TENN DIAMOND CORE DRILLS

Tenn® FASTENING SYSTEMS

Our core drilling machines and wet coring diamond drill bits are used in concrete construction, demolition, plant maintenance and concrete core sampling. These heavy-duty drilling machines on rock steady drill stands offer customers superior performance and much improved economics. Another plus is the famous Tenn service and spare parts support.

DIAMOND CORE DRILLING

Diamond core drilling is a method of making a hole by removing a cylinder (or "core") of concrete from a concrete beam, slab or wall. Hollow drill bits with diamond tips mounted on specially designed drill stands are used.

Pressurised water is used as a coolant for the diamond tips and also to flush away drill debris from the drilling interfaces so that the diamond bits remain sharp and advance rapidly.

Diamond drill bits will core out holes in concrete with rebar, concrete with wire mesh, concrete without reinforcement, concrete slab, concrete pipe, ceramic, porcelain and stone tiles. Holes can be completed in almost any thickness of reinforced concrete and in diameters from 500 mm down to 6 mm.

Alternative methods of creating holes in concrete are precasting and using jackhammers. However precast formworks are potentially hazardous obstructions, while jack hammers are imprecise, destructive, noisy and dusty. By contrast diamond drilling is safe, controlled and fast. Because diamond drilling is non-percussive, vibration and noise levels are greatly reduced.

Dust levels are also very much reduced because diamond drilling is a wet process.

Blind holes. These are small diameter holes of between 12 and 90 mm that are drilled partway. They are usually for anchor bolts and rebar dowels. For these applications, diamond drilling gives hole placement accuracy and hole straightness, both of which are crucial for safety-critical anchors.

Through holes. These holes are typically for fire protection, plumbing, electrical, heating and ventilation services. The holes can be drilled in horizontal or vertical direction, including overhead, and may be drilled straight or at an angle. Holes can be drilled up to 2 meter depths with the use of extension shafts connected to the drill bit.

Openings. Large circular or rectangular openings can be made in concrete floors, walls and soffits by the "stitch drilling" method, in which a series of overlapping holes are drilled to create openings of any shape, size or depth of openings. Openings may be for staircases, elevators, plumbing and electrical risers, etc. Stitch drilling is also used in demolition work.

Stitch drilling

Powerful wet drilling – with ease
Handheld or mounted on a stand

CAYKEN SCY-1520-2BS
For holes in concrete up to 100 mm diameter

Technical Data

Power input	1800 watts
Voltage	220 V
Frequency	50/60 Hz
Drilling speed	
1st gear	100-700 rpm
2nd gear	700-2770 rpm
Drilling capacities ø	
handheld	10-40 mm in concrete
on drill stand	10-125 mm in concrete
on drill stand	10-150 mm in solid brick
Tool holder	Male 1¼" UNC + Female ½" BSP
Nett weight	9 kg (Drill Motor only)
Gross weight	12 kg

- ***Torque control***
- ***Soft start***
- ***Oil immersed gear box***
- ***Safety clutch and overload protection***
- ***Waterproof switch***
- ***Carrying case for drill motor***
- ***Supplied with KY200F Tiltable Stand***
- ***Tenn service and spare parts support***

Tiltable Stand
for drilling at any angle 0-45°

CAYKEN SCY-2020-3EBS
For holes in concrete up to 150 mm diameter

Technical Data

Power input	2100 watts
Voltage	220 V
Frequency	50/60 Hz
Drilling speed	
1st gear	100-590 rpm
2nd gear	590-1310 rpm
3rd gear	1310-2730 rpm
Drilling capacities ø	
handheld	10-40 mm in concrete
on drill stand	10-180 mm in concrete
on drill stand	10-200 mm in solid brick
Tool holder	Male 1¼" UNC + Female ½" BSP
Nett weight	12 kg (Drill Motor only)
Gross weight	15 kg

- ***Torque control***
- ***Soft start***
- ***Oil immersed gear box***
- ***Safety clutch and overload protection***
- ***Waterproof switch***
- ***Carrying case for drill motor***
- ***Supplied with KY200F Tiltable Stand***
- ***Tenn service and spare parts support***

Tiltable Stand
for drilling at any angle 0-45°

CAYKEN DK-202E

For holes in concrete up to 202 mm diameter

- *Torque control*
- *Soft start*
- *Oil immersed gear box*
- *Safety clutch and overload protection*
- *Waterproof switch*
- *Tenn service and spare parts support*

Technical Data

Power input	4280 watts
Voltage	220 V
Frequency	50/60 Hz
Drilling speed	640/100-640 rpm
Drilling capacity ø	20-202 mm
Tool holder	Male 1¼" UNC + Female ½" BSP
Nett weight	23 kg (Drill Motor only)
Gross weight	26 kg

CAYKEN DK-300E

For holes in concrete up to 300 mm diameter

- *Torque control*
- *Soft start*
- *Oil immersed gear box*
- *Safety clutch and overload protection*
- *Waterproof switch*
- *Tenn service and spare parts support*

Technical Data

Power input	4980 watts
Voltage	220 V
Frequency	50/60 Hz
Drilling speed	360/100-360 rpm
Drilling capacity ø	20-300 mm
Tool holder	Male 1¼" UNC + Female ½" BSP
Nett weight	28 kg (Drill Motor only)
Gross weight	30 kg

CAYKEN SCY-3050

For holes in concrete up to 305 mm diameter

- *Torque control*
- *Soft start*
- *Oil immersed gear box*
- *Safety clutch and overload protection*
- *Waterproof switch*
- *Tenn service and spare parts support*

Technical Data

Power input	4650 watts
Voltage	220 V
Frequency	50/60 Hz
Drilling speed	490/100-490 rpm
Drilling capacity ø	25-305 mm
Tool holder	Male 1¼" UNC + Female ½" BSP
Nett weight	26 kg (Drill Motor only)
Gross weight	28 kg

CAYKEN SCY-3050T

For holes in concrete up to 305 mm diameter

Extremely high torque and powerful motor for blind holes, through holes and stitch drilling in concrete, reinforced concrete, all kinds of masonry, natural stone, asphalt, screedings – in diameters from 50 to 305 mm.

This machine is ideal for applications such as gas and sanitary piping installation, heating, and electrical installation etc., holes and openings for pipe and cable breakthroughs, air ducts, openings for risers.

Tiltable Stand
for drilling at any angle 0-45°

- ***Torque control***
- ***Soft start***
- ***Oil immersed gear box***
- ***Safety clutch and overload protection***
- ***Waterproof switch***
- ***Tenn service and spare parts support***

Technical Data

Power input	4650 watts
Voltage	220 V
Frequency	50/60 Hz
Drilling speed	490/100-490 rpm
Drilling capacity ø	25-305 mm
Tool holder	Male 1¼" UNC + Female ½" BSP
Nett weight	26 kg (Drill Motor only)
Gross weight	28 kg

WET DRILLING DIAMOND CORE BITS

For drilling into reinforced concrete and hard brick, Tenn EK and EL wet drilling diamond core bits are made using high quality MARVEL™ industrial diamonds welded to precision steel tubes to guarantee faster cutting speeds and longer drill life than just about any other product on the market.

TYPE EK
WET DRILLING DIAMOND BITS

Thread Connection:
Male ½" BSP

TYPE EK Wet Drilling Core Bits
Thread Connection: Male ½" BSP
Overall Length: 365 mm
Diamond Crown Height: 10 mm
Diameters (mm):
10/12/14/15/16/18/20/22/24/25/26/27/28/30/32/35/38/40/43/46/50/54/65/70

TYPE EL
WET DRILLING CORE BITS

Thread Connection:
Female 1¼" UNC

TYPE EL Wet Drilling Core Bits
Thread Connection: Female 1¼" UNC
Overall Length: 365 & 465 mm
Diamond Segment Height: 10 mm
Diameters (mm):
51/56/76/102/114/127/152/180/200/230/250/305

ADAPTERS FOR TENN EK/EL CORE BITS

Type DD-BI Adapter for DD100/DD110-W/DD120/DD130/DD150-U
Male 1¼" UNC + Female ½" BSP

Type DD-BL Adapter for DD160E/DD200/DD250E/DD350
Male 1¼" UNC + Female ½" BSP