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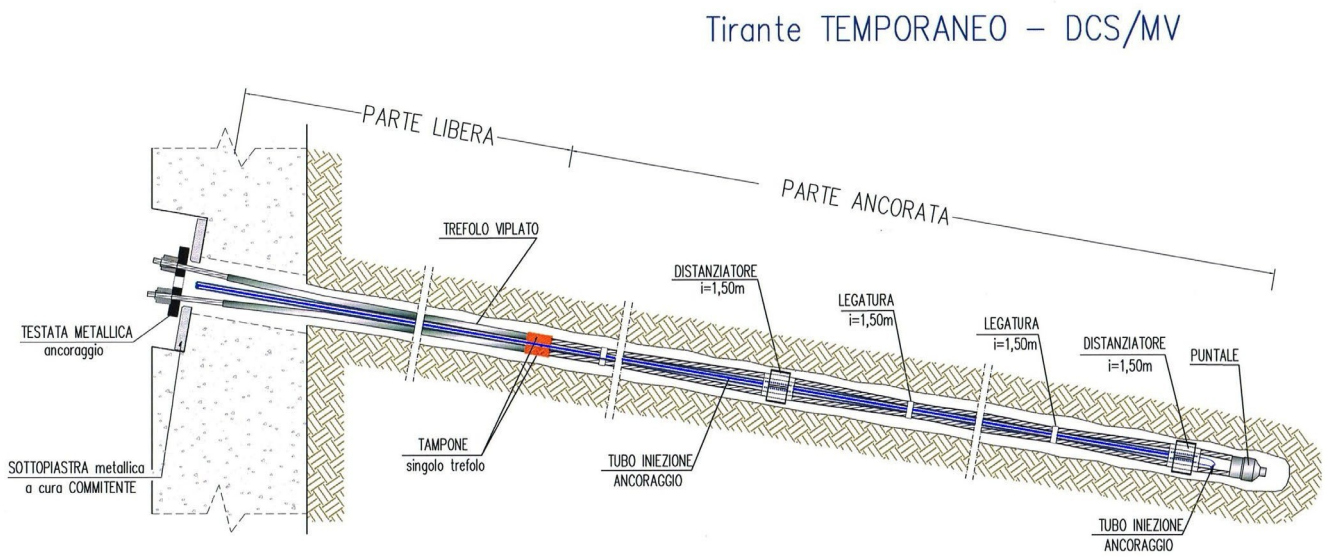
TEMPORARY ANCHOR DCS/MV



Encoding, classification, and static function :

Tie rod for geotechnics, **active** type, **temporary**, conforming to UNI EN 1537:2013, suitable for installation by

low-pressure cementing operations (pmax=10bar),

Assembly type :

- *Metal reinforcement* → 0.6" strands of stabilized harmonic steel type c.a.p., according to UNI EN10138.
- *strand number* → no. 2-8.
- *maximum operating pull* → 300-1200 kN
- *Cementation mode* → low-pressure injection (**pmax=10bar**), single-phase (**IGU**)
- *anchor stretch protection* → unprotected
- *free tract protection* → unprotected
- single *strand protection* → single plating
- *free-strand/anchor-strand* separation → single-strand separation pads
- single *locking protection* → single-refractory locking cover (polyolefin-based synthetic polymer)
- *protection tested anchorage* → CAP protection (polyolefin-based synthetic polymer)

Assembly mode :

Protection of the free part is achieved by impregnation of the strands by suitable anti-corrosive product (grease), after opening the individual strands and subsequent monoplating of the strands themselves using ϕ16.5x19.5mm polyethylene pipe.

In order to increase the adhesion of the reinforcement in the cemented anchorage section (foundation portion)

the bundle of strands is configured with the prescribed 'sinusoidal' pattern, alternating sections of 'tying' (by means of metal ties) with the placement of specific spacers, arranged at spacing of no more than
1.50 ml.

The end of the tie rod has a ferrule (polyolefin-based synthetic polymer) to facilitate insertion of the tie rod into the drill hole.

The ferrule is installed, covering the strands, with metal strapping and tape.

The separation between the free part and the foundation part of the tie rod consists of individual pads made, strand by strand, with the use of specific sealing product (called 'z-strip') and adhesive tape, which prevents the cement mixture from seeping inside the viples.

Inside the borehole, in the anchorage section, the correct positioning of the tie rod is ensured through the use of the specific 'spacers/centers' (made of polyolefin-based synthetic polymer) arranged with maximum spacing i=1.50ml, the installation of which ensures the correct minimum overburden expected.

Injection of the cement mixture is performed, at low pressure (**pmax=10bar**), in single phase (IGU) through a ϕ16x20mm polyethylene tube, placed inside the strand bundle, constrained with adhesive tape and with the end placed about 10cm from the bottom tip.

Tie-rods are complete with metal header plates, of appropriate size and varying according to the number of strands planned, as well as clamping systems (monotube) for stringing them.

At the request of the Client's Technical Representative, all available underplate and/or overplate

protection devices suitable to ensure greater durability and reliability of the installed element, in contact with the ground, with any percolating water in the wall and/or rising from the borehole interface as well as exposed to external weathering, can be provided and arranged as a supplement.

In the present case are available :

- ➔ mooth sheaths for free tract protection
- ➔ ingle-reflection covers.
- ➔ Variable section centralizers
- ➔ ver-plate protection device ➔ CAP protection.