

PROJECTS

The New Super Soilmec Hydromill for the World's Most Beautiful Metro Station

MARCH 19, 2024



An iconic metro station in the heart of Rome is destined to become the world's most beautiful 'archaeostation'. It is the new Piazza Venezia station on Rome's metro line C, commissioned by Roma Metropolitana and built by the consortium company Metro C S.p.a., led by Webuild and Vianini Lavori.



The newest **Soilmec** Hydromill will be used for this job. Soilmec is the engineering division of the Trevi Group, a world leader in soil engineering. Tiger SC-130 is a true technological jewel. The hydromill, with a height of 24.5 m and a weight of 185 tons, is a giant that combines technology and design to speed up work times and operate with greater precision and in smaller spaces, reducing noise and vibrations on the surface. The machine is imposing but also compact at the same time.



Accessing the 8 underground levels, one will have the sensation of entering a real museum, open to citizens and the millions of tourists passing through it. At a depth of 45 m, with perimeter walls retaining the excavation reaching 85 m, the new Piazza Venezia station will be a museum among museums, just a few steps away from the Colosseum and the Imperial Forums.

This major work, a challenge that will bring into play the best Italian engineering skills, will be carried out in phases, and will see the construction of perimeter diaphragms 85 metres deep from street level, guaranteeing excavation in "archaeological mode" through the so-called top-down method.



The SC-130 Tiger is equipped with an HDD system, a platform with hydraulic and mud winders positioned above the machine body. This system allows for reaching high excavation depths; for the SC-130 Tiger up to 120 m.



Considerable attention was also paid to safety. The new SC-130 Tiger is equipped with walkways with handrails and ladders for easy access to the various machine levels, an 8-camera system for perfect perimeter control around the machine, a spacious cab with a touch-screen monitor for the DMS system (Drilling Mate System, the software that, among other things, manages the verticality of the excavation) and radio controls for safe operations such as cutting tool changes and other operations.