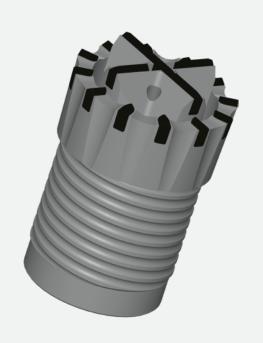




### **DRILL BITS**







In order to work in the most diverse of geologies, and to achieve the best possible drilling progress in these geologies, various drilling methods and expertise are essential. Choosing the correct drill bit for the geology at hand rounds off the drilling tool setup. This makes the process complete. Customised drill bits from D 51 mm (2-1/64") to D 620 mm (24-13/32") outer diameter can be realised to suit to a customer's requirements.

Drill bits are divided into different categories, depending on the type of use.

- Casing bits / crowns
- Rotary drill bits
- Rotary percussion bits
- Sacrificial / lost bits
- Auger drill bits
- Cutter drill bits
- Extension drill bits

To manufacture the drill bits, high-quality materials are used for the main body, and the appropriate thread profile is turned or milled into that body.

Various cemented carbides are utilised in button inserts / plates and assembled onto the bit body, including PCD geometries. The inserts are described as follows based on their geometries and working action:

- Octagonal
- Wedge-shaped scraping type
- Hemispherical
- Ballistic
- Plate

- PCD (PDC)
- Round attack picks
- Weld-on teeth (J-tooth design)
- Weld-on studs

## **DRILL BITS**

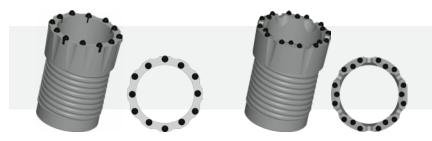
### CASING BITS FOR ROTARY PERCUSSIVE DRILLING



Rotary percussive casing bits with wedge-shaped, scraping type, button inserts



Rotary percussive casing bits with plate type tungsten carbide cutters



Rotary percussive casing bits with tungsten carbide button inserts (hemispherical or ballistic)

### CASING BITS FOR PURE ROTARY DRILLING



Rotary casing bits with octagonal type button inserts



Rotary casing bits with weld-on cutter inserts (J-tooth).

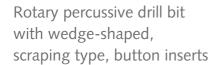


Rotary casing bits with PCD (PDC) button inserts



### FULL FACE DRILL BITS FOR ROTARY PERCUSSIVE DRILLING







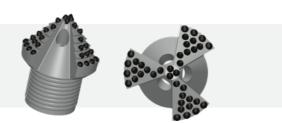
Rotary percussive drill bit with tungsten carbide cutters



Rotary percussive drill bit for down-the-hole applications



Rotary percussive drill bit, tungsten carbide plate, cross version



Rotary percussive drill bit with tungsten carbide button inserts (hemispherical and ballistic)

### FULL FACE DRILL BITS FOR PURE ROTARY DRILLING



Rotary drill bit with round attack picks



Rotary drill bit with PCD (PDC) cutters



Rotary drill bit, claw bit type

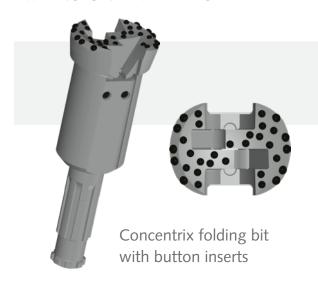


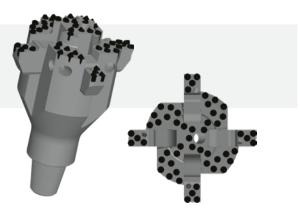
Rotary drill bit, stepped type



Auger drill bit with round attack picks

### **EXTENSION DRILL BITS**



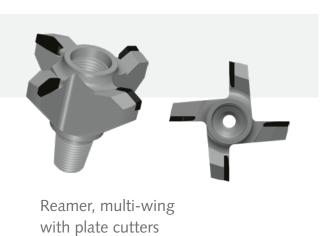


Extension bit with wedge-shaped, scraping type, button inserts

# CUTTER ("MILLING" TYPE) DRILL BITS

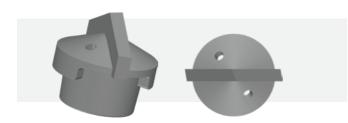
### **ROTARY REAMER**







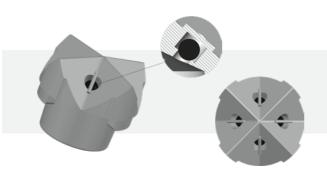
### SACRIFICIAL/LOST DRILL BITS



Lost blade with radial groove



Lost blade with bayonet connection (radial pin-and-groove)



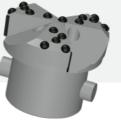
Lost cross bit with radial groove and non-return ball valve for drilling against water pressure



Latch drill bit with wedge-shaped, scraping type, button inserts



Lost blade with bayonet connection (radial pin-and-groove) and round attack picks





Rotary percussive drill bit with wedge-shaped, scraping type, button inserts, multi-wing and bayonet connection (radial pin-and-groove)

# PRECISION ENGINEERED DRILLING SOLUTIONS FROM INITIAL CONCEPT TO FINAL TOOL SYSTEMS – EVERYTHING UNDER ONE UMBRELLA!



Sysbohr's highly qualified team develop custom tooling and economically efficient solutions for all drilling projects in the special civil engineering and geothermal energy sectors.

#### THE ADDED ADVANTAGE

Project planning including: Support and guidance of drilling personnel over the entire duration of the project at hand. Quick and on-track customer results mirrrored by Sysbohr's quick turn around times from order to final delivery.

We look forward to being your partner of choice on your next projects and challenges.

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Sysbohr's offering includes the development and production of tools and accessories for the entire range of applications in diameters from 51 mm (2") to 610 mm (24").

The systems shown in this product catalogue show standard system variants and can be combined together to form unique systems if required.

Non-off-the-shelf products for complex drilling applications and extreme drilling conditions can be tailor-made to meet customer needs and expectations.

Sysbohr's sales team look forward to guiding customers through a detailed in-house consulting process, whereby a comprehensive drilling solution is identified and generated.