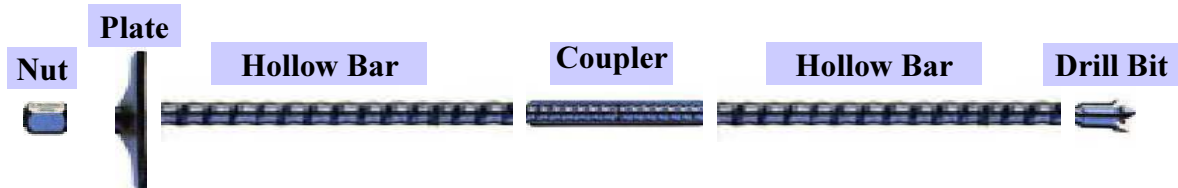


HCI Self-Drilling Anchor

Introduction

The **HCI Self-drilling Anchor** employs the fully threaded Hollow Bar manufactured by machines and technology imported entirely from the European **IBO Self-Drilling System**. The Hollow Bar is cold rolled to form standard rope thread. The rolling process refines the grain structure of the steel, increasing the yield strength and producing a robust hollow bar acting as both drill rod and grouting tube during installation. The formed standard rope thread allows the length of the Hollow Bar to be extended by couplers, giving the **HCI Self-drilling Anchor** more flexible in transportation and installation than the regular rock bolts.



Comprised of the Hollow Bar, drill bit and other fittings, the **HCI Self-drilling Anchor** can enable the hole drilling and grouting to be done in one single cycle. It can eliminate the use of a casing to support the drilled hole which is easy to collapse and offer higher rates of installation than the regular rock bolts. The **HCI Self-drilling Anchor** is used for rock bolting and grouting in softer rocks where there is loose ground or sections prone to collapse.



The whole anchorage components of **HCI Self-drilling Anchor** have been all successfully produced locally in Taiwan since the machines and technology imported. HCI is the only one company manufacturing IBO Self-drilling System in Taiwan. With our effort, **HCI Self-drilling Anchor** is not only the most used products in Taiwan, but has also been successfully exported to countries such as Austria, Japan, etc.

Main Advantages

- Drilling, installation, and injection the HCI anchor in one single operational cycle
- Easy and same operating principle for different rock mass and soil conditions
- No need for pre-drilling of a borehole, saving the time for removing the casing and the drill rod
- Especially suitable for unstable geology where borehole collapse is expected
- Minor working space required and can be installed by small drill equipment
- Easy step of extension to the designed anchor length by coupling
- Variety of designed drill bits and diameter for fulfilling different geology
- Hollow bar can be used as air and water passage during installation and increase the bonding by additional grouting inside.
- The quality of HCI Self-drilling Anchor is guaranteed by HCI high quality control.

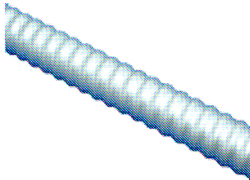
HCI Self-Drilling Anchor

System Description

- An anchor system with continuous cold-rolled outside-thread on the Hollow bar
- The Hollow bar acts as both a drill rod and a grouting tube during installation
- Self-drilling installation with the use of the single-use drill bit
- Drill bits in different designs and diameters for different ground conditions
- Easy extension of the anchor bars by couplings through the outside thread
- Assemble the anchor plate and the nut ; stress and lock the anchor bar after the grout has cured
- Anchor can be installed with many types of drilling equipment.

System Components and Specifications

Hollow Bar



Specifications	Unit	R25	R32	R38	R51L
External Diameter	mm	25	32	38	51
Internal Diameter	mm	15	21	19	36
Cross Section Area	mm ²	288	417	850	1025
Ultimate Load	KN	176	260	476	574
Yield Load	KN	145	211	391	472
Weight/m	Kg	2.2	3.4	6	7
Steel Grade	According to DIN 17124 Gr.STE460				
Length	1M , 2M , 3M , 4M , 6M				

Coupler



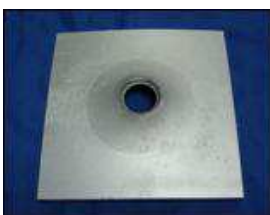
Specifications	Unit	R25	R32	R38	R51L
External Diameter	mm	35	42	50	63
Length	mm	150	120	160	120
Weight	Kg	0.6	0.6	0.85	1.15

Nut



Specifications	Unit	R25	R32	R38	R51L
Size	mm	41	46	50	75
Length	mm	41	45	50	70
Weight	Kg	0.25	0.35	0.4	1.55
Steel Grade	According to ASTM A307 (ASTM A563-07a Gr.A)				

Plate



Specifications	Unit					
Size	mm	150*150	150*150	150*150	200*200	200*200
Thickness	mm	9	10	12	12	13
Hole Diameter	mm	34	34	34	34	34
Weight	Kg	1.5	1.6	1.95	3.6	3.95
Steel Grade	According to CNS 2473 G3039 SS400					

HCI Self-Drilling Anchor

System Components and Specifications

Drill Bit



Specifications	Unit	R25	R29	R32	R38	R51L
T	mm	42	51		76	115
EX	mm	42				
EXX	mm		51			115
ESS	mm		51		76	115
EC	mm		42			



Type T

hard drilling head for sand or gravel



Type EX

Strengthen drilling head for intensify material usage



Type EXX

Tungsten steel drilling head specific for rock



Type ESS

Tungsten steel drilling head specific for rock



Type ESS

Tungsten steel drilling head specific for rock



Type ESS

Tungsten steel drilling head specific for rock



Type EC

Arch drilling head for others layers