliery located 16 km south-east of Delmas in the Mpumalanga region.

Task

In the mine coal has to be dozed accessibly for the backhoe excavators which feeds haul trucks, supplying two coal washing plants. The 100 tph washing plant produces duff, peas and nuts. Duff is used for producing charcoal, whereas coal peas and nuts are used for generating thermal energy. The 500 tph washing plant produces thermal coal for Eskom who generates, transmits and distributes electricity to industrial, mining, commercial, agricultural and residential customers and redistributors.

Solution

The Liviero management was approached with regards to having the Liebherr PR 776 in operation on their mining site in the vicinity of Johannesburg.

The PR 776 is Liviero's first Liebherr branded dozer working at Vanggatfontein Colliery and will be measured against a large fleet of competitor machines.

The 73 t Liebherr dozer is equipped with a huge 22.0 m³ U-blade and a rugged single shank ripper. The Liebherr V12 diesel engine delivers 440 kW/598 HP in forward travel mode, and 565 kW/768 HP in reverse travel mode to keep cycle times as short as possible.

The hydrostatic drive system with its high draw bar pull of 955 kN is ideal for dozing and ripping providing optimum traction. The overall visibility from the cab is excellent, with a full view of the ripper, behind the blade, as well as the undercarriage. The walkways around the operators' cabin ensure that maintenance is carried out with the greatest of ease, with all key areas easily accessible.

According to LiDAT, the comprehensive data collection and tracking system made by Liebherr, the average fuel consumption of the PR 776 lies roughly at 41 litres per hour, which is considered very efficient by Liviero compared to competitor machines on site.

Technical Data

Engine	Liebherr D 9512 A7
Engine output according to ISO 9249 (FWD/REV)	440 kW/565 kW
Operating weight	73,189 kg/161,354 lb
Blade capacity	22.0 m ³ /28.8 yd ³

Equipment

U blade with dual tilt
Single shank ripper
LED headlights
Working platform
Automatic fire suppression system

Liebherr-Werk Telfs GmbH

Hans Liebherr-Straße 35, A-6410 Telfs
 ☎ +43 50809 6-100, Fax +43 50809 6-7772
 www.liebherr.com, E-Mail: lwt.marketing@liebherr.com
 www.facebook.com/LiebherrConstruction