THE ARCHIVE SPEAKS VOLUMES

THE GRAN SASSO TUNNEL



The men, techniques and courage that accomplished the feat

The rocks crack and everything seems to collapse, dust rises and penetrates everywhere, and water never stops dripping.

It has been like this for 16 years, 192 months, 5,760 days, 138,240 hours: an infinite amount of time, crystallized in a single thought, drilling through a 6-million-year-old mountain, burrowing more than 10 km into the damp semi-darkness with billions of tons of rock overhead.

Today, however, there is something new going on inside the tunnel: the barrier of limestone boulders gives way, light seeps through the cracks, and excited voices can be heard on the other side.

One final blow, the diaphragm crumbles, and hands from Teramo on one side and L'Aquila on the other touch, intertwine, and shake, as if each of them sees in the other a family member who was lost but then miraculously reappeared in the dark underbelly of that tunnel.



The tunnel of the Gran Sasso - the highest massif in the Apennines - is partly complete. It's a short time before the end of 1984, the year when AIDS made its terrifying appearance on planet Earth and in Italy Enrico Berlinguer was abruptly gone while the monster of Florence continued to strike. But here, in this corner of Abruzzo, it is just a time to celebrate the end of a cyclopean project, which provides a direct link, by way of the A24 highway, between Rome and the Tyrrhenian Sea to L'Aquila and the Adriatic Sea.

They say the trip takes just over two hours, as opposed to before when it took twice as long. A dream.

On December 1st - the day closest to the 4th, which is dedicated to St. Barbara, traditionally the patron saint of firefighters and miners - the right side of the two-way Rome-Teramo tunnel is inaugurated between the junctions of Assergi in the province of L'Aquila and Colledara in the province of Teramo: about 10 km long at an average height of 973 meters above sea level.

The pharaonic structure will herald the change of an entire region.



There are dozens, perhaps hundreds, of Italian workers and engineers, especially from Abruzzo, who huddle around the tunnel. They are the true civilian heroes of the tunnel, they are the historical memory of this public work that cost so much effort and so much labor.

Everyone remembers when on November 14, 1968, the explosives (the most commonly used excavation method) of the Cogefar company blazed, kicking off work on the tunnel, commissioned by the Società Autostrade Romane e Abruzzesi.

The mines, with the support of milling equipment and 7-arm jumbo drills, were first used to create a "pilot tunnel" (lined with concrete and with temporary structures as a support base for the various construction materials, such as stones, arches, and vaults), which was used to test the hold of the mountain: a technique employed for prompt action in case of unforeseen events in the central excavation.

And the unforeseen had a precise name: the aquifers of which the mountain range is rich, except for the part in Teramo. Because of this, technicians proceeded step by step with drains and probes to try and detect the presence of water.

Violent and destructive, the water unfortunately manifested on September 14, 1970 when the large excavating "mole" (a mechanical cutter that allows the complete mechanization of the tunnel excavation and the simultaneous construction of the tunnel lining) touched the exposed vein of an aquifer and a jet of water and mud swept through the tunnel and those inside.

Rescue was prompt and there was no damage to people or property, but the unforeseen event resulting from an error on the part of the geologists brought work to a halt for two years.

And how can we forget when construction was suspended in 1975 because of the economic and energy crisis that swept through the country? It was another seven years of silence in which the big hole in the belly of the mountain looked like a metastasis.

But then it all resumed.

The workers and technicians who performed the endeavor look on proudly at the pharaonic work. It will be a wonderful Christmas of 1984. Their eyes are also on the progress of the work on the second tunnel in the direction of L'Aquila (to be inaugurated in 1993) and on the underground laboratories of the National Institute of Nuclear Physics: an ingenious intuition of the scientist Antonino Zichichi, who jumped at the chance to benefit from the excavations of the highway tunnel under the Gran Sasso, a natural bunker where he could devote himself to the study of particle physics, 1,400 meters down with direct access from the highway artery, through an underground junction.

Today, after 55 years, the Gran Sasso tunnel is still the thirdlongest tunnel in Italy after the Frejus (which is gearing up to exceed it) and Mont Blanc; and as Sergio Mattarella recalls the Laboratories are "one of the highest points of excellence in our country, a source of prestige and pride."

Clelia Arduini

Journalist and writer, for Maire Tecnimont Foundation