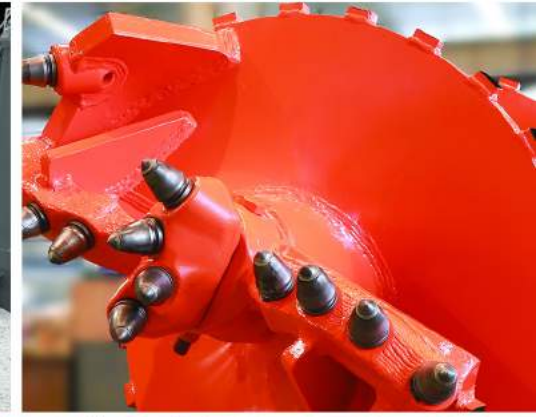


**HEMCO**   
PASSION FOR QUALITY



## **FOUNDATION ENGINEERING AND ROCK DRILLING TOOLS**

▶ **Equipment, Tools & Accessories**

[www.hemcoequipment.com](http://www.hemcoequipment.com)



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# About Us



HEMCO - Heavy Equipment Manufacturing Co., is devoted to design, development and manufacture of high quality equipment, tools and accessories for the foundation engineering and drilling industry. Our products include parts and accessories for diaphragm wall cutters and hydraulic rotary drilling rigs, kelly bars, drilling buckets and augers, casings, DTH hammers, top hammer drill bits and drill rods, drilling teeth, slurry handling equipment such as de-sanders and filter press units, grout pumps, cross-hole sonic logging tubes amongst others.



We are continuously striving for improvement of our products and are totally dedicated to providing world class service to our customers.

Because of our "Passion for Quality" and our customer focused approach, HEMCO is fast becoming a world class manufacturer and supplier for the foundation engineering and drilling industry.

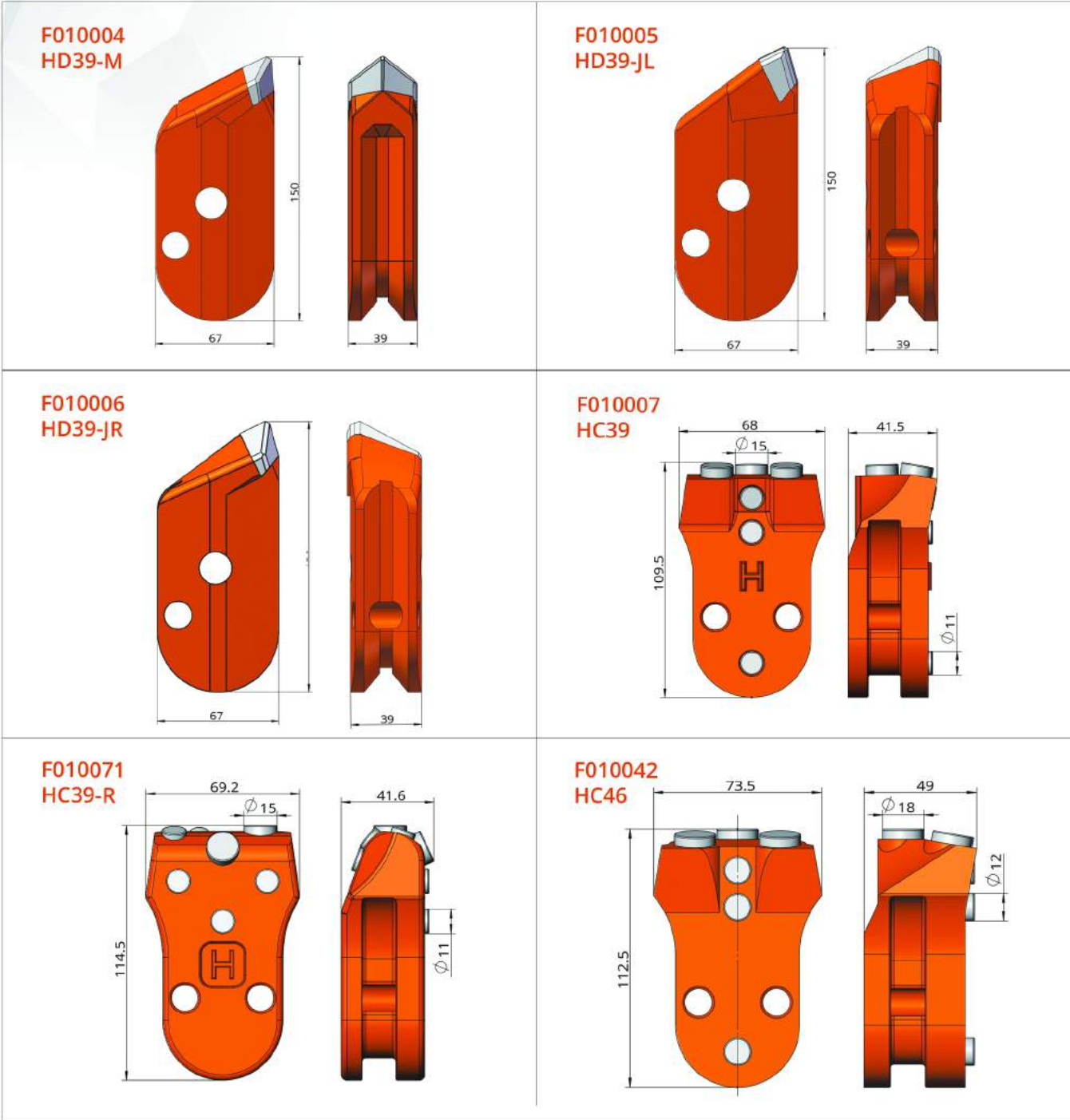




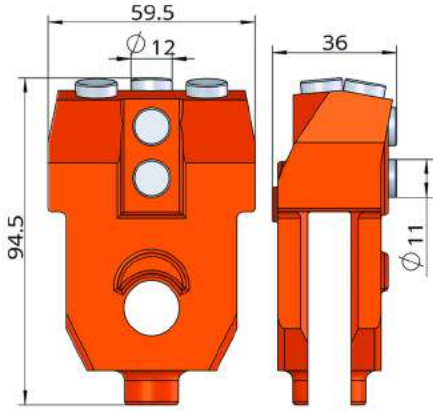
# ▶ Drilling Bits and Teeth

Ground Engaging Tools (GET) division of HEMCO is responsible for manufacture of tungsten carbide tipped round shank bits and flat teeth for different types of drilling tools and accessories used in piling and diaphragm wall works.

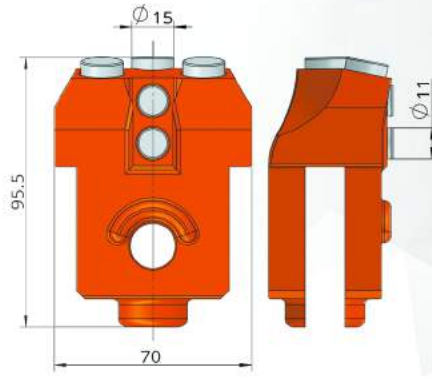
Our GET products provide the cutting edge that is not only durable but also results in high productivity in piling and drilling works undertaken by our customers.



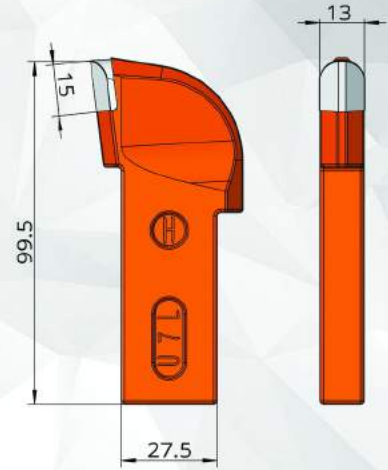
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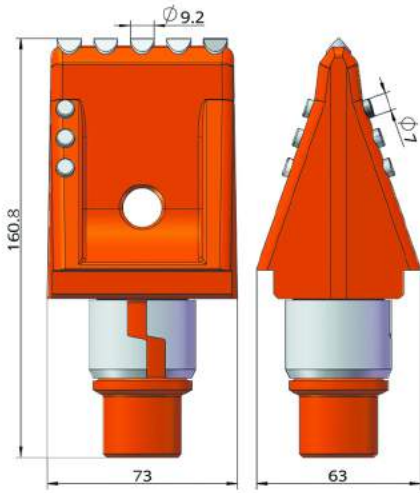
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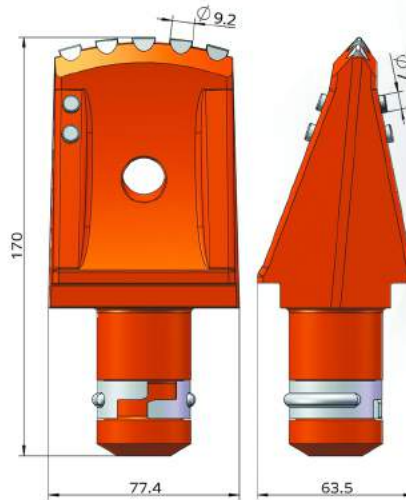
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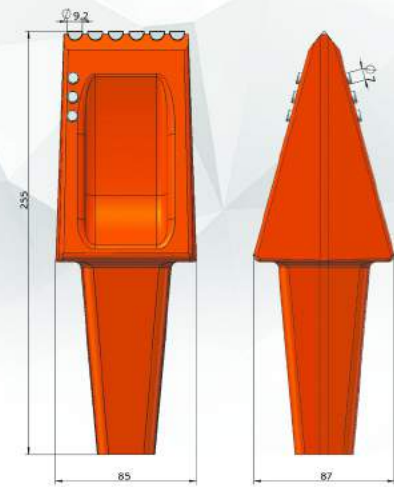
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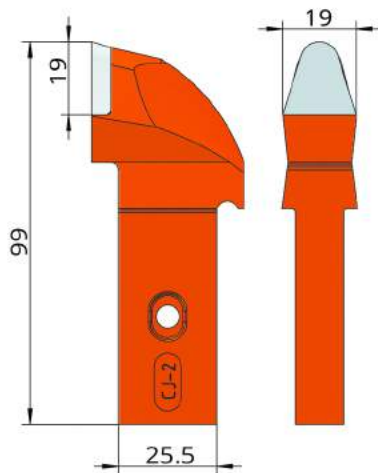
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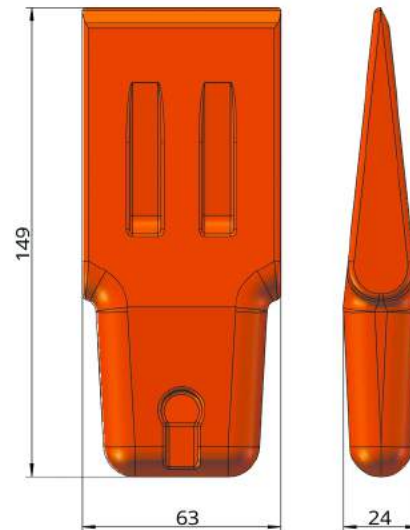
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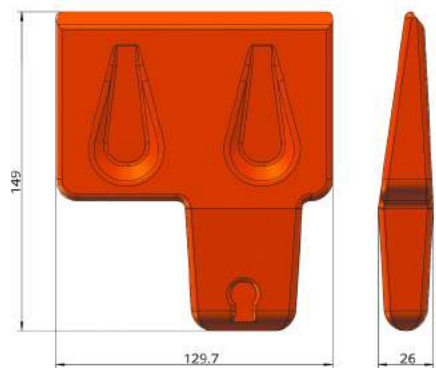
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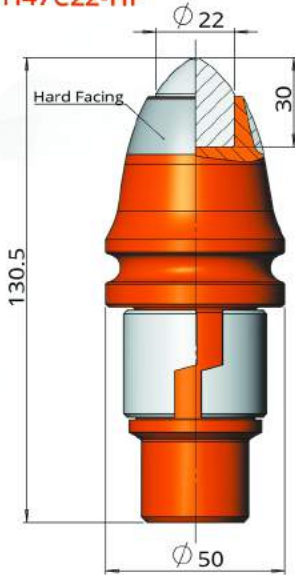
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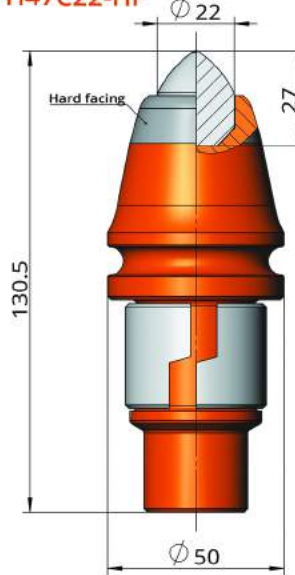
# ▶ Round Shank Teeth



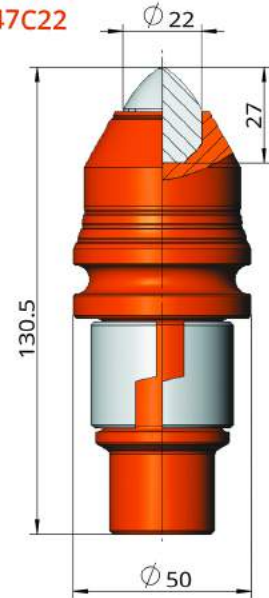
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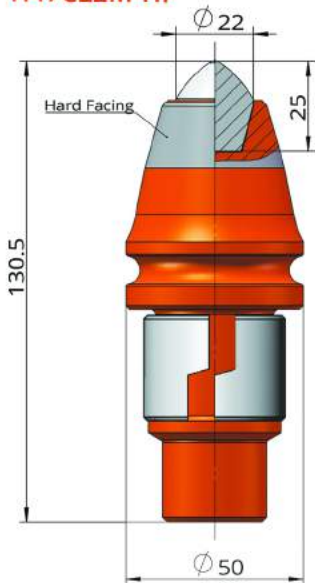
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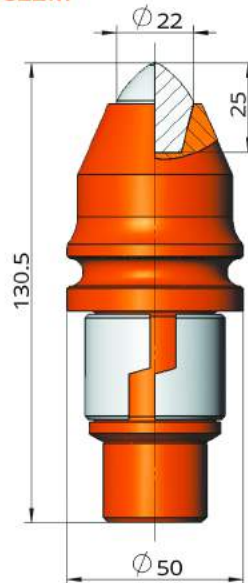
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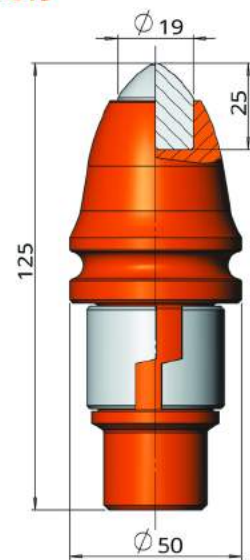
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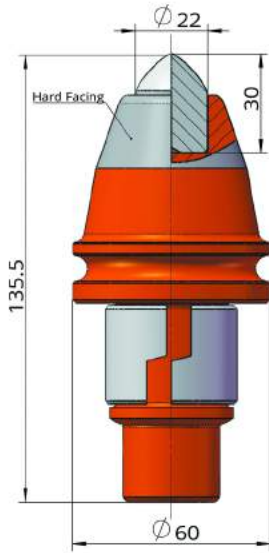


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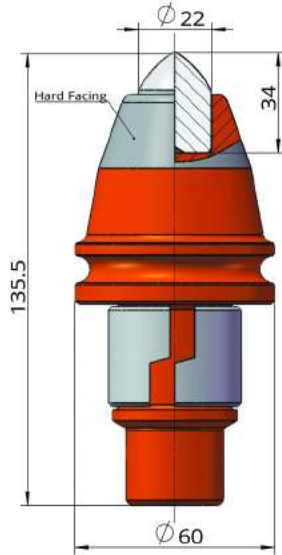




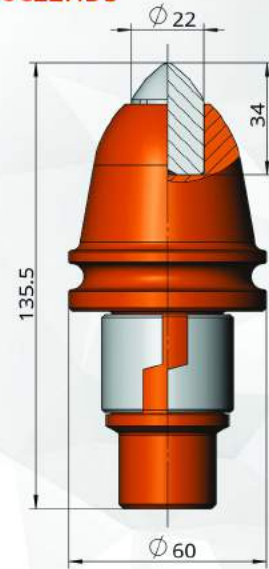
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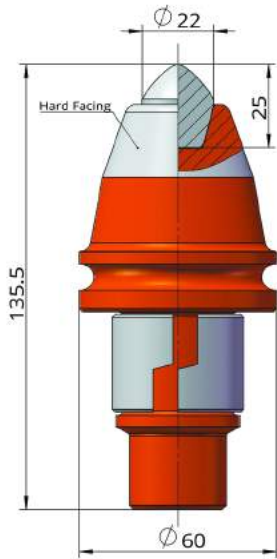
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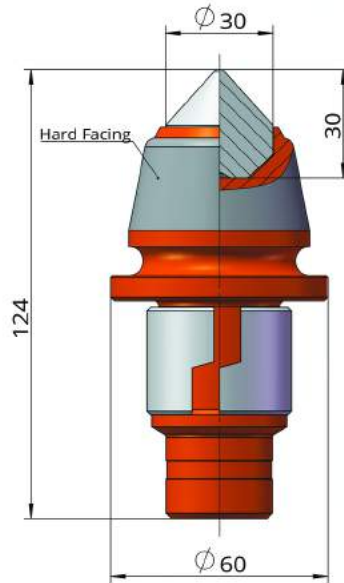
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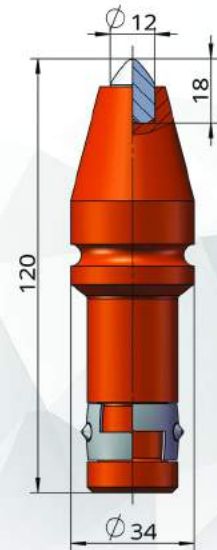
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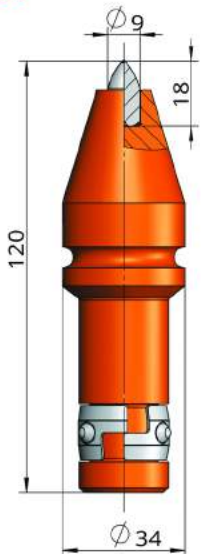
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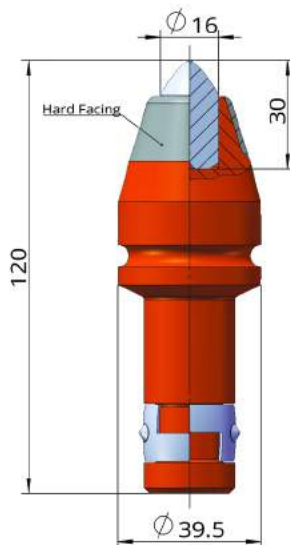
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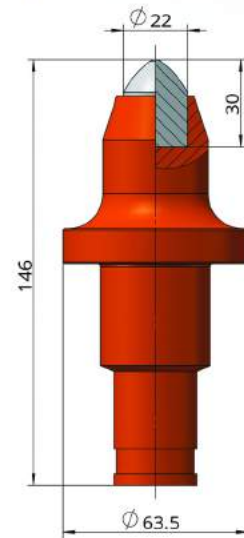
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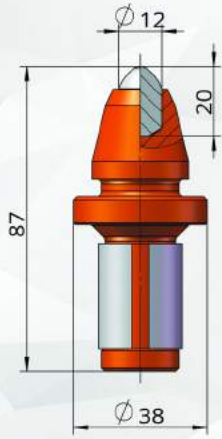
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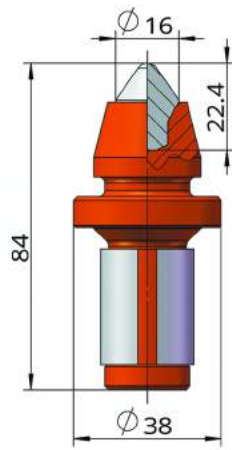
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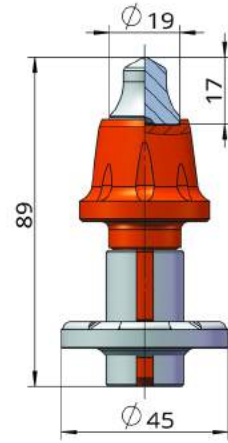
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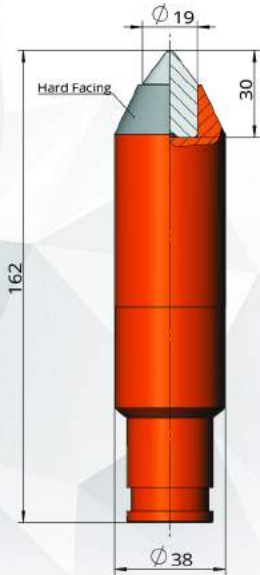
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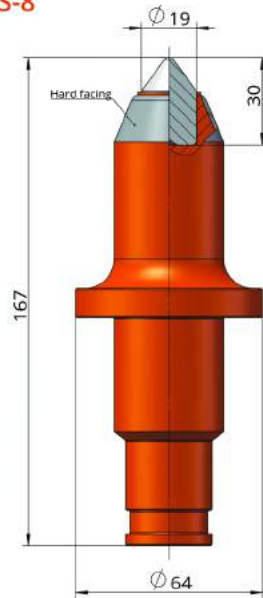
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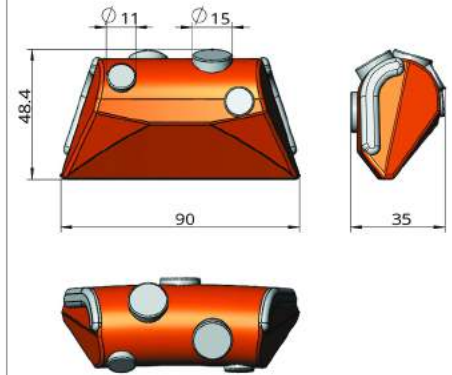
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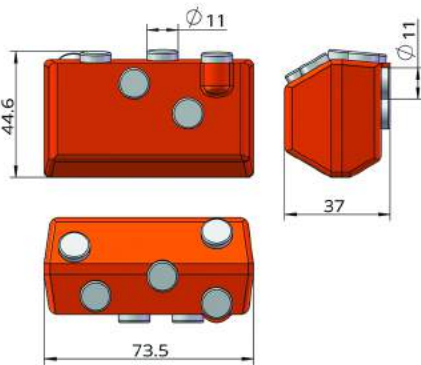
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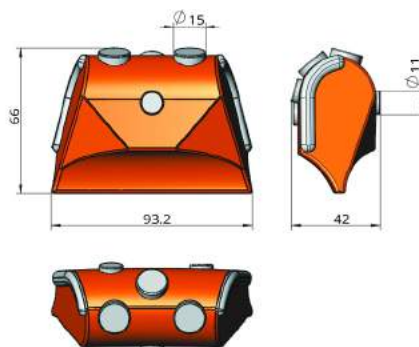
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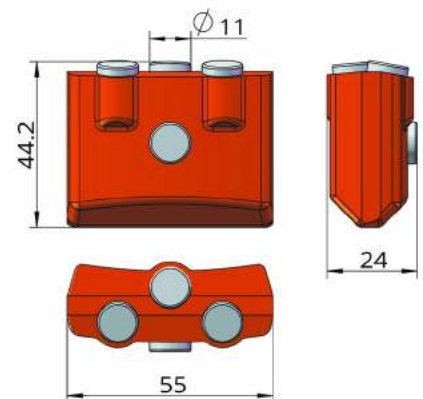
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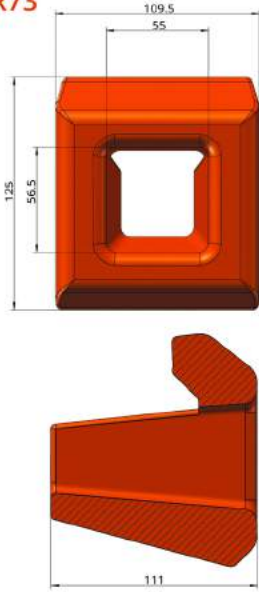


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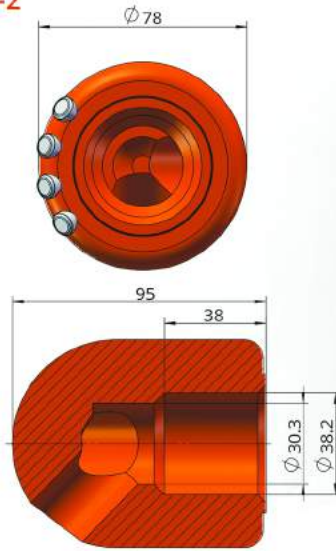




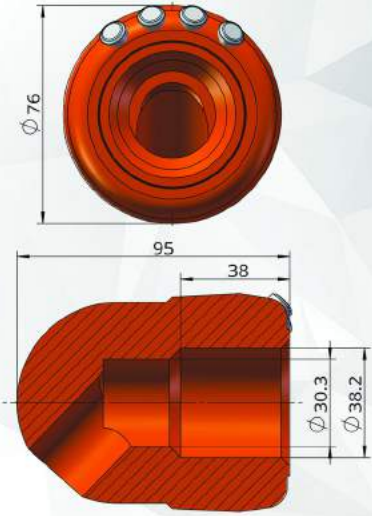
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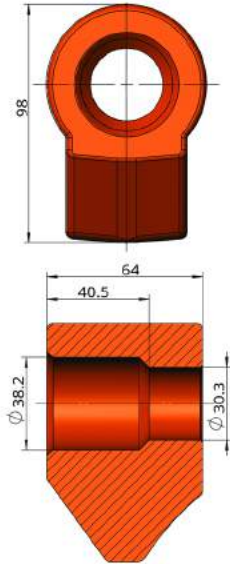
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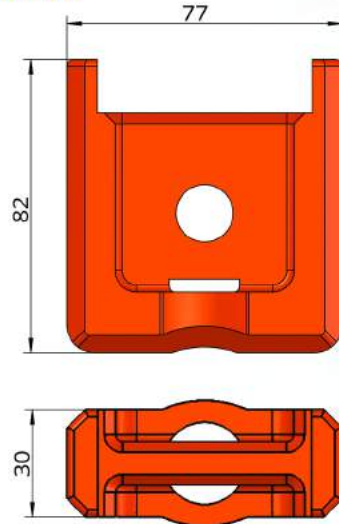
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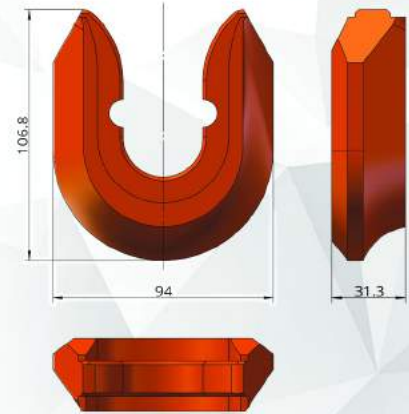
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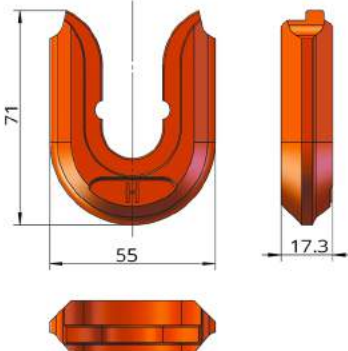
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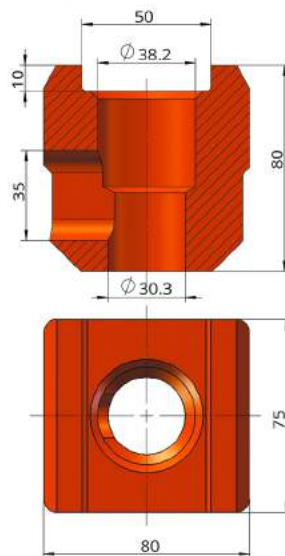
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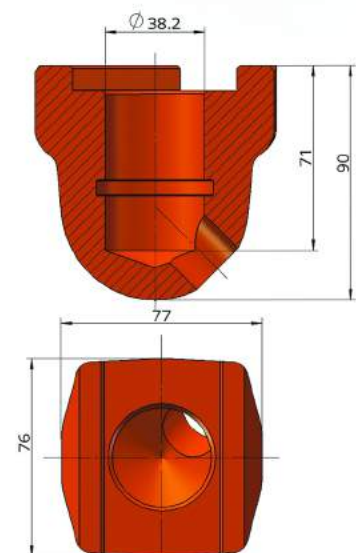
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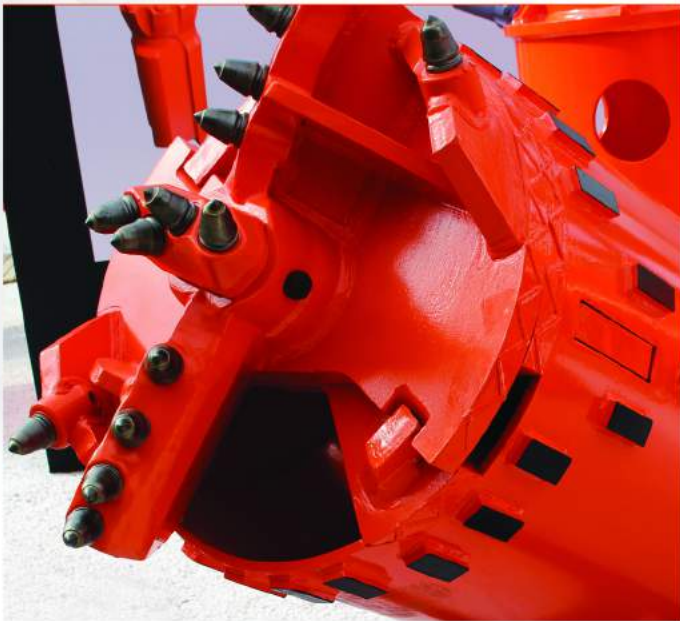
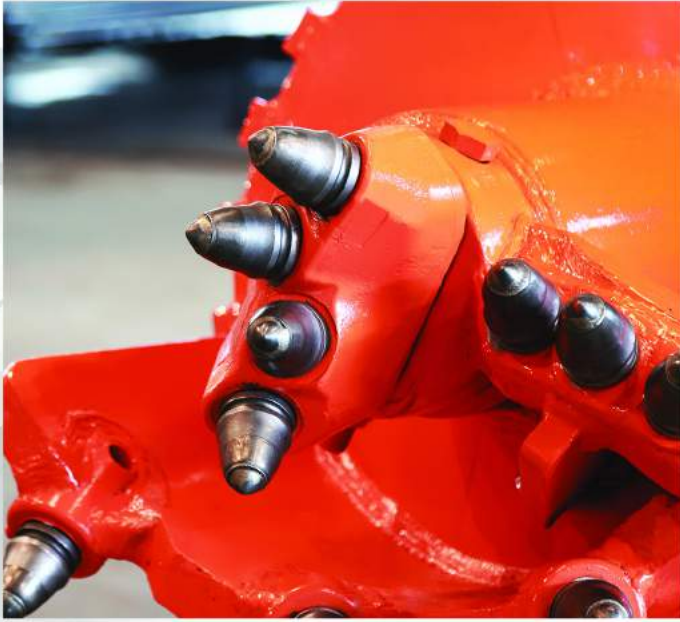


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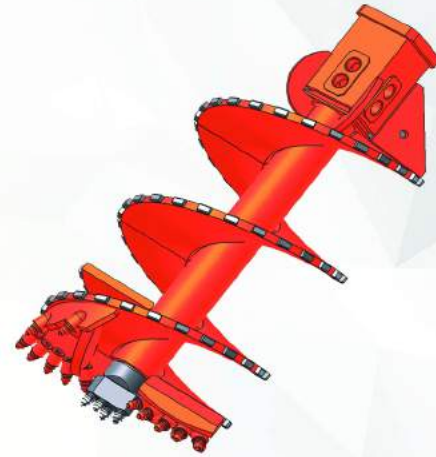




## ► Augers

HEMCO augers are designed and fabricated for a drilling torque of +400kN-m. The design of the augers is such that high productivity is achieved with minimal wear of the round shank bits and auger flights even when drilling through hard formations. Furthermore, cleaning of the auger is done in minimal time when the auger is spun in anti-clockwise direction.

Cutting Dia mm	Weight kg	Cutting Dia mm	Weight kg
520	630	980	1020
640	700	1060	1025
670	715	1180	1050
700	735	1200	1060
780	800	1350	1170
880	940	1500	1300
900	910	2000	1800



- Diameters up to 3000 mm can be manufactured on request.
- Hard Facing, Hardox 450 or equivalent wear blocks are used for wear protection.
- All weights are approximate values.
- We manufacture flat and conical augers.

- **Kelly Box:** 200 x 200 mm or 150 x 150 mm or 130 x 130 mm
- **Flight Length:** 1,500 mm (other lengths can be manufactured on request)
- **Teeth:** As per soil strata requirement

## ► Drilling Buckets

HEMCO buckets are used to drill through sandy soils, gravel, cobbles and weathered rock formation. The buckets specially designed for durability, high productivity and ease in maintenance. All buckets are designed and fabricated for high torque machines.

Cutting Dia mm	Weight kg	Cutting Dia mm	Weight kg
520	700	980	1330
640	835	1060	1490
700	900	1180	1650
770	980	1200	1690
780	990	1350	1820
880	1120	1500	2200
900	1070	2000	2800



- Diameters up to 3000 mm can be manufactured on request.
- Hard Facing, Hardox 450 or equivalent wear blocks are used for wear protection.
- All weights are approximate values.
- We manufacture rock, soil and cleaning buckets.

- **Kelly Box:** 200 x 200 mm or 150 x 150 mm or 130 x 130 mm
- **Barrel Length:** 1,220 mm (other lengths can be manufactured on request)
- **Teeth:** As per soil strata requirement







## ► Core Barells

HEMCO core barrels are specially designed to drill through very hard formations and permafrost. With tricon bits, the core barrels can be used to cut through rocks with UCS exceeding 100 Mpa.

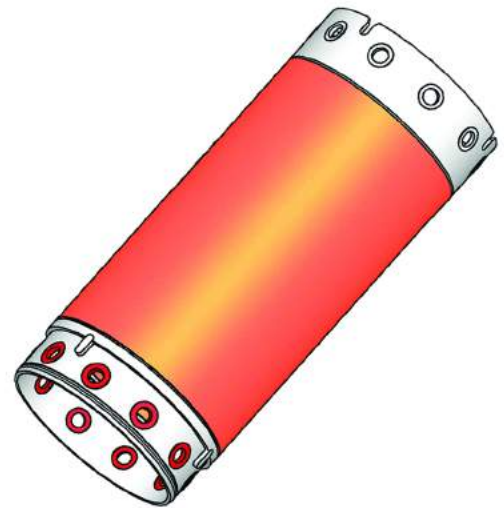
Cutting Dia mm	Weight kg	Cutting Dia mm	Weight kg
520	520	1000	900
600	595	1060	980
650	655	1180	1100
700	690	1200	1110
780	700	1350	1250
800	750	1500	1400
900	815	2000	1800



- Diameters upto 2500 mm can be manufactured.
- Hard Facing, Hardox 450 or equivalent strips are used for wear protection.
- All weights are approximate values.
- We manufacture Core Barrels with RSC teeth and tricon bits.
  - Kelly Box: 200 x 200 mm or 150 x 150 mm

## ► Double Wall Casings

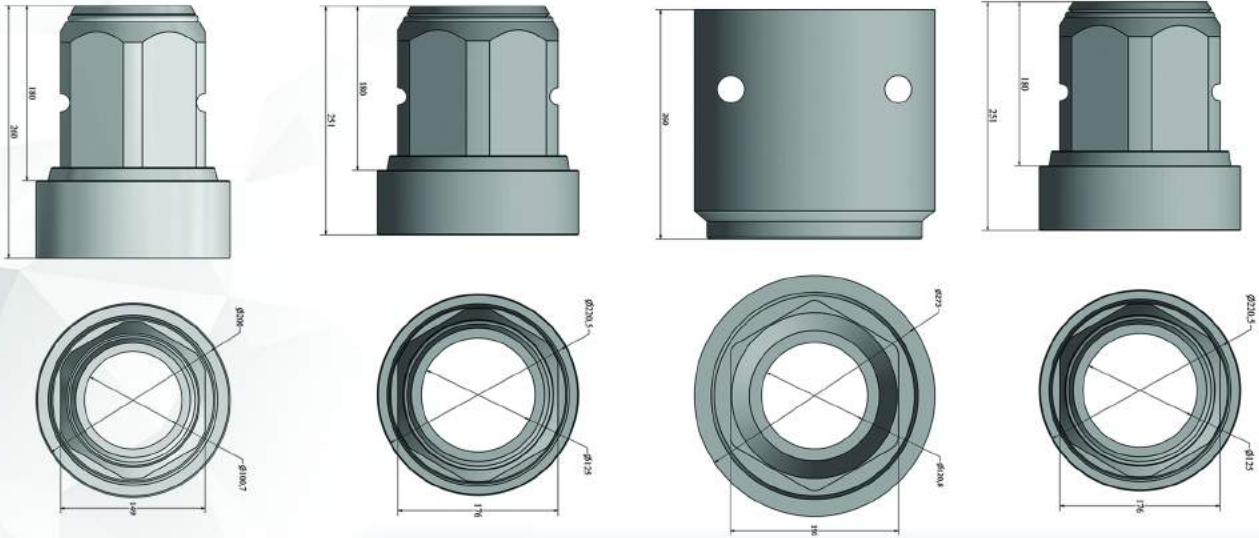
HEMCO manufactures double wall casings with joints made through a special rolling-forging process using an extremely high strength, wear-resistant steel alloy. In order to provide adequate structural capacity against torsion and crushing (especially when the double wall casings are used in conjunction with casing oscillators), steel bars fabricated in the shape of spirals are painstakingly welded to the inner side of the outer casing tube (for 620mm casings, the steel bars are welded to the outer side of the inner casing tube).



Cutting Dia (OD/ID m)	1m kg	2m kg	3m kg	4m kg	5m kg	6m kg
620/540	403	739	1074	1411	1747	2081
750/670	492	902	1311	1722	2131	2540
800/720	?	?	?	?	?	?
880/800	585	1069	1552	2036	2520	3005
1000/920	669	1221	1773	2326	2877	3429
1180/1100	844	1580	2316	3052	3787	4522
1200/1120	872	1620	2370	3120	3870	4620
1300/1220	933	1746	2558	3372	4184	4995
1500/1400	1433	2625	3817	5009	6201	7393
1800/1700	1830	3166	4602	6038	7474	8910
2000/1880	2450	4280	6110	7940	9770	11600
2500/2380	3105	5710	8315	10920	13525	16130
3000/2840	4940	9015	13090	17170	21250	25330

# ► CFA Augers and Joints

HEMCO offers following CFA Augers in all diameters with Soilmec and Bauer couplings.



Code	Type	Allowable Toruq (kNm)	Dimension (Inches)	Dimension (mm)
<b>H25HD5</b>				
H2002	Male	250	5	220
H2003	Female	250	5	220
<b>HXHD5</b>				
H1915	Male	170	5	190
H1916	Female	170	5	190
<b>HHD5</b>				
H1608	Male	100	5	176
H1609	Female	100	5	176
<b>HHD4</b>				
H0958	Male	85	4	148
H0959	Female	85	4	148
<b>HHD3</b>				
H0792	Male	30	3	110
H0793	Female	30	3	110



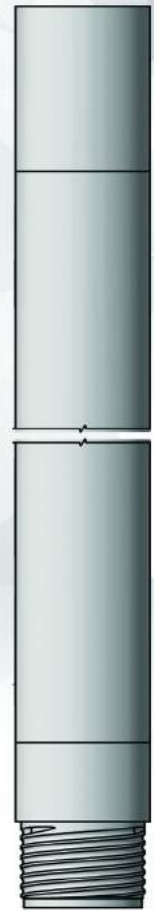
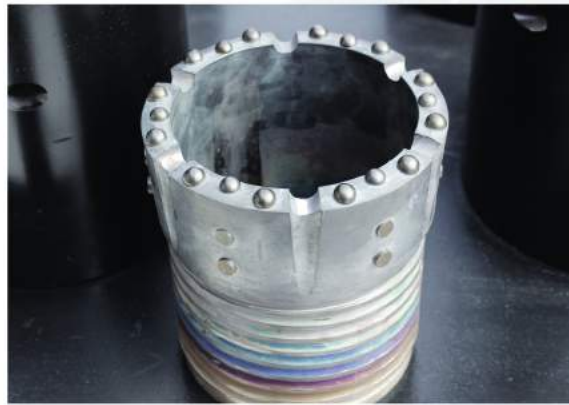
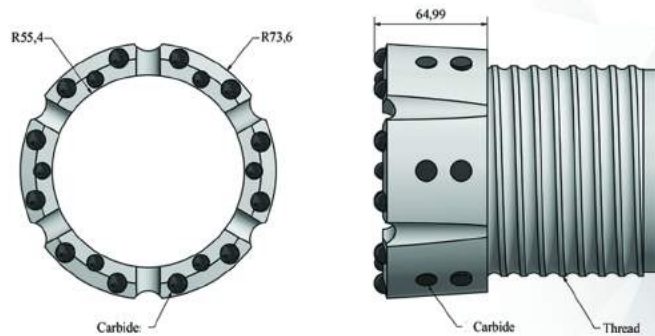


# ► Drill Casings & Rods

## Rotary Casings

HEMCO offers wide range of drill casings that are designed for rotary drilling without percussion.

Our casing joints are fabricated using high tensile strength steel especially heat treated for durability of the threads under repeated usage. The joints are machine welded onto seamless tubes that are lightweight while having adequate strength. We supply these casings for 102mm (4 in) to 219mm (8 1/2 in) drilling.



## Drill Rods

HEMCO API Drill Rods are designed for use in rotary drilling and rotary DTH applications. These are commonly used as single rotary rods or as the inner drill string on double head rotary-rotary or rotary-percussion applications.

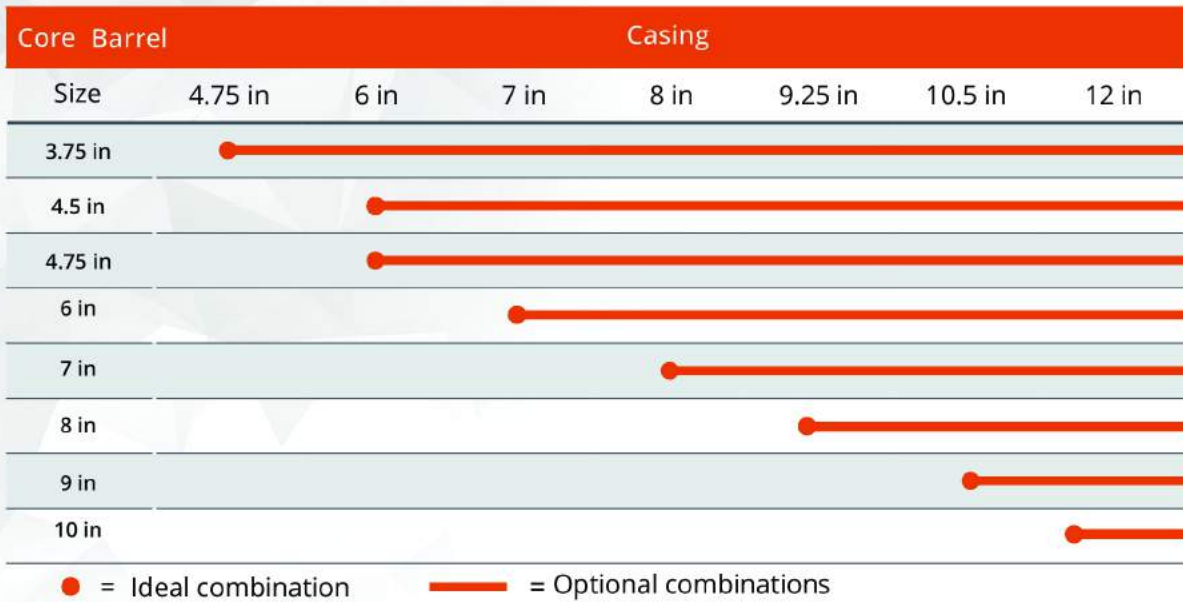
The ends of the API rods are fabricated using high-tensile strength quenched and tempered steel. The rod ends are gas nitrided to provide additional life to the drill string. Rod ends are machine welded onto high strength seamless tubes.

API rods are manufactured in a variety of lengths and wall thicknesses and include internal flush designs for additional flushing capacity.

HEMCO can manufacture alternative rod lengths and spanner flats upon request.

- Long-life thread designs utilizing high strength steel
- Machine welding for a superior welded connection between threaded joints and mid-body

## CASING SELECTOR



## 2 Feet

Size	4.75 in	6 in	7 in	8 in	9.25 in	10.5 in	12 in
------	---------	------	------	------	---------	---------	-------

## 5 Feet

Size	4.75 in	6 in	7 in	8 in	9.25 in	10.5 in	12 in
------	---------	------	------	------	---------	---------	-------

## 10 Feet

Size	4.75 in	6 in	7 in	8 in	9.25 in	10.5 in	12 in
------	---------	------	------	------	---------	---------	-------

\*Casing and related accessories are designed with **left** hand threads.

## Core Barrel Bits

**Standard Core Barrel Bits**

Usage: Normal multipurpose operating conditions

Size	3.75 in	4.75 in	6 in	7 in	8 in	9 in	10.5 in
------	---------	---------	------	------	------	------	---------

**HD Core Barrel Bit**

Usage: Moderately abrasive formations

Size	3.75 in	4.75 in	6 in	7 in	8 in
------	---------	---------	------	------	------

**HD Core Barrel Bit with Wear Plates**

Usage: Severly abrasive formations

Size	3.75 in	4.75 in	6 in	7 in	8 in
------	---------	---------	------	------	------

## Casing Shoes

**Steel Casing Shoes**

Usage: Normal multipurpose operating conditions

Size	4.75 in	6 in	7 in	8 in	9.25 in	10.5 in	12 in
------	---------	------	------	------	---------	---------	-------

**Heavy Duty Casing Shoes with Wear Pad**

Usage: Contains tungsten carbide wear pads for severely abrasive formations

Size	6 in	7 in	8 in	9.25 in	10.5 in	12 in
------	------	------	------	---------	---------	-------

**Sandstone Casing Shoes**

Usage: Abrasive or in swelling ground conditions  
(can also be used in conjunction with the full face core barrel bit)

Size	4.75 in	6 in
------	---------	------



**BIT AND SHOE SELECTOR**

Core Barrel Bit	Core Size	Casing Shoes						
		4.75 in	6 in	7 in	8 in	9.25 in	10.5 in	12 in
Size*	Size**							
3.75 in	3 in							
4.5 in	3.5 in							
4.75 in	4 in							
6 in	5 in							
7 in	6 in							
8 in	7 in							
9 in	8.5 in							
10.5 in	9.5 in							

\*Casing and related accessories are designed with **left** hand threads.

**CORE BARREL SELECTOR**

= Ideal combination

= Optional combinations

Casing	Core Barrel							
	3.75 in	4.5 in	4.75 in	6 in	7 in	8 in	9.25 in	10.5 in
4.75 in								
6 in								
7 in								
8 in								
9.25 in								
10.5 in								
12 in								
Core Size (determined by inner-diameter of bit)								
	3 in	3.5 in	4 in	5 in	6 in	7 in	8.5 in	9.5 in

**DRILL ROD MID-BODY DIMENSIONS**

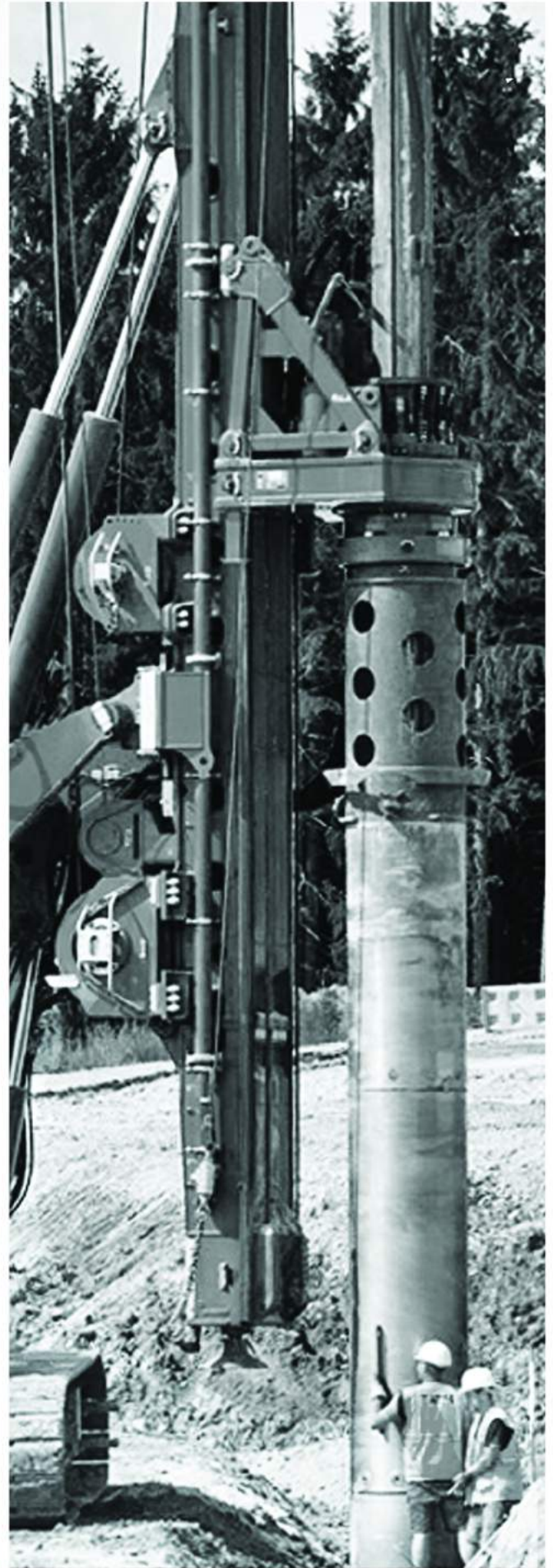
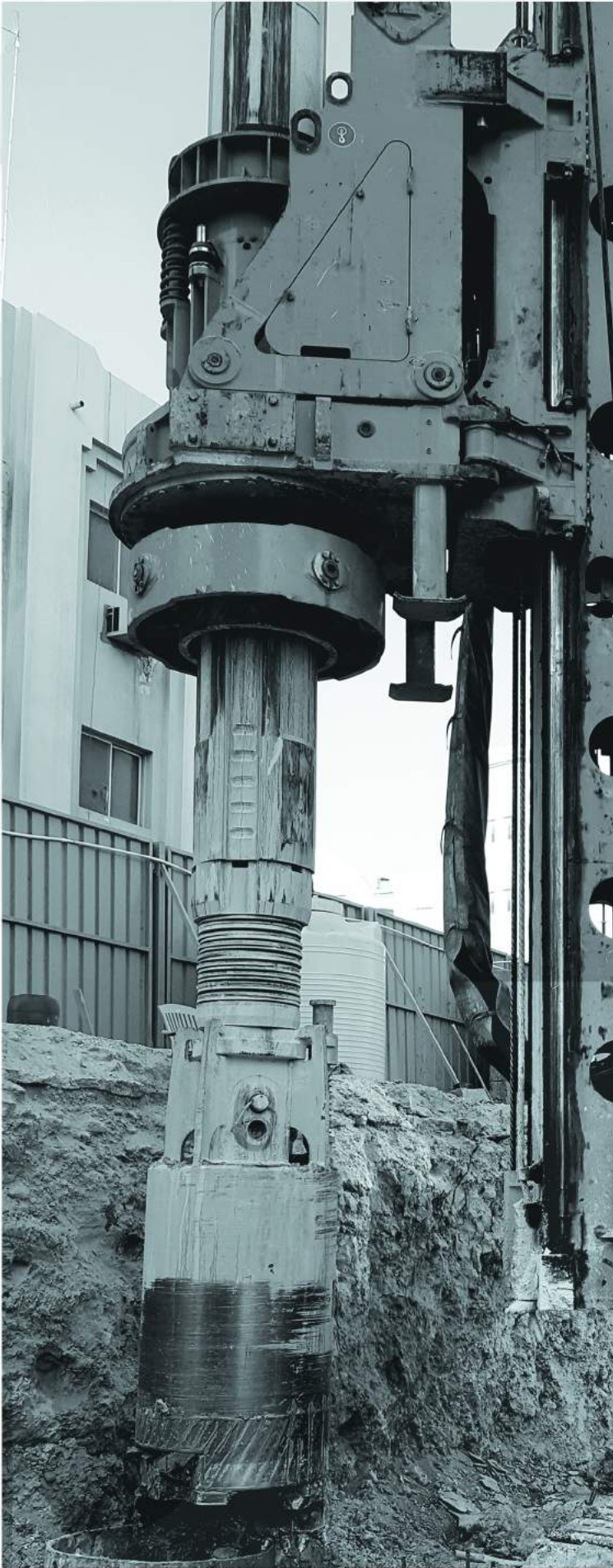
Size	Inner Diameter		Outer Diameter	
	Metric	U.S.	Metric	U.S.
3.5 in Standard	76.2 mm	3 in	88.9 mm	3.5 in

**DRILL ROD THREAD-ENDS DIMENSIONS**

Size	Inner Diameter		Outer Diameter	
	Metric	U.S.	Metric	U.S.
3.5 in Standard	63.5 mm	2.5 in	88.9 mm	3.5 in

\*Drill rod, core barrels and related accessories are designed with right hand threads.







# ► Kelly Bars

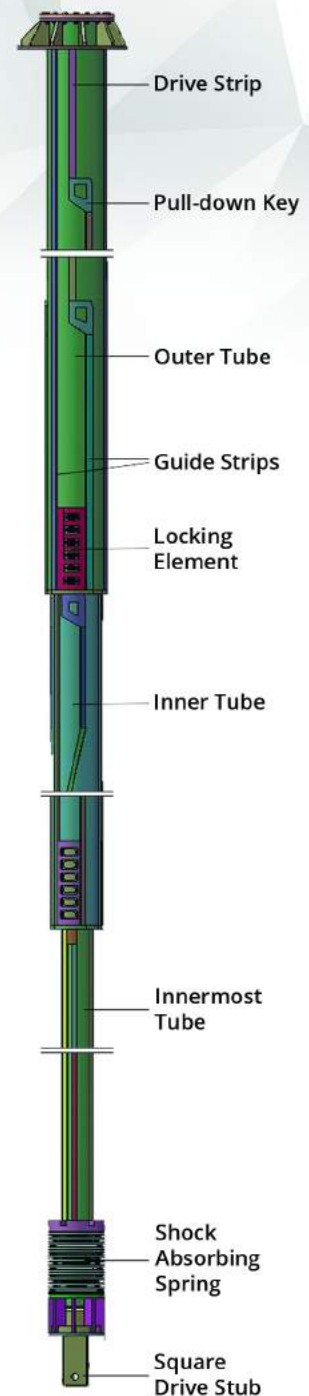
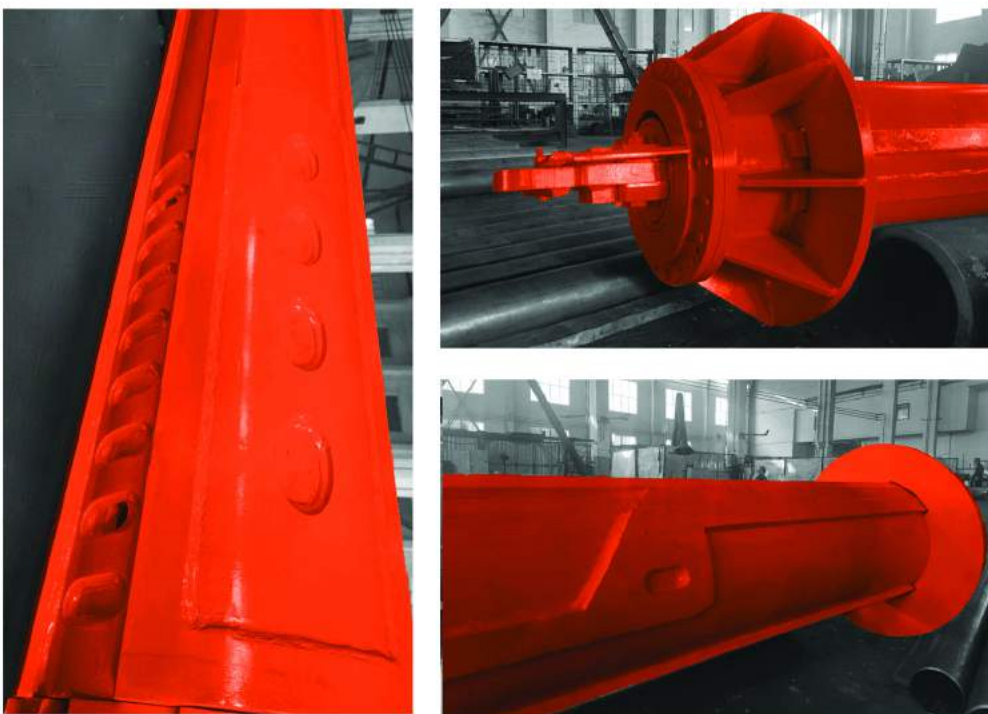
A kelly bar is the key element of the rotary drilling rig that transfers the torque and the pull-down from the rig to the drilling tool. The Kelly bar comprises of high strength but ductile telescoping steel tubes with special guide strips, drive strips, pull-down keys and locking elements welded onto the tubes.

The gearbox of the drilling rig engages the drive strips and the pull-down keys of the outermost tube to apply the torque and the pull-down respectively to the kelly bar while the locking element on the inside of any given tube engages the drive strips and pull-down keys of the next inner tube to transfer to the inner tube the same torque and pull-down. This transfer of torque and pull-down proceeds from the outermost tube to the innermost one which has a square drive stub at its lower end that connects to the drilling tool.

HEMCO manufactures kelly bars to world class standards using the best quality high strength seamless steel pipes from European steel mills and weld-on elements made from special heat treated steels.

Description	Outer Dia mm	No. of Sections	Max Drilling Depth (m)	Torque (kN-m)	Drilling Rigs
HK 40/470/3	470	3	48	450	BG-40 / BG-36
HK 40/470/4	470	4	72	450	BG-40 / BG-36
HK 28/419/3	419	3	36	280	BG-28
HK 28/419/4	419	4	64	280	BG-28
HK 28/394/3	394	3	36	280	BG-28 / BG-25

Kelly bars for other rigs can be supplied on request.





# ▶ Top Hammer Drill Bits and Drill Rods

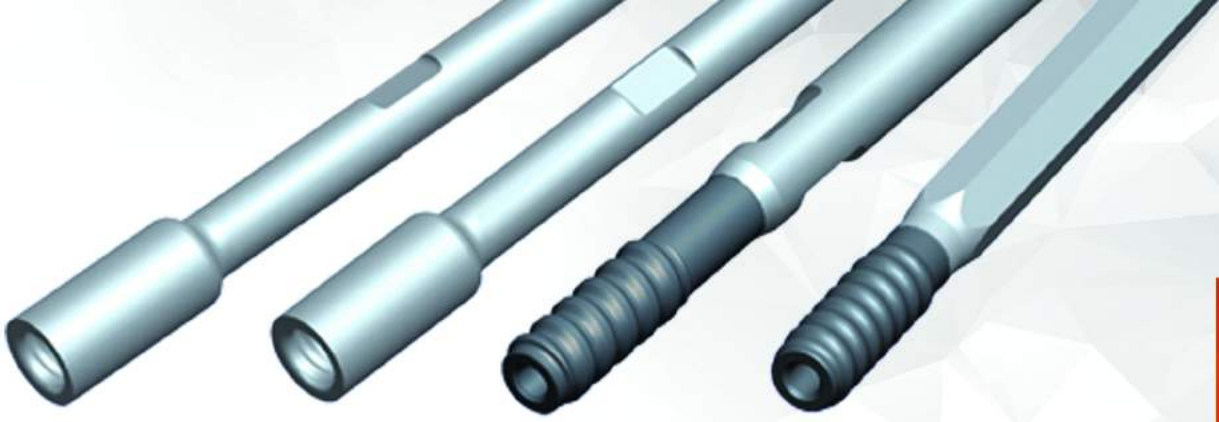
Top hammer drilling is all about transmitting intense impact energy into the rock being drilled with minimal loss of energy. Thus the process of drilling small diameter holes by top hammering imposes much strain on the drilling tools and equipment.

HEMCO top hammer bits and drill rods are manufactured to the highest standards using premium grade materials to give maximum meterage of drilling even in very hard rock formations.

TOP HAMMER DRILL BITS AND DRILL RODS







HEMCO MF drill rods are specially designed for the toughest surface bench drilling works. The special features of these drill rods include:

- Highly rigid design resulting in straight holes and maximum productivity
- Special high strength steel for long life
- Effective heat treatment for extended service life and minimal wear threat
- Tight manufacturing tolerances for the threads resulting in maximum durability and reliability

HEMCO also supplies extension rods, drifting and tunneling rods to world class standards.

### MF Drill Rods (Speed Rods)

Thread Sizes: R32, T38, T45, T51

Rod Diameters: Round 32mm, Round 39mm, Round 46mm, Round 52mm

Effective Lengths: 915mm to 6,100mm

### Extension Rods

Thread Sizes: R22, R25, R28, R32, R35, R38, T38, T45, T51

Rod Diameters: Round 32mm, Round 39mm, Round 46mm, Round 52mm, Hex 22mm, Hex 25mm, Hex 28mm, Hex 32mm, Hex 35mm

Effective Lengths: 600mm to 6,400mm

### Drifting & Tunneling Rods

Thread Sizes: R22, R25, R28, R32, R38, T38

Rod Diameters: Round 32mm, Round 39mm, Hex 25mm, Hex 28mm, Hex 32mm, Hex 35mm

Effective Lengths: 2,100mm to 6,400mm

### Shank Adaptors

HEMCO shank adaptors ensure a quality drill string interface to the most exacting industry tolerances. Built to seamlessly interface with hydraulic and pneumatic drifters and top hammers, our shank adapters come in a full range of industry-standard thread configurations. Our precision grinding process ensures straightness, and our tools are fully carburized with an advanced heat treatment.

Different shank adapters are available, like Atlas Copco, Tamrock, Ingersoll Rand, etc. Also for the same drill machine, due to different applications, the shank adapters can be different length and different threads



- Atlas Copco (COP1238, COP1838, COP1032 and etc)
- Furukawa (HD715, HD612, HD609, PD200 and etc)
- Ingersoll-Rand (VL140, VL671, YH80A and etc)
- Tamrock (HLX5, HL600, HL500, HL300, HL 700, HL850 and etc)

# ▶ DTH Hammers and Bits

HEMCO offers Down-the-hole (DTH) hammers and bits for drilling diameters from 90mm to 305mm. The hammers and the bits are manufactured to the highest standards using premium grade steel alloys that are heat treated and hardened for maximum productivity without compromising durability or reliability.



Model	Connection Thread	Size Inch	Length mm	Outer Diameter mm	Hole Range mm	Working Pressure
HD35	API 2 3/8" Reg	3"	930	82	90-110	1.0 - 1.5 MPA
HQL4	API 2 3/8" Reg	4"	1097	99	110-135	1.0 - 2.5 MPA
HQL5	API 3 1/2" Reg	5"	1156	125	135-155	1.0 - 2.5 MPA
HQL6	API 3 1/2" Reg	6"	1212	148	155-190	1.0 - 2.5 MPA
HQL8	API 4 1/2" Reg	8"	1467	185	195-254	1.0 - 2.5 MPA
HQL10	API 5 1/2" Reg	10"	1502	225	254-311	1.0 - 2.5 MPA
HQL12	API 6 5/8" Reg	12"	1880	275	305-445	1.0 - 2.5 MPA

## Key Features

- Simple design of the piston.
- More efficient energy transfer, faster drilling speed, lower air and oil consumption.
- Fewer internal parts, simple structure, longer life, less failure.
- Easy to disassemble because the top sub, drive chuck and external cylinder are connected by multistep thread.



## Bit Face Shape



### Drop Center

For high penetration rates in soft to medium hard and fissured rock formations. Low to medium air pressures. Maximum hole deviation control.



### Concave Face

The all-round application bit face specifically for medium hard and homogeneous rock formations. Good hole deviation control and good flushing capacity.



### Convex Face

For high penetration rates in soft to medium-hard with low to medium air pressures. It is the most resistance to steel wash, and may reduce the load and wear on the gauge buttons, but poor hole deviation control.



### Double Gauge Face

This kind of face shape is suitable for fast penetration rates in medium to hard rock formations. Designed for high air pressures and good resistance to steel wash step gauge bit.



### Flat Face

This kind of face shape is suitable for hard to very hard and abrasive rock formations in applications with high air pressures. Good penetration rates and resistance to steel wash.

## Carbide Button Shape



### Domed / Round Button

Domed / Round Buttons are usually used as gauge buttons of DTH bits, suitable for very abrasive and very hard formations.



### Parabolic / Semi-Ballistic Buttons

Parabolic Buttons are usually used as gauge buttons and front buttons of DTH bits, suitable for medium abrasive and hard formations.



### Ballistic Button

Ballistic Buttons are usually used as front buttons of DTH bits, suitable for medium abrasive and medium hard formations. They can also be used as gauge buttons if the rock is soft.



### Sharp Button

Sharp Buttons are usually used as front buttons of DTH bits for soft formations where fast penetration rates are possible and button breakage is minimal.



### Flat Button

Flat buttons are usually used as protection buttons to reduce wear on rubbing surfaces of DTH bits.

# ▶ Multi-hammer drill

When drilling through rocks, conventional rock augers and buckets (and even core barrels) quickly lose their effectiveness as the strength of the rock begins to exceed 25 MPa. HEMCO multi hammer drills are a modern solution for drilling in hard rock formations and we have developed a highly effective Multi-Hammer for drilling 24" (610mm) to 48" (1200mm) boreholes in medium rocks to the hardest formations.

## Multi-hammer drill for 24" dia borehole

- HEX connections for ease in assembly and disassembly
- Robust construction yet lightweight
- Can work without shock absorber as vibrations are low
- Extension rods available for deeper drilling



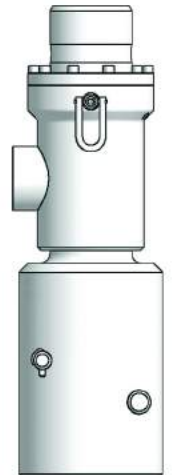
## Working principal of the multi-hammer drill

The drill employs three DTH hammers of 8" (200mm) with drill bits of 11" (275mm) diameter mounted on the lower end of the DTH hammers. The hammers work inside a steel barrel and the geometry of the arrangement is such that each drill bit extends about 1" (25mm) beyond the barrel. Air is introduced through a swivel at the top of drill string and the air flow is distributed to each of the three DTH hammers through a distribution chamber at the top of the barrel. As drilling proceeds, the cuttings are lifted upwards through the annulus between the borehole wall and the steel barrel and these cuttings settle into a collection barrel mounted on top of the drilling barrel. Once the collection barrel becomes full, the drill is lifted out of the borehole and the collection barrel is pulled upwards by the auxiliary winch of the drilling rig to empty the cutting. Subsequently the drill is once again lowered into the borehole to proceed with the borehole drilling.



### Drill pipe

The drill pipe comprises of a high strength tube with an 8" (200mm) HEX pin on one end and a corresponding HEX box on the other end. The length of the drill pipe can be adjusted as per job requirements. Also, additional tubes can be easily connected together to form longer drill strings.



### Air swivel

The air swivel has a robust structure which ensures long hours of trouble free drilling. The connection at top is a 4" x 4" box while the bottom comprises of 8" HEX box.

## Technical specifications

Model	Diameter mm	Diameter inches	No. of Hamers	Air Required CFM	Air Required m <sup>3</sup> /min
MHD-610	610	24"	3	1200 - 2000	34 - 57



## Multi-hammer drill upto 48" boreholes

- All hammers can be used in "straight" drilling using standard kelly drilling or in "reverse" drilling with RCD drill rods
- All drills utilize our standard 8" (200mm) DTH hammer
- Can work without shock absorber as vibrations are low



## Working principal

The drill employs 8" (200mm) diameter multiple DTH hammers with drill bits of 11" (275mm) or 12" (300mm) diameter mounted on the lower end of the DTH hammer. The hammers work inside a steel barrel and the geometry of the arrangement ensures that each drill bit extends about 1" (25mm) beyond the barrel. The DTH hammers are arranged in a geometry such that the complete pile diameter is covered by the DTH hammer bits as the barrel is rotated (or oscillated) by the drilling rig.



**STRAIGHT DRILLING:** "Straight" drilling is very conveniently possible using any normal piling rig working with a standard telescoping kelly bar.

A kelly box of the required size is bolted onto the top of the hammer barrel and air is supplied through an inlet below the kelly box from where it is distributed to each individual DTH hammer through a distribution chamber at the top of the barrel. As drilling proceeds utilizing 180 degree oscillatory motion of the kelly bar, the cuttings are lifted upwards through the annulus between the borehole wall and the steel barrel and these cuttings settle into a collection barrel mounted on top of the drilling barrel. Once the collection barrel becomes full, the drill is lifted out of the borehole and the collection barrel is pulled upwards by the auxiliary winch of the drilling rig to empty the cuttings.



**REVERSE CIRCULATION DRILLING (RCD):** RCD drilling when done in conjunction with the multi-hammer is a very effective method of drilling through all types of formations for shallow drilling as well as depths exceeding 300 ft (90m). For RCD drilling, a transfer pipe is bolted to the top of the drilling barrel which in turn connects to special double wall RCD drill rods with HEX connections. The HEX connection drill rods of standard length are conveniently coupled together through PIN and BOX connections utilizing a pair of through bolts. The upper part of the drill string connects to the lower side of the piling rig gearbox through a drive adapter while an air swivel sits on top of the gear box. Air is supplied to the inlet of the swivel through an air hose connected to air compressors of adequate capacity and pressure.

## Technical specifications

Model	Diameter mm	Diameter inches	No. of Hammers	Air Required CFM	Air Required m <sup>3</sup> /min
MHD-750	750	30"	4	1600 - 2500	45 - 71
MHD-800	800	32"	4	1600 - 2500	45 - 71
MHD-900	900	36"	4	2000 - 3000	57 - 85
MHD-1000	1000	40"	5	2500 - 4000	71 - 114
MHD-1200	1200	48"	6	3000 - 5000	85 - 142

Other sizes can be supplied on request.



# ▶ Crosshole Sonic Logging Tubes

HEMCO Crosshole Sonic Logging (CSL) tubes provide an accurate, cost effective and non-destructive means of investigating the integrity of concrete in drilled cast-in-situ piles. Specially designed rubber gasket at the joint ensures proper sealing and quick installation.

## Key Features

- No welding required at jobsites
- Quick installation within rebar cage
- Each tube is pressure tested in factory against leakage

## CSL Integrated Parts

CSL testing can provide valuable feedback regarding following possible defects in cast-in-situ piles:

- Honeycombing during the concreting operation.
- Washout of cement due to groundwater flow.
- Cracks in pile shaft due to shrinkage, thermal stresses or other defects in concrete.
- Inclusion of foreign material (e.g. soil) during the concreting operation.
- Necking of the pile due to collapse of sidewall during withdrawal of the temporary casing.

The CSL tubes are installed within the steel cage at the time of fabrication of the cage. At the time of lapping of steel cages, the lightweight CSL tubes can easily be press-fitted together with specially designed joint as shown in the adjacent sketch.





## CSL Integrated Parts



## CSL Specifications and Test Results

<b>Diameter:</b>	50 mm (2")
<b>Wall Thickness:</b>	From 1.0 mm to 2.0 mm
<b>Standard Length:</b>	58 m
<b>Water Proofness:</b>	Until 200 m
<b>Pull out Strength on Bell mouth:</b>	40 kg (12 m of water filled tubes)
<b>Fixing Ear Loading Capacity:</b>	70 m of water filled tubes

Lorem Ipsum

## Quick Fix System for CSL Tubes

Economical, safe and quick to press-fit in two easy steps.

### STEP 1 – FIXING IN STEEL CAGE

Press fit appropriate length of CSL tubes together, place in the rebar cage and fix to the longitudinal rebars using steel binding wire.

Firmly connect adjacent tubes using binding wire ties through ears pre-welded to the CSL tubes for this purpose.

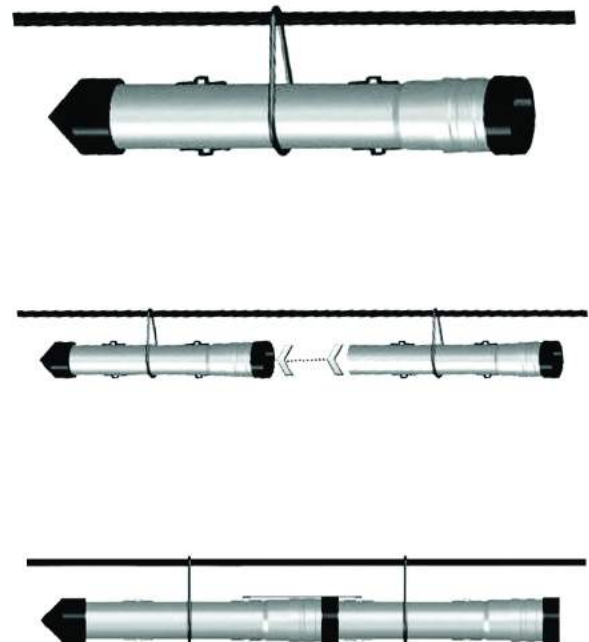
Binding with longitudinal steel rebars should be light enough to ensure that free length of 10 cm is available to move the tubes sideways and vertically at time of lapping.

### STEP 2 – LAPPING OF STEEL CAGE

Align the tube in the upper cage with the tube in the lower cage Push the upper tube into the bell mouth of the lower tube. Ensure that the rubber gasket in the bell mouth is not damaged during this press-fitting operation.

Ensure adequate insertion of the upper tube into the bell mouth of the lower tube such that the reference line on the upper tube reaches the mouth of the lower tube.

Connect tightly the ears of both tubes with steel binding wire.









# ► De-sanders

HEMCO De-sanders are becoming increasingly popular for both piling and diaphragm wall works.

HEMCO manufactures following types of de-sanders:

- HDP100 for use in piling works where small volumes of slurries need to be processed
- HDP250 for piling and grab based diaphragm wall applications where large volumes of slurries are to be handled
- HDP500 for trench cutter based diaphragm wall works. The HDP500 plant comprises of a combination of one pre-screening unit and two sets of HDP250.



## Technical Specifications

	HDP-100	HDP-250	HDP-500
Slurry Feed Capacity	100 m <sup>3</sup> /h	250 m <sup>3</sup> /h	500 m <sup>3</sup> /h
Vibration Motors	1.1 kW x 2	2 kW x 2	2 kW x 6
Pump Power	24.5 kW	55 kW	55 kW x 2
Cyclone	375 mm	450 mm	450 mm
Cut Point	60 micron	60 micron	60 micron
Dimensions	2.0 x 1.9 x 2.25 m	3.54 x 2.25 x 2.83 m	10.48 x 3.36 x 4.68 m
Total Weight	2,100 kg	5,000 kg	12,500 kg

# ▶ Slurry Pumps

HEMCO slurry pumps are suitable for bentonite and slurry handling with flow rates as high as 600 cubic meters per hour which makes these pumps very effective for use with diaphragm wall trench cutter system. The slurry pumps can be conveniently controlled by American made Allen Bradley Superflex VFD (Variable frequency drive) pump control system. Robust structure of components ensures long working life of the pump. The pump body and case are made of special cast steel alloy whereas pump body, belt case and the impeller are reinforced with wear resistant metal lining.



## Special Structural Features

- A large impeller diameter with short overhang ensures rigidity of shaft and makes the pump very suitable for high pumping requirements.
- Hardened stainless steel shaft sleeve with 'O' ring seals at both ends. A slip fit through the sleeve protects the shaft from the wear and corrosion.
- The deputy vanes at front and rear of impeller relieve seal pressure and minimize recirculation.
- Casing is made of ductile iron while the ribs help the casing to withstand high pressures.
- The wet parts are made of special high chrome alloys which make these parts highly resistant to abrasion and corrosion as well as impact forces, thereby leading to high service life of the pump under the toughest working environments.
- Impeller design takes into consideration high volume flow required from the pump and the concave vanes result in improved flow and corrosion resistance which in turn increase the durability of the pump.

D(mm)	Q(cu-m/hr)	N(r/min)	H(m)	Efficiency(%)	P(kW)	NPSH(m)	Motor(kW)
540	600	980	40	78	84	4.8	110



# ► Parts for D-Wall Cutter and Soil Mixing Equipment

HEMCO manufactures cutting wheels and other spare parts for diaphragm wall cutters and soil mixing equipment.

## We Offer:



































- Cutting wheels with round shank chisel
- Cutting wheels with flat teeth

## Technical Specifications

Model	Panel Width mm	Cutting Wheels with Round Shank Chisels No. of teeth	Cutting Wheels with Flat Teeth No. of teeth
HCW-640	640	10	23
HCW-800	800	14	27
HCW-1000	1000	18	31
HCW-1200	1200	22	35
HCW-1500	1500	26	39













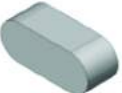













# ▶ Spare Parts for De-sanders

Description	Item Code	Description	Item Code
 Screen Insert 0.25 x 16 mm	050211	 Reducer Coupling	F090317
 Screen Insert 0.4 x 16 mm	050214	 Spigot 3 inch	F050363
 Screen Insert 0.16 x 5.65	090320	 Lower Cone (Cone 1)	F050364
 Adapter Bar for Middle Carriers	050212	 Middle Cone (Cone 2)	F050365
 Adapter Bar for Side Carriers	050215	 Upper Cone (Cone 3)	F050366
 Wire Screen Lining	050482	 Extended Feed Box (Cone 4)	F050367
 Side Protection Bar	050213	 Feed Box	F050368
 Dewatering Screen Mat 0.75 x 25 mm	050184	 Top plate	F050369
 Dewatering Screen Mat 2 x 25 mm	050483	 Vortex Finder	050370
 Pressure Spring	050148	 Over Flow Pipe (90° Bend)	F050371
 Vibration Motor 2 Kw, 1460 RPM, 415 V, 50 Hz	050782	 Inlet Feed Box Extension	F050372
 Vibration Motor 2 Kw, 1460 RPM, 400 V, 50 Hz	050200	 Deflector Plate	050558
 Float	050228	 Hopper	F050356
 Carrier Middle	F070047	 Pipe Socket	F050357
 Carrier Left Side	F070048	 18" Cyclone Assy	050355
 Carrier Right Side	F070049	 Complete Cyclone	050338
 Pipe Bend 90°	F090640	 Flexible Coupling with Sleeve DN 150 PN 16	050341



# ► Spare Parts for Drilling Rigs and Tools

Description	Description
 <p>RP-4 Pilot For B47</p>	 <p>Teeth Puller Impact Extraction</p>
 <p>Pilot Box- 200 mm</p>	 <p>Limit Stop Damper</p>
 <p>Pilot Box- 177 mm</p>	 <p>Kelly Bend</p>
 <p>Fish Tail Pilot</p>	 <p>Driving Shell Plate</p>
 <p>Conical Ring for Casing</p>	 <p>Wear Strip / Sledge 320 x 50 x 20 mm</p>
 <p>Screw for Casing</p>	 <p>Wear Strip / Sledge 320 x 50 x 20 mm</p>
 <p>Key for Casing</p>	 <p>Wear Strip / Sledge 430 x 50 x 20 mm</p>
 <p>Female Casing Joint</p>	 <p>Wear Strip / Sledge 430 x 50 x 20 mm</p>
 <p>Male Casing Joint</p>	 <p>Wear Strip / Sledge 460 x 60 x 25 mm</p>
 <p>Complete Joint Set for Casings</p>	 <p>Wear Strip / Sledge 460 x 60 x 25 mm</p>
 <p>Wrench for Casing Bolts Square Type 28 mm</p>	 <p>Wear Strip / Sledge 660 x 60 x 25 mm</p>
 <p>Wrench for Casing Bolts Hex Type 27 mm</p>	 <p>Wear Strip / Sledge 660 x 60 x 25 mm</p>

# ► Self-Drilling Anchors



## Key Features

- Applicable for various types of soils as well as for weathered rocks.
- Hollow bar is used as drill rod, inner hole is used for flushing during drilling.
- Once drilling is completed, inner hole serves for grouting of annulus.
- Steel couplers are used to achieve required splicing length.
- Speedy installation utilizing sacrificial drilling bit; drill rod becoming the rebar.
- Ribs of fully threaded bar efficiently transfer stress between the bar and grout.

## Corrosion Protection

- For temporary applications, grout is adequate as the encapsulating medium.
- For permanent applications, epoxy coated hollow bars are available.

## Technical Specifications

Model	Thread Type	Outer Diameter	Yield Load (kN)	Ultimate Load (kN)	Elongation at Ultimate Agt (%)	Maximum Elongation
R25N	R	25	150	200	≥2.5%	≥8%
R32N	R	32	230	280	≥2.5%	≥8%
R32S	R	32	280	360	≥2.5%	≥8%
R32SS	R	32	330	400	≥2.5%	≥8%
R38N	R	38	400	500	≥2.5%	≥8%
R51L	R	51	450	550	≥2.5%	≥8%
R51N	R	51	630	800	≥2.5%	≥8%
T30N	T	30	260	300	≥2.5%	≥8%
T40N	T	40	525	600	≥2.5%	≥8%
T40L	T	40	425	540	≥2.5%	≥8%
T76N	T	76	1200	1600	≥2.5%	≥8%





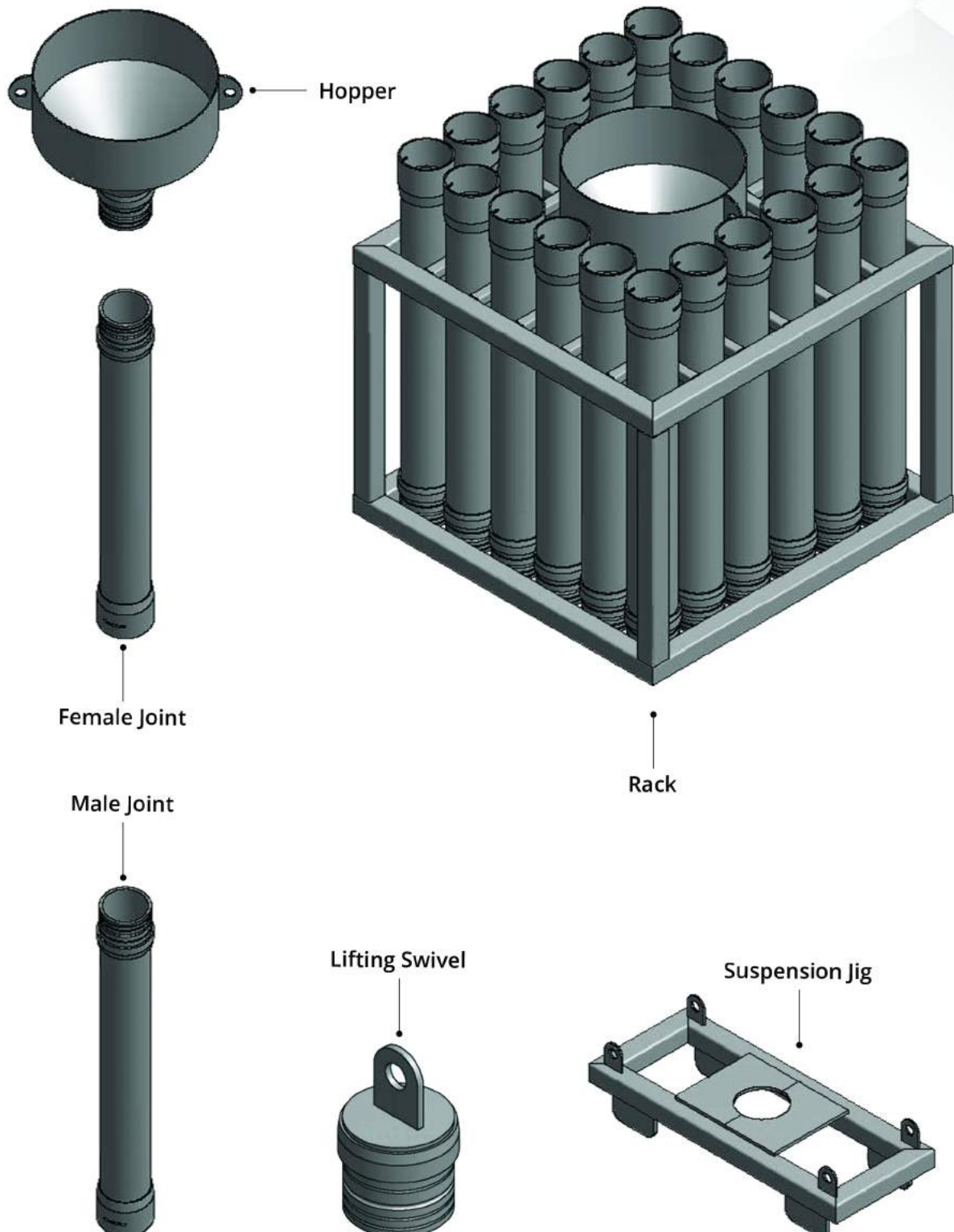
# ► Tremie Pipes

A tremie is a watertight pipe usually of about 6" to 12" (150-300mm) diameter with a conical hopper at its upper end above the water level. A tremie is used to pour the concrete underwater in a way that avoids washout of cement from the concrete mixture. We offer tremie system for piling, diaphragm wall construction, caissons and other underwater foundations. It includes:

**Funnel:** to pour concrete through the tremie pipe

**Lifting swivel:** to help the lifting and lowering options

**Chain spanner:** to tighten and unscrew the threaded joints



# ► Worldwide Distribution



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