



Press Release

HERRENKNECHT

Herrenknecht tunnel borers taste mountain air in Ecuador

September 5, 2016
Schwanau

In Quito one of the highest metro systems in the world is currently being built. The first line will run over more than 20 kilometers through the elongated capital of Ecuador. At an altitude of more than 2,800 meters above sea level, from the spring of 2017 two recently completed Herrenknecht EPB Shields are set to work their way through the volcanic ground.

Two tunnel boring machines from Schwanau will soon be literally heading for the hills. In the Ecuadorian Andes work on the Metro de Quito is in full swing – the first two of the planned 15 metro stations are already under construction. In a few months the site crews will be joined by two Herrenknecht tunnel borers. The EPB Shields with diameters of 9.36 meters were completed in Schwanau in late August 2016. The mayor of Quito, Dr. Mauricio Rodas, visited the Ortenau region for the technical acceptance. Together with representatives of contracting joint venture Acciona / Odebrecht and client Quito Metro, the guests admired and inspected the concurrently assembled and completed machines in detail.

The planned tunnel alignment of Metro Line 1 runs at a depth of about 20 to 25 meters below the city. The new rail system is an important step in the modernization of the metropolis and in future will transport more than 350,000 passengers daily. At the moment the high volumes of traffic regularly cause congestion and smog. The switch to a more environmentally friendly mass transportation system is designed to remedy the situation and save up to 30,000 tonnes of CO2 emissions per year.

Herrenknecht AG
Schlehenweg 2
77963 Schwanau

Corporate Communications
Phone +49 7824 302-5400
pr@herrenknecht.de

www.herrenknecht.com

MACHINE DATA S-1018, S-1019**Machine type: 2 x EPB Shield**

- › Shield diameter: 9,365 mm
- › Drive power: 2,750 kW
- › Torque: 21,035 kNm (nominal)

PROJECT DATA**Project**

- › Metro de Quito Line 1

Client

- › Quito Metro (Empresa Pública Metropolitana Metro de Quito)

Contractor

- › Consorcio Line 1 – Metro De Quito (Acciona/Odebrecht)

Geology

- › Silt, clay, tuff (volcanic origin)

Tunnelling distance

- › 1 x 8,180 m, 1 x 9,053 m

Photos**Herrenknecht-tunnel borers taste mountain air in Ecuador**

Photo 1

With a diameter of 9.36 meters the two identical tunnel boring machines for the Metro de Quito are among the larger calibers. By the opening of the metro system the EPB Shields completed in late August 2016 will have excavated more than 17 kilometers of new tunnels.

Herrenknecht AG
Schlehenweg 2
77963 Schwanau

Corporate Communications
Phone +49 7824 302-5400
pr@herrenknecht.de

www.herrenknecht.com



Photo 2

The mayor of Quito, Dr. Mauricio Rodas, (front left) talking to Martin-Devid Herrenknecht, engineer and son of company founder Dr.-Ing. E.h. Martin Herrenknecht, at the technical acceptance of the two EPB Shields in Schwanau.

For further information: Please contact us.

Herrenknecht AG

Herrenknecht is the only company worldwide to deliver tunnel boring machines for all geologies and in all diameters – ranging from 0.10 to 19 meters. The product range comprises tailor-made machines for traffic, supply and disposal tunnels, technologies for pipeline installation as well as additional equipment and service packages. Herrenknecht also manufactures drilling rigs for vertical and inclined shafts as well as deep drilling rigs.

In 2015 the Herrenknecht Group achieved total revenues of 1.343 billion euros. The Herrenknecht Group employs around 5,000 people worldwide, including around 170 trainees. With 76 domestic and overseas subsidiaries and associated companies working in related fields, Herrenknecht provides comprehensive services close to each project and customer.

› <http://www.herrenknecht.com/en/references>

Your contact:

Achim Kühn

Head of Corporate Communications, Branding und Public Affairs

Phone +49 7824 302-5400

Fax +49 (0)7824 302-4730

pr@herrenknecht.de

Herrenknecht AG
Schlehenweg 2
77963 Schwanau

Corporate Communications
Phone +49 7824 302-5400
pr@herrenknecht.de

www.herrenknecht.com