

# SCREW PILES



**GFWA**

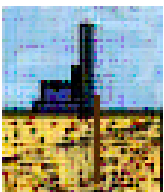
SUSTAINABLE TECHNOLOGY



As the name implies screw piles are literally installed by screwing them into the ground using the rotary hydraulics of a base machine. They are formed by welding helical shaped to the steel pile shaft.

Screw piles can be used both in compression and in tension. In compression, they can be classified as displacement end bearing piles. In tension they perform as ground anchors. This makes screw piles an ideal affordable choice for projects where, in addition to compressive service loads, the foundations can be subject to tensile loads and uplifting forces in extreme conditions such as cyclones and storms.

The connection between the structure and the screw pile is called the interface. The interface can be created in various forms, such as by direct welding or by bolting for steel structures. For concrete structures, such as footings and pile caps, starter bars are grouted into the screw pile.



## SCREW PILES



Helical shaped plates welded to the steel shafts of the screw piles

### Major Advantages of Screw Piles

- Rapid installation
- High tensile capacity; ideal for resisting uplift in cyclonic zones
- Ready for use immediately after installation
- Capacity of each screw pile is checked by measuring the installation torque
- Screw piles can be easily removed which makes them ideal for temporary structures.
- If necessary, screw piles can be reused.

### Recent References

**Terrace Hotel (Perth, WA, Australia)**  
**The Landing (Port Hedland, WA, Australia)**  
**M Square (North Bridge, WA, Australia)**

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