

2 OVERBURDEN DRILLING SYSTEM DUPLEX D 88.9 mm – 219.1 mm (3-1/2" – 8-5/8") with hydraulic drifter



A method of drilling through the overburden with the aid of an outer casing to support the borehole wall is the so-called duplex drilling process. The system depicted here is drilled simultaneously with outer casings and inner rods and driven by a hydraulic drifter. The drill string thus experiences both rotation and percussion.

The flushing for the discharge of the cuttings is directed through the centre of the inner drill string, conveyed to the toe of the borehole and carried back up the drill string, above ground and expelled from the system.

The hydraulic drifter rotates and transmits percussive energy from above through the complete drill string (that consists of the outer casings and inner drill rods) driving it through the overburden.

As the impact energy through the whole drill string dissipates with length, this system is suited to shallow boreholes. With the aid of flushing rings encompassing the flushing bell, a discharge preventer (diverter) may be realised that expels the drill cuttings in a controlled manner and contamination free.

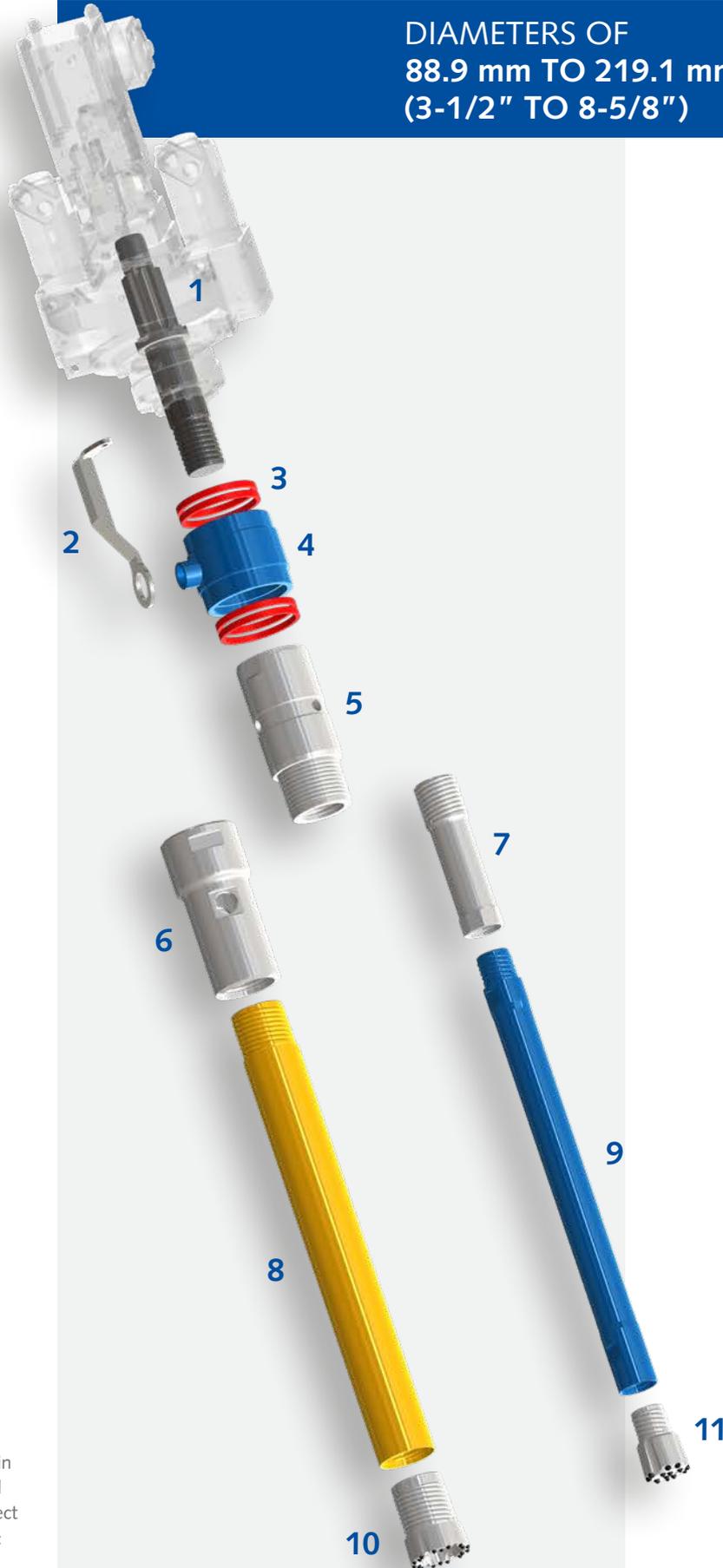
There is a complete systems offering from D 88.9 mm (3-1/2") to D 219.1 mm (8-5/8") available with a wide sortiment of external casings and inner rod combinations, as well as a plethora of ground specific drill bit designs available.



OVERBURDEN DRILLING SYSTEM DUPLEX

with hydraulic drifter

DIAMETERS OF
88.9 mm TO 219.1 mm
(3-1/2" TO 8-5/8")



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

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

- 3 Flushing ring lip seals

- 4 Flushing ring with a suitable / incorporated hose connection

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

- 6 Ejection bell to suit flushing shaft and outer casings

- 7 Balancing rod to suit flushing shaft and inner drill rods

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

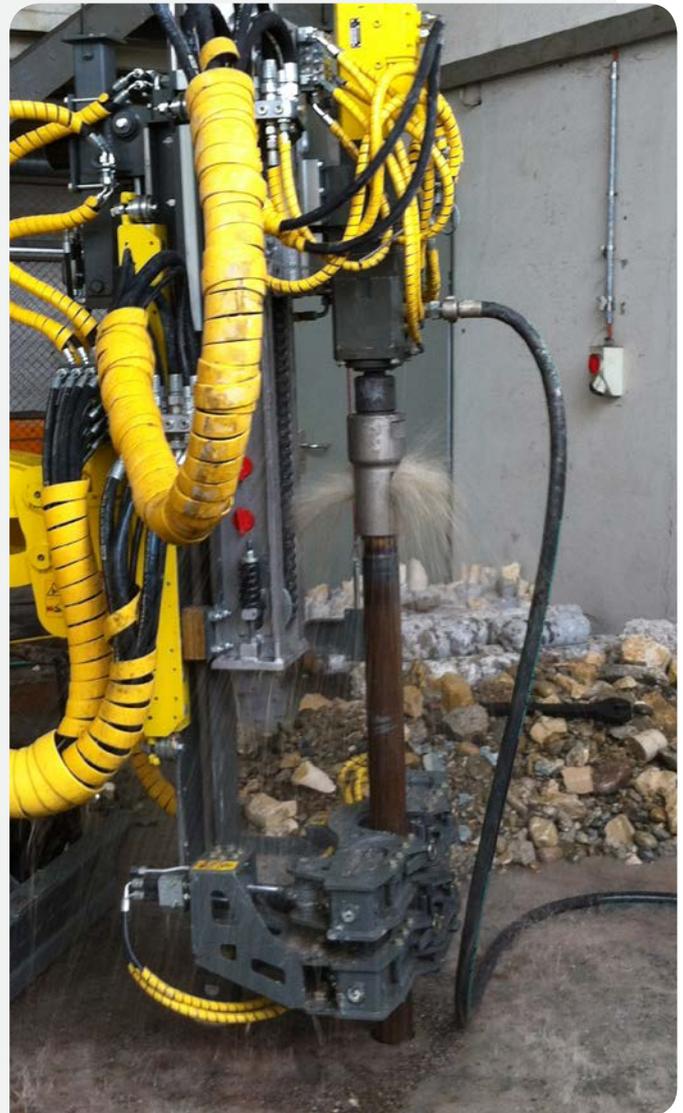
- 9 Roto-percussive drill rods (inner drill string) – in lengths of 500 mm (approx. 1-5/8') to 6000 mm (approx. 20')

- 10 Casing bit

- 11 Percussion bit

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.

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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.