

## Product Description

Steel fiber consists of high-strength steel filaments, manufactured through a cold-drawing process. It is used as an additional reinforcement in underground excavations, enhancing ground stability and increasing the strength of shotcrete and other support systems such as rock bolts, mesh, or steel arches. Its primary function is to distribute loads more effectively and prevent deformations or collapses in unstable zones, acting as an efficient support network. In addition, its flexibility and fatigue resistance allow for fast installation and adaptability to the terrain, without compromising the existing structure.

## Benefits

- ❖ Enhances reinforcement in irregular or unstable ground conditions
- ❖ Increases the tensile, flexural, and shear strength of shotcrete
- ❖ Allows for rapid and easy application
- ❖ Improves the cohesion and integrity of the concrete matrix

## Applications

- ❖ Underground mining and tunneling: as a structural reinforcement for shotcrete in walls, vaults, and tunnel linings
- ❖ Ground stabilization in fractured or weak rock masses
- ❖ Supplementary reinforcement in combination with bolts, mesh, and steel arches
- ❖ Concrete lining systems exposed to high stress or deformation
- ❖ Shotcrete reinforcement in slopes, shafts, caverns, and underground chambers

