

### **8.7 TPE-15 permanent ground anchor** (increased adherence ground anchor)

**Permanent TPE-15** ground anchors are usually used in the construction of bulkheads and diaphragms, where the type of ground has serious highly corrosive geo-technical problems in the presence of groundwater, where an increased adherence of the bulb is required. The **TPE-15** anchor is totally encapsulated, all its parts are encapsulated in polyethylene, thus ensuring a total protection (hermetic of all its components).



*TPE-15 increased adherence permanent ground anchor*

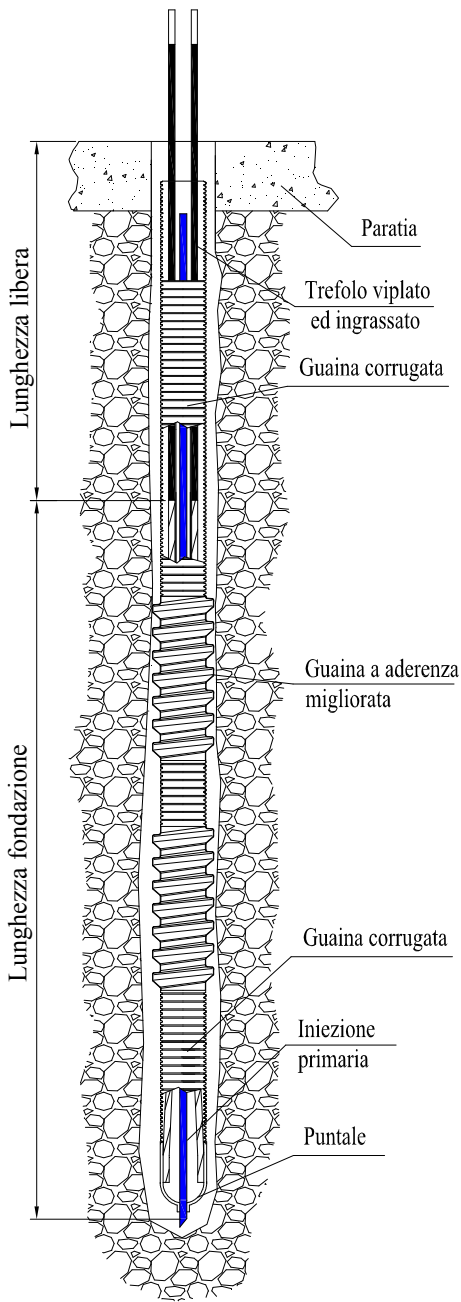
In **permanent TPE-15** ground anchors the foundation is provided with devices that increase the adherence to the drilling hole. This anchor has the following advantages:

- reduction of the anchor length by reducing the foundation length,
- reduction of the length of drilling holes,
- easy to install,
- high adherence,

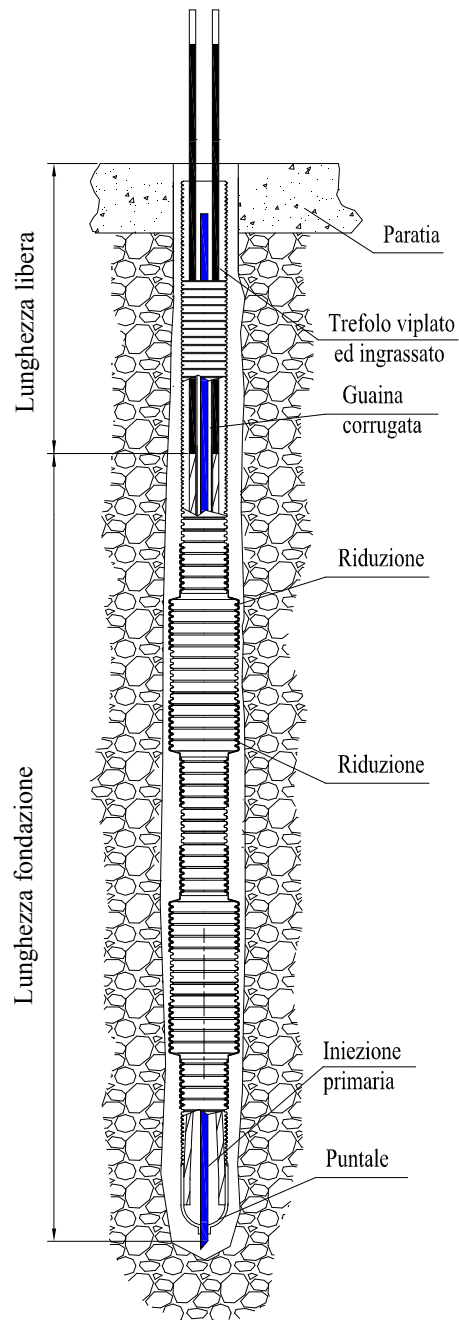
**The anchor is made as follows:**

- **TPE-15** anchors are made of harmonic steel protected on the free length by a corrugated sheath in P.H.A.D. having a diam. of 16x19.5 mm. and grease. The separation of the free length from the active part is achieved by way of a sealing strand by strand of sealing material, which allows strand and 16x20 P.H.E.D. mm tube to be perfectly hermetic, according to the instructions of the “**Client's Technical Representative**”
- On the foundation (bulb) the external sheath is provided with devices to increase the anchor adherence. While maintaining the continuity of the sheath, they offer a greater adherence to the grouting than normal permanent anchors.
- In the active part, the strands are separated by special spacers which have a sinusoidal shape, by means of suitable strapping and taping, to increase their adherence with the foundation cement mix. Grouting (primary and free length) takes place via 16x20 mm polyethylene tubes and allows the grouting of the whole anchor by starting from the bottom. Since there is no separation buffer, the tube also grouts the free length.
- The anchor is provided with a corrugated sheath on all its length, which is provided with a threaded corrugation every 500 mm. This characteristic allows to connect the anchor with the DD200SP under plate protection to protect the tendon length under the bearing plate and ensure the continuity of the sheath up to the anchor..

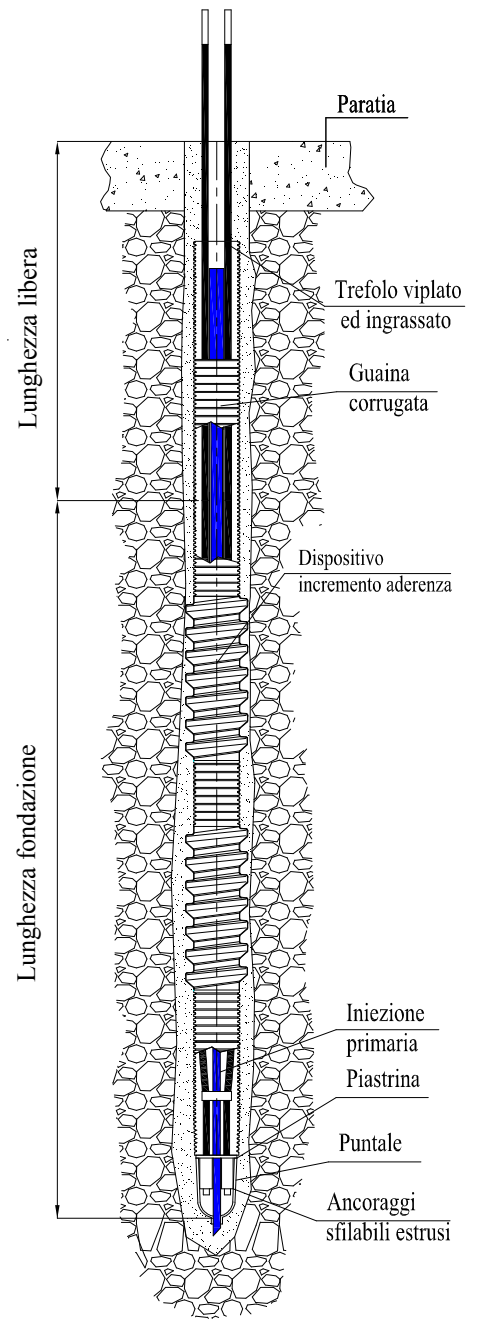
*Diagram of the TPE-15 permanent ground anchor*



*TPE 15A ground anchor*



*TPE 15B ground anchor*



*TPE 15C ground anchor*