

12 REVERSE CIRCULATION DRILLING SYSTEM D 139.7 mm - D 406 mm (5-1/2" - 16")



Reverse Circulation (RC) drilling is a drilling method, mostly associated with mining and exploration, where it is used to quickly and economically obtain mineral uncontaminated samples from the ground.

In foundation drilling applications, Reverse Circulation (RC) drilling can offer the same significant advantages as in mineral exploration.

This method is characterised by the use of dual-wall drill pipes to deliver compressed air down the outer casing and carry cuttings back up to surface through the inner rod.

Many advantages of Reverse Circulation (RC) drilling in mineral exploration also apply to foundation drilling, including: high-quality sample collection; fast drilling rates; and minimal water usage; are especially valuable for construction projects.

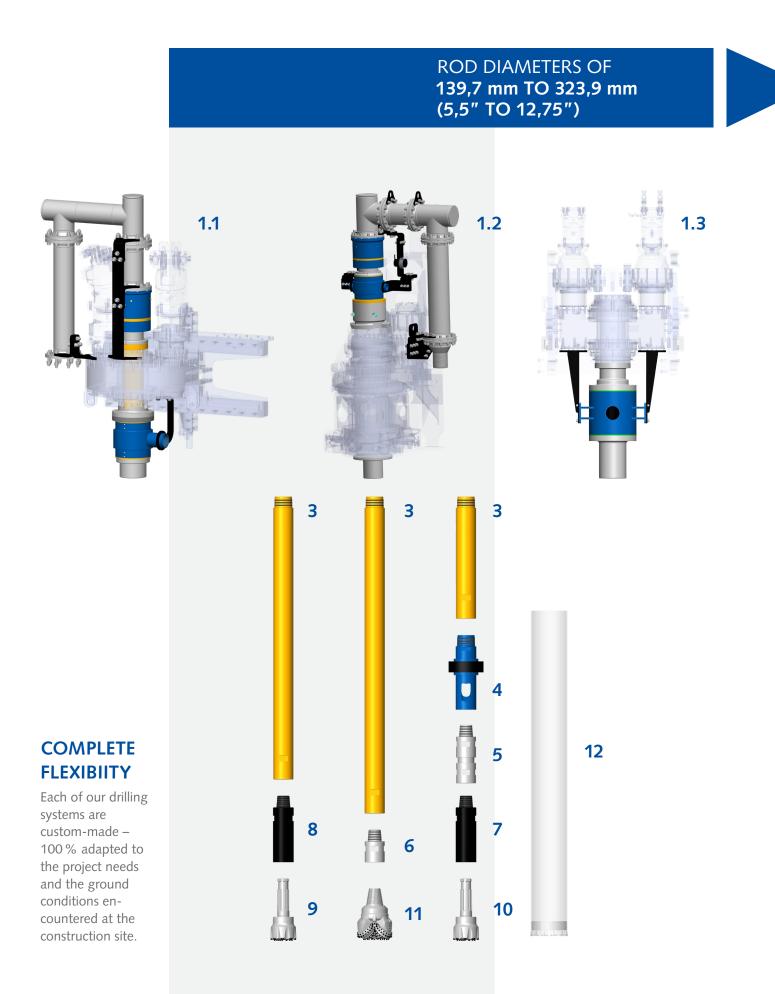
Efficiency, adaptability to the most varied of ground conditions, including unstable ground, as well as the minimal environmental impact make RC drilling a preferred option in foundation works, site investigations, and urban construction projects where environmental impact is crucial.

With Sysbohr's tool conversion kits, any drill rig, equipped for Kelly drilling, or conventional drilling, can be easily converted to RC drilling economically.

Drill rig utilisation is increased, putting a new drilling methodology into the field with the existing drill fleet, at a fraction of the cost of aquiring a dedicated new machine.

THREADED REVERSE CIRCULATION DRILLING SYSTEM

with undermount, top mount or split swivel setup



- 1 Reverse circulation (RC) discharge swivel conversion kits
 - **1.1** Split swivel top & undermount
 - **1.2** Combi swivel top mount
 - **1.3** Combi swivel undermount
 - **1.4** Kelly rig RC conversion kit with top mounted swivel
- **2** Kelly rig reverse circulation (RC) adapter
- Reverse circulation (RC) casings in lengths of 1500 mm to 12000 mm
- 4 Interchange for conventional DTH hammer in hybrid setup
- 5 Shock absorber
- **6** Adaptor-sub
- **7** Coventional DTH hammer
- 8 DTH reverse circulation (RC) hammer
- **9** DTH reverse circulation (RC) drill bit
- **10** DTH drill bit/casing advancement system
- **11** Tricone bit
- **12** Outer casing/reverse circulation (RC) shroud

THE SYSTEM IN ACTION





HEXAGONAL REVERSE CIRCULATION DRILLING SYSTEM

with undermount, top mount or split swivel setup and kelly conversion kit

ROD DIAMETERS OF 193,7 mm TO 406,4 mm (7,625" TO 16")





RC RODS - THREADED VERSION



Rod Diameter OD		Rod Wall Thickness Outer Tube		Inner Tube Inside Diameter		Length, effective	
139,7 mm	5,5"	8 mm	0,31"	76,3 mm	3"	1500 mm – 6000 mm	5' - 20'
177,8 mm	7"	8,8 mm	0,35"	98,3 mm	3,9"	1500 mm – 6000 mm	5' - 20'
219,1 mm	8 5/8"	10 mm	0,4"	109,4 mm	4,3"	1500 mm – 6000 mm	5' - 20'
273 mm	10 ¾"	12,5 mm	0,5"	148,3 mm	5,8"	1500 mm – 6000 mm	5' - 20'
323,9 mm	12 ¾"	12,5 mm	0,5"	194 mm	7,6"	1500 mm – 6000 mm	5' - 20'

RC RODS - HEX VERSION



Rod Diameter OD		Rod Wall Thickness Outer Tube		Inner Tube Inside Diameter		Length, effective	
193,7 mm	7 5/8"	10 mm	0,4"	84 mm	3,3"	1500 mm – 12000 mm	5' - 40'
273 mm	10 ¾"	12,5 mm	0,5"	122 mm	4,8"	1500 mm – 12000 mm	5' - 40'
355,6 mm	14"	12,5 mm	0,5"	158 mm	6,2"	1500 mm – 12000 mm	5' - 40'
406,4 mm	16"	12,5 mm	0,5"	199 mm	7,8"	1500 mm – 12000 mm	5' - 40'

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.

SYSBOHR GMBH

Industriepark Fulda West Karrystraße 15 36041 Fulda, GERMANY Tel +49 661 250 530 Mail info@sysbohr.com

www.sysbohr.com

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.