

EHWA[®]



DIAMOND DRILLING PRODUCTS



EHWA DIAMOND IND. CO., LTD.

EHWA Drilling Products

For Drillers who Demand the Best

EHWA Diamond Industrial Co. Ltd and General Tool have developed a family of Drilling Tools to achieve maximum performance for all drilling applications.

These tools include :

- Impregnated core bits
- Reaming shells
- Casing shoes
- Thin wall core bits
- Diamond blades for cutting core samples



Whether you're performing Exploration, Soil Sampling, Foundation Testing, Highway & Dam Investigation you can expect Ehwa Diamond Tooling to exceed your drilling and sampling expectations.



MINING CORE BITS

EHWA offers two grades of bits for all drilling applications. Each bit has a standard diamond depth of 13mm, controlled distribution of diamond, a pre - conditioned matrix for reduced break - in time, advanced engineered waterways for enhanced flow, and precise placement of natural diamonds, TC pads, and TSP diamond for ID and OD wear protection.

• Explorer Series :

The Explorer Series of Impregnated Core Bits is a unique blend of components and ultra high quality diamonds designed for the most demanding drilling applications. Each core bit is manufactured under controlled conditions to ensure consistency and repeatability. The Explorer Series provides a variety of matrices for all rock formations.



Turbo Type

• Geo - Pro Series :

The Geo - Pro Series of Impregnated Core Bits is manufactured with the same precise high quality standards as the Explorer Series. These bits were developed for the Drilling Contractor that demands consistency of product and performance under the severest ground conditions. Available in four (4) distinct series.



Pie Type

* Other crown profiles available upon request.

* All crown profiles available for both Explorer and Geo - Pro Series.

• Bit Matrix Availability

GRADES	SERIES	ROCK FORMATIONS
EXPLORER SERIES Available sizes : A, B, N, H, P Oversize on request	Series I	Extremely Abrasive, Broken, Coarse, Fractured Formations. Shales, Limestone, Sandstone
	Series II	Abrasive, Medium to Coarse Grain, Solid to Fractured Formations. Dolomite, Granite, Peridotite
	Series III	Moderately Abrasive, Medium to Fine Grain. Basalt, Diorite, Quartz, Volcanics
	Series IV	Low Abrasive, Hard to Very Hard Formations. Diorite, Granite, Gneiss, Quartzite
	Series V	Extremely Hard, Non-Abrasive Formations. Jasterite, Rhyolite, Quartzite
GEO - PRO SERIES Available sizes : A, B, N, H, P Oversize on request	Series I	Extremely Abrasive Fractured Formations Coarse Grain Formations.
	Series II	Abrasive To Moderately Abrasive Fractured Formations.
	Series III	Slightly Abrasive Medium Hard Formations.
	Series IV	Extremely Hard, Low Abrasive Solid Formations.

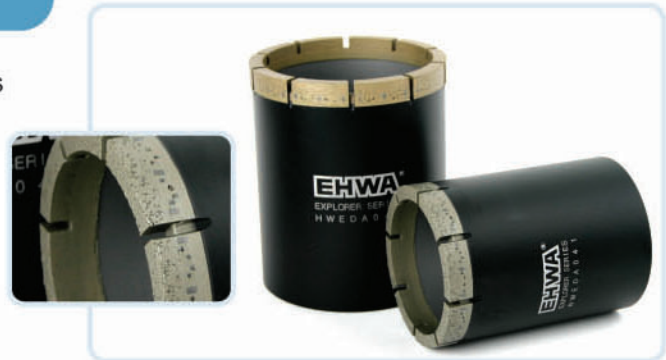
CASING SHOES

Casing shoes are available in both Explorer Series and Geo - Pro Series for advancing casing through a wide variety of overburden.

• Explorer Series :

The Explorer Series, available in both standard sizes (DCDMA) and oversize, is manufactured with high grade diamonds in high concentrations for severe applications. .250" diamond depth, select grade natural diamonds and precision set wear pads guarantee OD and ID gauge protection.

Available sizes BW, NW, HW, & PW.



The Explorer Oversize Casing Shoe is designed for use with Wire Line Casing Advancers. (.315" diamond depth)

Available sizes include NW and HW.
Set sizes are as follows:

- NW OD 3.875" x 2.992"
- HW OD 4.875" x 3.975"



• Geo - Pro Series :

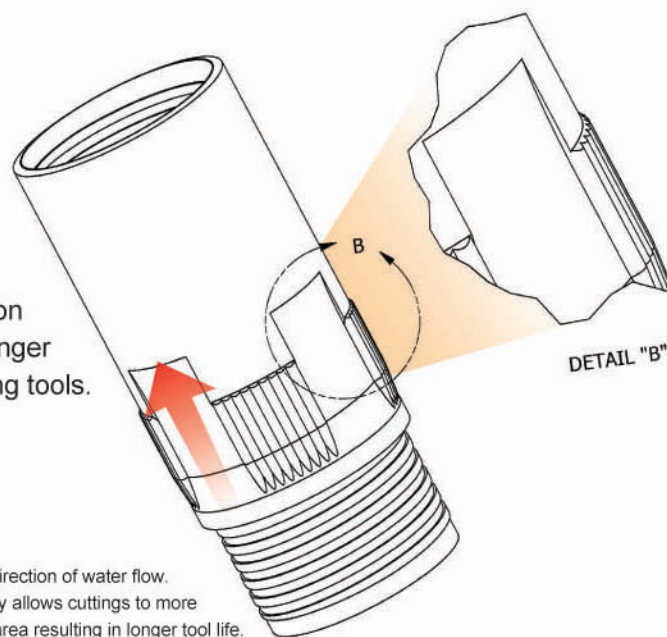
The Geo - Pro Series is manufactured with the same high quality diamond as the Explorer Series but is designed for less demanding drilling applications. These casing shoes also come with .250" diamond depths, select grade natural diamonds and wear pads for OD and ID wear protection.

Available sizes BW, NW, HW, & PW.



REAMING SHELLS

EHWA offers two distinct grades of Reaming Shells, Standard and Heavy Duty. EHWA Reaming Shells are manufactured with a **unique patent pending** design. The design allows cuttings to more freely transition into the waterway area resulting in longer life and reduced vibration of the drilling tools.



• Standard Grade Reaming Shell :

Standard Grade Reaming Shells are manufactured with an engineered abrasive resistance matrix and precision set natural diamond.

Available sizes B, N, H, & P.

• Heavy Duty Grade Reaming Shell :

Heavy Duty Grade Reaming Shells are manufactured with the same engineered abrasive resistance matrix as the Standard Series. Additional features include premium grade natural diamonds, carbide wear pads and TSP's, precision set for maximum wear.

Available sizes, B, N, H, & P

Oversize N – 3.032", H – 3.830", 3.850"

Two, three, & four ring shells are also available for greater drilling stabilization.



CORE DRILLS & SAW BLADES

• OE30P Premium Grade (Wet) :

- **Application** : Hard Concrete, Cured Concrete, Steel Reinforced Concrete, Concrete Brick, Concrete Block
- **Equipment** : Electric, Gasoline & Hydraulic Powered Core Drills

Part Number	Description (Inches)	Seg Height
OE30P02014A	2 X .145 X 1 1/4 - 7	8mm D
OE30P02214A	2 1/4 X .145 X 1 1/4 - 7	8mm D
OE30P02514A	2 1/2 X .145 X 1 1/4 - 7	8mm D
OE30P02714A	2 3/4 X .145 X 1 1/4 - 7	8mm D
OE30P03014A	3 X .145 X 1 1/4 - 7	8mm D
OE30P03214A	3 1/4 X .145 X 1 1/4 - 7	8mm D
OE30P03514A	3 1/2 X .145 X 1 1/4 - 7	8mm D
OE30P04014A	4 X .145 X 1 1/4 - 7	8mm D
OE30P04214A	4 1/4 X .145 X 1 1/4 - 7	8mm D
OE30P04514A	4 1/2 X .145 X 1 1/4 - 7	8mm D
OE30P05014A	5 X .145 X 1 1/4 - 7	8mm D
OE30P05514A	5 1/2 X .145 X 1 1/4 - 7	8mm D
OE30P06014A	6 X .145 X 1 1/4 - 7	8mm D
OE30P06214A	6 1/4 X .145 X 1 1/4 - 7	8mm D

* Core length 14" standard - additional lengths available on request.

• OA30P Asphalt Premium Grade (Wet)

- **Application** : Asphalt, Abrasive Concrete
- **Equipment** : Electric, Gasoline & Hydraulic Powered Core Drills

Part Number	Description (Inches)	Seg Height
OA30P04214A	4 1/4 X .145 X 1 1/4 - 7	8mm D
OA30P04514A	4 1/2 X .145 X 1 1/4 - 7	8mm D
OA30P05014A	5 X .145 X 1 1/4 - 7	8mm D
OA30P06014A	6 X .145 X 1 1/4 - 7	8mm D
OA30P06214A	6 1/4 X .145 X 1 1/4 - 7	8mm D

* Core length 14" standard - additional lengths available on request.

• SB10UT Core Sample Premium Blade (Wet)

- **Application** : Core Samples
- **Equipment** : Table Saw, Bridge Saw

Part Number	Description (Inches)	Seg Height
SB10UT1409EN	14 X .090 X 1	10mm D
SB10UT1812EN	18 X .125 X 1	10mm D
SB10UT2012EN	20 X .125 X 1	10mm D



• Core Bit RPM & Water Flow Chart

Core Bit Size	RPM Range	Optimum RPM	Suggested Water Flow (GPM)
A	1500 - 1700	1600	4 - 5
B	1200 - 1450	1350	8 - 10
N	900 - 1200	1100	10 - 12
H	750 - 950	850	13 - 16
P	600 - 750	650	20 - 22

• Impregnated Core Bit Dimension Chart Standard & RSG Gauge

Bit Description	Set Bit Dimensions (+ / - .005)				Reaming Shell Dimensions (+ / - .005)	
	Outside Diameter		Inside Diameter		Outside Diameter	
	Inches	mm	Inches	mm	Inches	mm
AO	1.875	47.6	1.062	27.0	1.890	48.0
AWG, AWM	1.875	47.6	1.185	30.1	1.890	48.0
ADBGM	1.875	47.6	1.193	30.3	1.890	48.0
BO	2.345	59.6	1.433	36.4	2.360	59.9
BWG, BWM	2.345	59.6	1.655	42.0	2.360	59.9
NO - 3	2.965	75.3	1.775	45.1	2.980	75.7
NO	2.965	75.3	1.875	47.6	2.980	75.7
NO - 2	2.965	75.3	1.995	50.7	2.980	75.7
NWD - 4	2.980	75.7	2.060	52.3	2.980	75.7
NWG, NWM	2.965	75.3	2.155	54.7	2.980	75.7
NO - 2 Oversize	3.032	77.0	1.995	50.7	3.032	77.0
HO - 3	3.763	95.6	2.406	61.1	3.783	96.1
HO - 3 Oversize	3.830	97.3	2.406	61.1	3.830	97.3
HO	3.763	95.6	2.500	63.5	3.783	96.1
HO - Oversize	3.830	97.3	2.500	63.5	3.830	97.3
HO - Oversize	3.850	97.8	2.500	63.5	3.850	97.8
PO - 3	4.805	122.0	3.270	83.1	4.828	122.6
PO	4.805	122.0	3.345	85.0	4.828	122.6



Use approved safety guards and protective goggles.



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