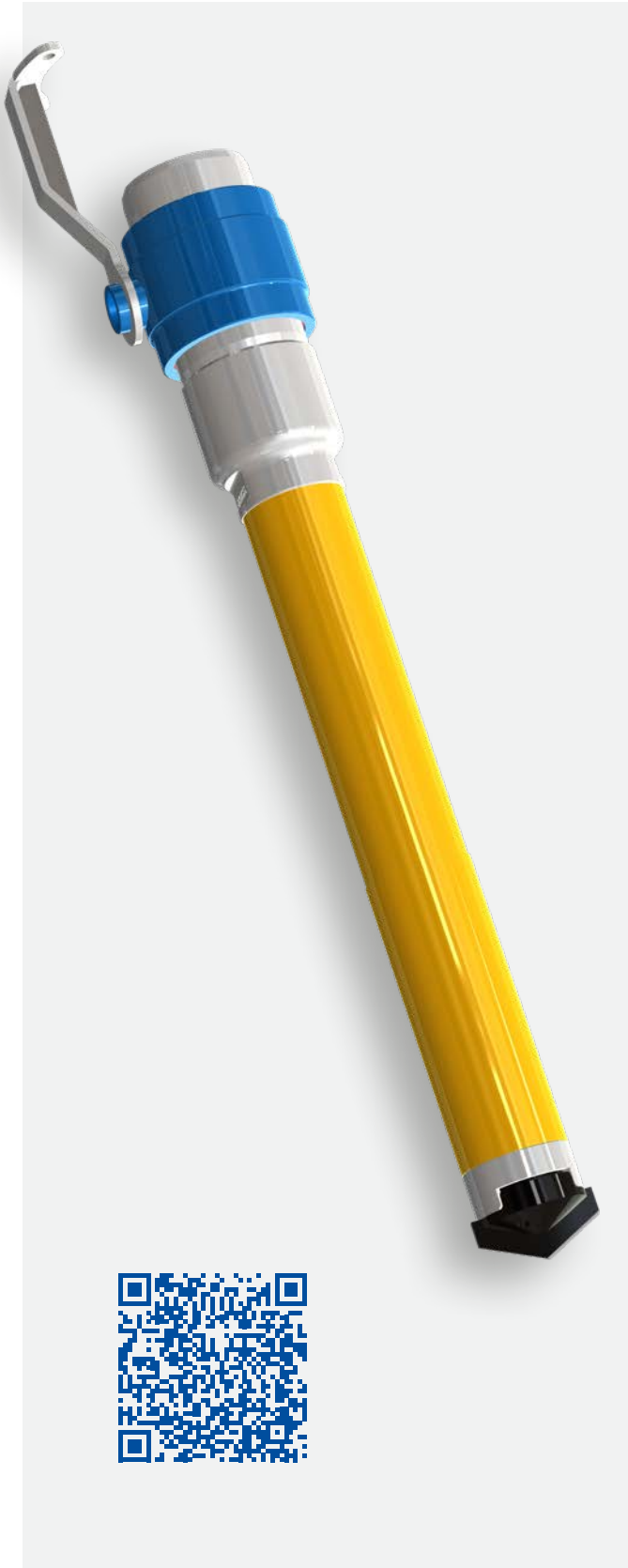


## 5 DRIVE DRILLING SYSTEM D 88.9 mm – 152.4 mm (3-1/2" – 6") with hydraulic drifter



A simple method of drilling through the overburden is with the so-called drive drilling system. The system makes use of the principle of displacement, whereby a single casing is driven through the overburden with the use of a hydraulic drifter. The drill string thus experiences both rotation and percussion.

The displacement work is carried out by a cone shaped tip that fits perfectly to the end of the drill string drill, and is also constrained in the direction of rotation. Once the desired depth of the borehole has been reached, the tip is pushed off. By the pushing off of the sacrificial bit, the casing interior is freed up to allow the introduction of temporary or permanent anchors, injections, Gewi piles etc.

The drill bit remains in the borehole and is considered to be lost. Should the ground formations contain rock deposits, the cone is replaced by a lost or sacrificial percussion drill bit made further wear-resistant via hard armouring, carbide tipping etc.

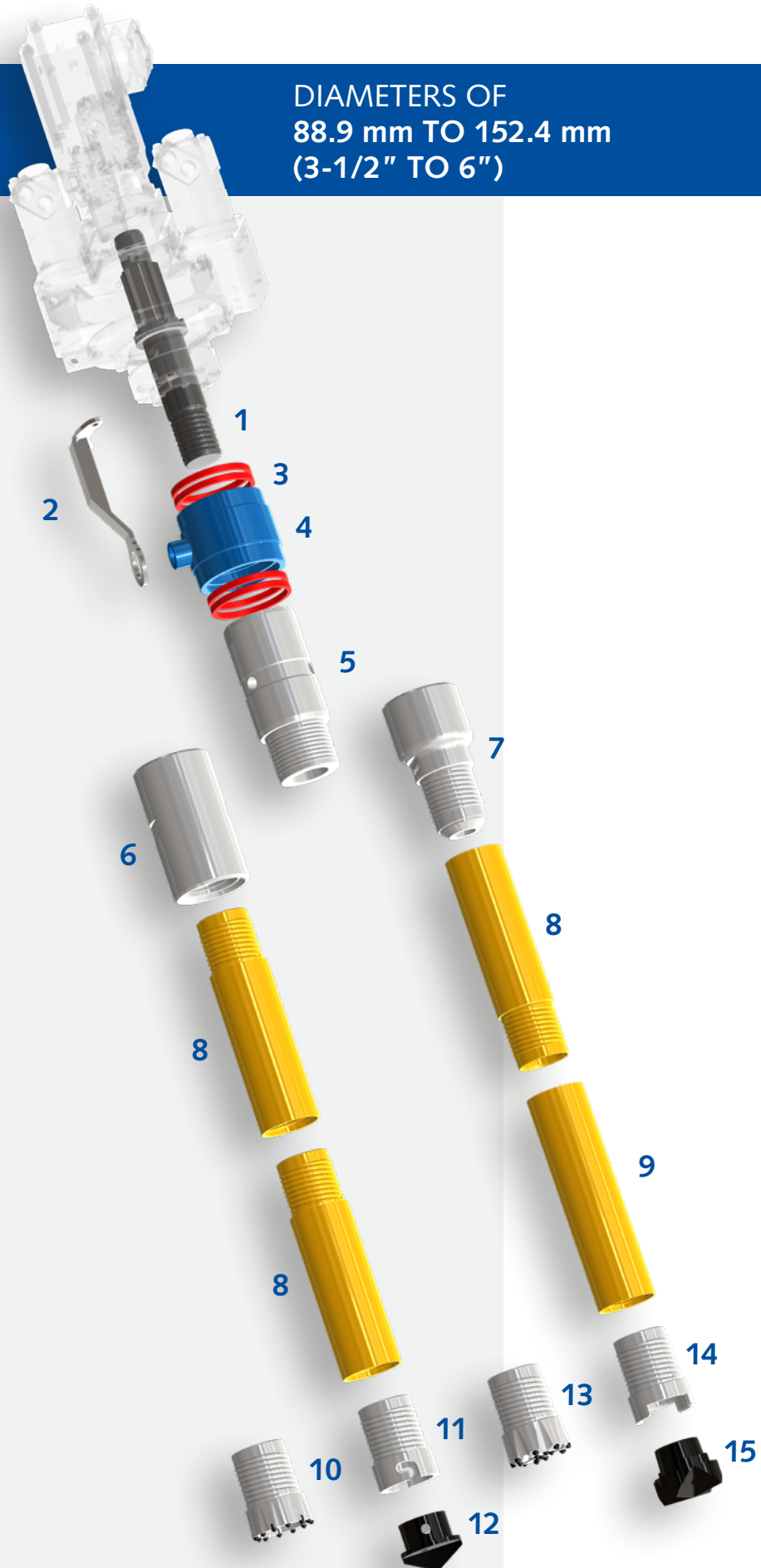
Flushing can then always be used to discharge the drilled cuttings as long as inclusions, the presence of caverns or sub-surface erosion may be excluded.

Also, drill bits can be adapted during project execution to perform more effectively against water pressure or different ground conditions, thereby increasing penetration rates.

# DRIVE DRILLING SYSTEM

with hydraulic drifter

DIAMETERS OF  
88.9 mm TO 152.4 mm  
(3-1/2" TO 6")



## COMPLETE FLEXIBILITY

Each of our drilling systems are custom-made – 100% adapted to the project needs and the ground conditions encountered at the construction site.

All drill bits are available in a plethora of designs and borehole diameters, project and / or customer specific

- 1 Shank adapter to suit hydraulic drifter brand and model

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- 2 Flushing ring holder tailor-made to integrate seamlessly with brand and model of hydraulic drifter as well as drill mast characteristics

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- 3 Flushing ring lip seals

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- 4 Flushing ring with a suitable / incorporated hose connection

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- 5 Flushing shaft to suit shank adapter, ejection bell and balancing rod

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- 6 Drive adapter

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- 7 Drive pin

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- 8 Roto-percussive casings – in lengths of 500 mm (approx. 1-5/8') to 6000 mm (approx. 20')

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- 9 Starter casing with box threads at both ends in conjunction with a drive pin

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- 10 Casing bit

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- 11 Drive shoe with machined grooves for bayonet coupling system

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- 12 Sacrificial percussion bit with radial pins for bayonet coupling system

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- 13 Percussion bit

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- 14 Drive shoe with machined slots for bayonet type coupling system

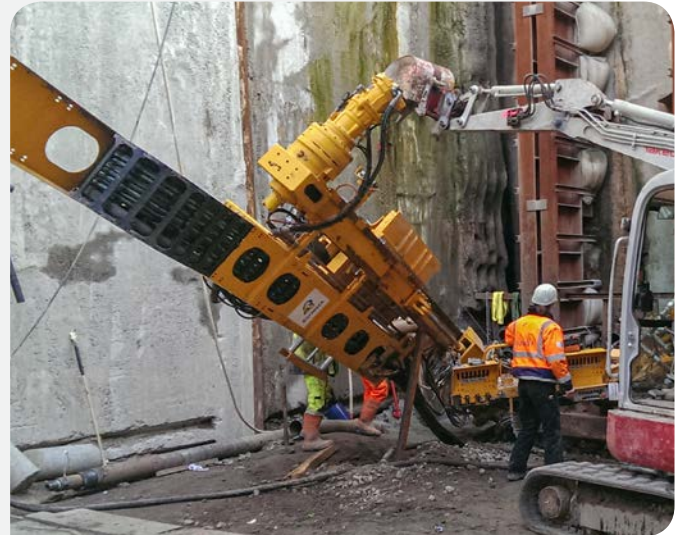
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- 15 Sacrificial percussion bit with radial groove type coupling

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The thread profiles are available in right-hand (RHT) and left-hand (LHT), as well as conical and cylindrical versions. All supplied casings are realised through various manufacturing methods and are application specific.

## THE SYSTEM IN ACTION



# 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 mirrored 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.**

## SYSBOHR GMBH

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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.**