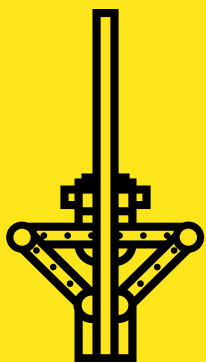


www.roger-bullivant.co.uk

UNDERREAMER

Roger Bullivant has pioneered an innovative Underreamer tool to strengthen existing floor slab foundations. This patented design is the first product on the market to provide a countersink shape to the under-reamer void, compared to existing tools which offer parallel-sided counterbored opening. This method can be used in most ground conditions, suitable for residential and infrastructure projects and can be used where headroom or access is restricted.





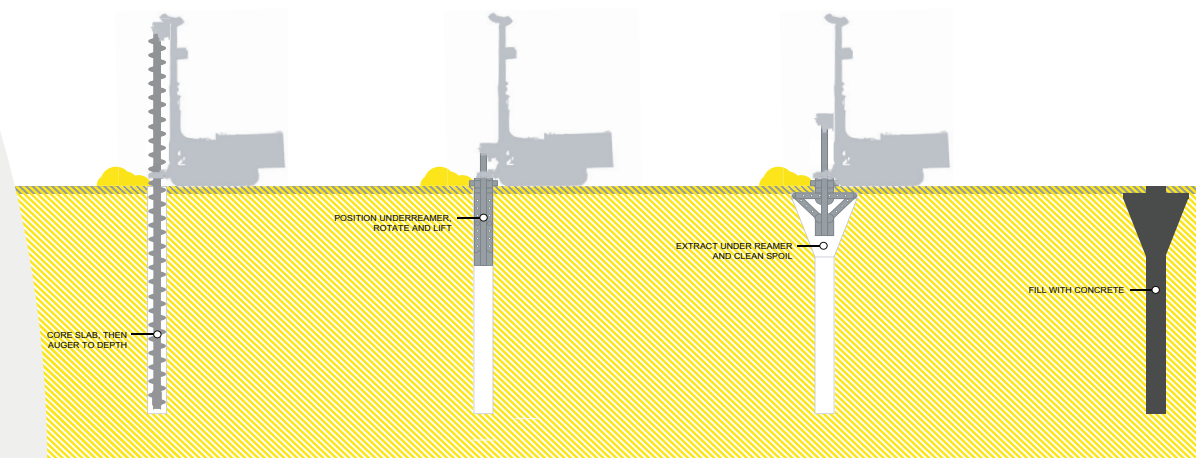
UNDERREAMER PILING

DESCRIPTION

Roger Bullivant have designed, engineered, and manufactured an innovative under reamer tool to strengthen existing floor slab foundations whilst creating a countersink shape to under ream beneath a void. The Underreamer is the first tool to market which has the capabilities to provide a countersink void, compared to existing tooling which provide a parallel sided counterbored opening.

Designed and manufactured to suit our mini fleet Commachio rigs, this solution is ideally suited where headroom or access is restricted. This method can be used within the residential, infrastructure and industrial sectors. Suitable where existing foundations may have weakened or areas where additional loads may be required such as increased warehouse storage requirements.

Underreamer is a cost-effective and environmentally friendly solution, designed to upgrade and reuse existing structural elements thereby significantly reduces the requirement of new material as well producing minimal spoil.



APPLICATIONS



Residential



Infrastructure



Suitable for most ground conditions



Industrial

ADVANTAGES



Cost effective



Minimal spoil



Environmentally friendly



Reduced amount of new materials



Limited headroom & restricted access

INSTALLATION

Firstly, a core drilling machine cores through the existing slab to 450mm dia and is then augered to the design depth generated by a Comacchio Drill Rig.

The Under Reamer tool is then fitted to the Comacchio drill rigs and held in its closed position. It is then lowered into the augered hole and rotated, slowly lifting the central shaft by raising the rotary head carriage.

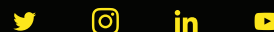
This will gradually expand the arms of the under reamer creating a countersink shaped void.

Once this shape is achieved, the rotary head carriage is lowered in order to close the arms of the tool. When it is fully closed, the tool can be lifted clear of the hole and moved to the next location. A casing is inserted through the countersink void, into the augered hole, augering through the casing to clean the hole of any spoil. The casing is then removed and filled with concrete.

TECHNICAL SPECIFICATION

This is a bespoke solution created to address a specific requirement. This demonstrates the agility of Roger Bullivant to work with their interdisciplinary teams and suppliers to quickly propose technical solutions to meet and exceed client's expectations. Roger Bullivant successfully augered 1,400 no positions at 450mm diameter to design depth with integral 1,300mm conical voids directly beneath the existing floor slab. The under reamer slab is not limited to these requirements, for all individual requirements please contact us for further information.

www.roger-bullivant.co.uk



Call Nationwide on 0845 8381801

Email info@roger-bullivant.co.uk