

Helical Anchors



☆ Helical Anchor Details Advantage, Application and more Details

● When are Helical Anchors used?

Helical anchors can be used to secure new foundations or repair existing ones. They're used for lighthouses, roads, rail, telecommunication, and in many other industries that require fast installation or building near existing structures. Signs, retaining structures, and masts are other common uses since they're suitable for compression as well as tensile loads.

The anchors can also be used to repair your property's existing foundation and cracked or leaning walls.

● What's a Helical Anchor?

A helical anchor, also known as a screw pile, screw anchor, or helical pile, is an extendable foundation system which consists of helically shaped steel plates that are attached to a central steel shaft with a round or square cross-section. The steel plates' thickness, number, diameter, and helices position are determined by the restrained or supported structure's minimum design life, the environmental corrosion and geotechnical parameters, and the design load requirements

Helical anchors are installed via rotation into the ground using hydraulic rotary attachments fitted to earth moving equipment. As a result, they don't require massive excavation work. The plates offer substantial pull-out resistance once they've advanced to a suitable depth. They then transfer the load from the steel shaft to the soil. Modern helical anchors have load capacities that exceed 2,000 kN.

● What are the Benefits of Helical Anchors?

A helical anchor offers numerous advantages, which include:

Ease of installation and removal

Installation in any weather condition and across restricted access sites

Reduces a project's carbon footprint

Saves time on projects

Reduces transport costs since there is little soil disturbance, so there's no need to carry excess soil from the site

There's little to no vibration

Reduces foundation costs