CRCHI EPB Shield Machine Exported to Chile Is Launched

On May 6th in Chile, the EPB shield machine manufactured by China Railway Construction Heavy Industry Corporation Limited (CRCHI) was officially launched. The EPB shield machine is named "Matukana", symbolizing brightness and hope. The diametre of the "Matukana" is 9.8 meters, the total length of the whole machine is 105 meters, the total weight is 1400 tons, and the installed power is 5700 kW.

The TBM adopts a compound cutterhead equipped with 19 inch disc cutters. The cutting tools will be changed after every 2-kilometer excavation. During the tunneling, the TBM will pass through sandy soil layers, limestone and other strata, and there are strict settlement control requirements for undercrossing dense residential areas. The formation boulders and other factors have a severe test to the cutterhead.

The EPB machine will be applied in the construction of Santiago Metro Line 7, which is 26 km long with 19 stations. The total length of the construction lot is 7.9 km, including 6.7 km TBM tunnel construction. Once the project is completed, the travel time of the entire line will be shortened from 90 minutes to 43 minutes, which will provide fast and convenient transportation service for more than 1.36 million residents.

