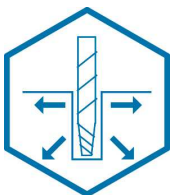


# CONTROLLED MODULUS COLUMNS

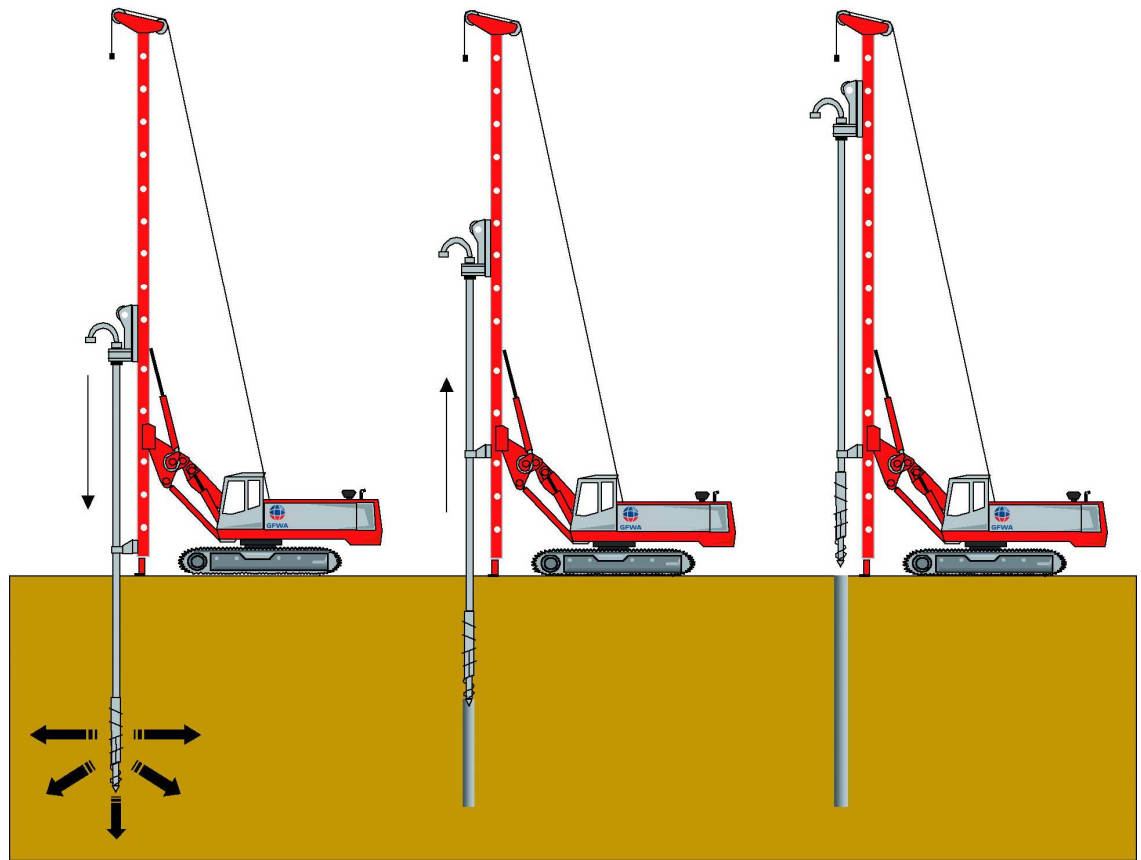


The Controlled Modulus Column (CMC) is the environmentally friendly 21<sup>st</sup> century solution for treating very soft cohesive soils. This soil treatment method is used to improve the characteristics of compressible ground by use of rigid inclusions. Unlike piling, which is designed to support the entire load, the objective of CMC is to share the load between the soil and the inclusions, to increase the stiffness of the ground mass, and to reduce both total and differential settlements.

A specially designed hollow stem auger with a large torque capacity and static down thrust displaces the soil laterally with minimum spoil and vibration. During auger extraction a column with predetermined characteristics is constructed by low pressure grouting. The result is a composite soil-grout layer that will be able to safely support the loads and foundations.

CMC can be used to support residential, commercial and industrial foundations, storage areas, slabs, tanks, roads, embankments, etc.

## Work procedure for CMC



## Advantages

- Suitable for moderately heavy loading conditions and strict settlement requirements.
- Practically with very low volumes of spoil
- Minimum disturbance of the superficial layer.
- Uniformly supports slabs-on-grade; thus, reduces the slab thickness and reinforcing steel quantity.
- Increases the ground properties economically.

## Recent References

New Perth Stadium, Burswood WA Australia – Brookfield Multiplex  
Freshwater Apartments, Perth WA Australia – Pindan  
Geraldton Water Tank, WA Australia – Water Corporation  
Dusty Rhodes Bridge, Sunshine Coast Qld Australia – Civil Mining & Construction  
Kempsey Bypass, NSW Australia  
Homespace, Qld Australia  
South Sydney Freight Line NSW Australia – ARTC

## GFWA

Web: [www.gfwa.com.au](http://www.gfwa.com.au)



### GFWA Perth

113 Radium Street  
Welshpool  
WA 6106  
Tel: +61 8 9251 1050  
Fax: +61 8 9251 1080

### AFS

Sydney  
Suite 108, 7-11 Clarke Street  
Crows Nest  
NSW 2065  
Tel: +61 2 9437 6100  
Fax: +61 9437 6200

### March

Christchurch  
1220 Main North Rd  
Belfast 8083  
New Zealand  
Tel: +64 3 323 8085  
Fax: +64 3 323 7584

### Menard Bachy Sydney

13-15 Lyonpark Road  
Macquarie Park  
NSW 2113  
Tel: +61 2 9491 7100  
Fax: +61 2 9491 7111