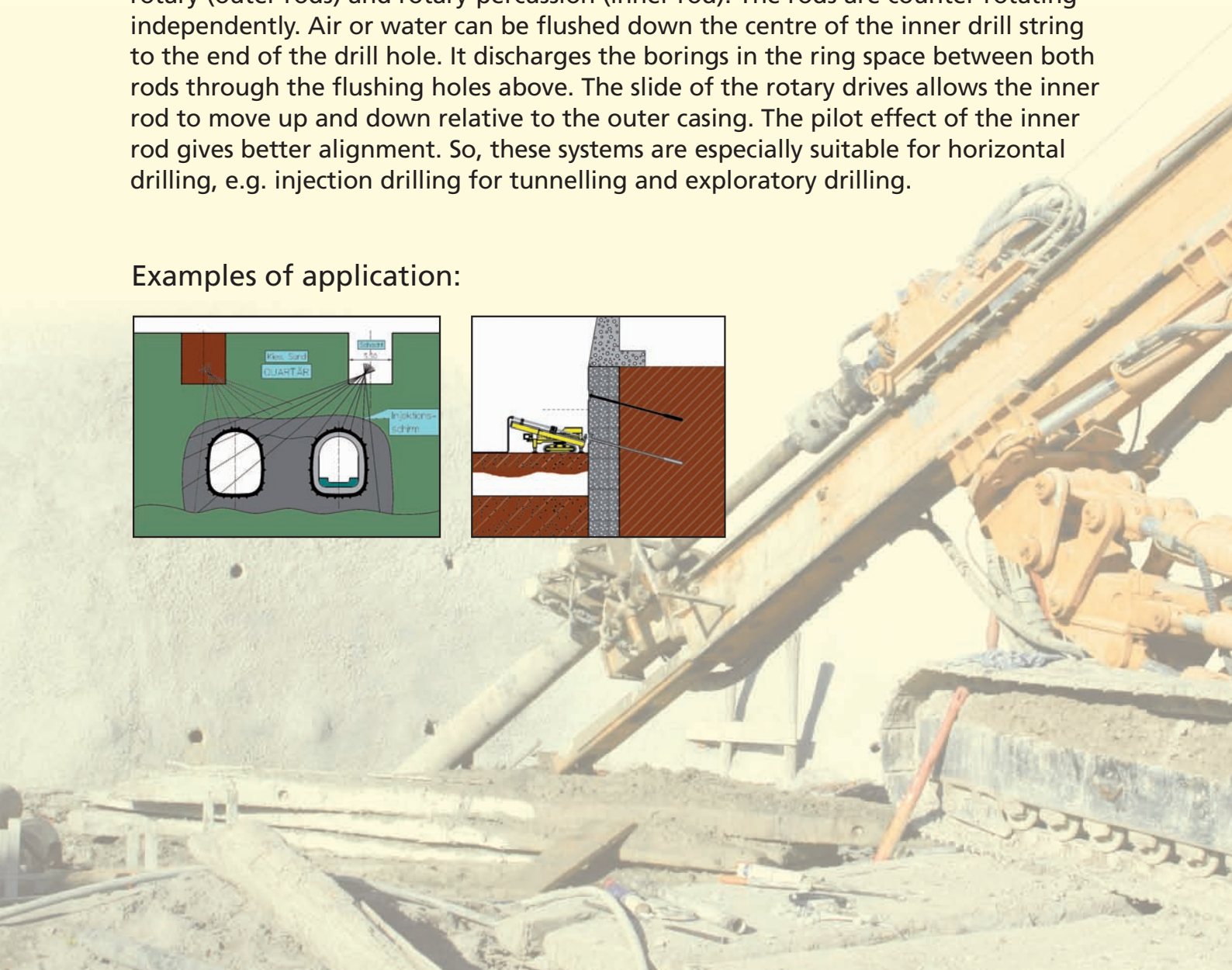
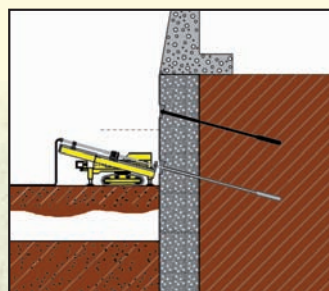
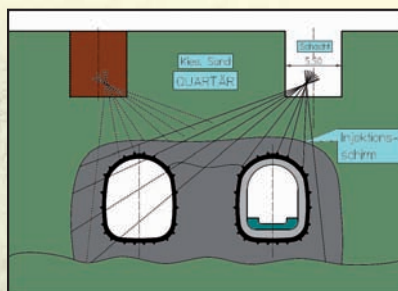


Overburden Drilling Systems D 114.3 – D 177.8 with double head drilling unit (rotary/rotary-percussion)

The name „Overburden Drilling“ results from the composition of the earth crust. The bedrock is covered with loose layers of earth consisting of sand, gravel, boulders combined with loose soil and other deposits. All these formations are grouped together under the umbrella term „Overburden“, which overlies the bedrock.

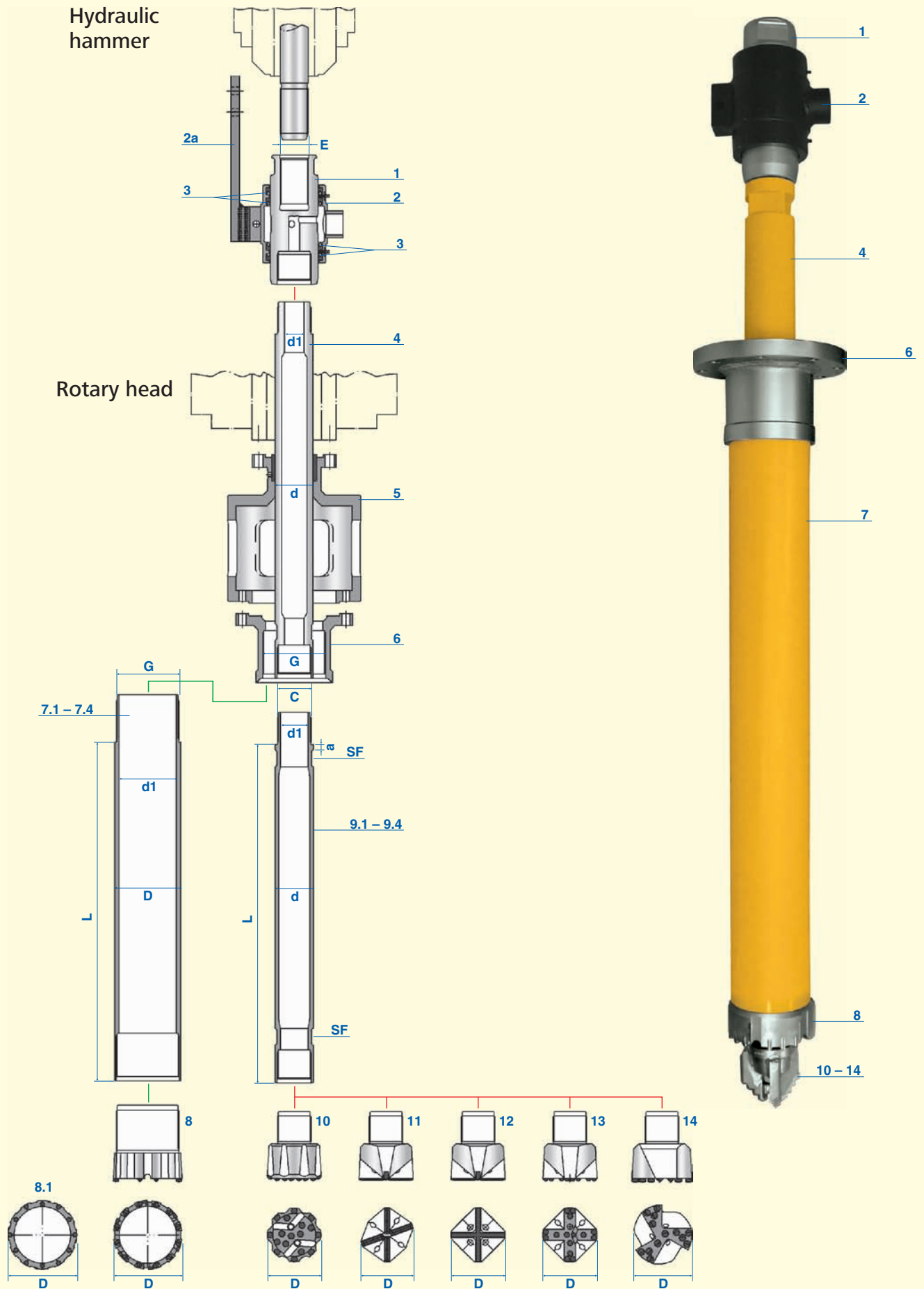
Certain drilling processes make it necessary to support the wall with tubes. The system shown here has two heads which can be moved opposite to one another, rotary (outer rods) and rotary-percussion (inner rod). The rods are counter-rotating independently. Air or water can be flushed down the centre of the inner drill string to the end of the drill hole. It discharges the borings in the ring space between both rods through the flushing holes above. The slide of the rotary drives allows the inner rod to move up and down relative to the outer casing. The pilot effect of the inner rod gives better alignment. So, these systems are especially suitable for horizontal drilling, e.g. injection drilling for tunnelling and exploratory drilling.

Examples of application:



Overburden Drilling Systems

with double head drilling unit (rotary/rotary-percussion)



Overburden Drilling System D 114.3

with double head drilling unit (rotary/rotary-percussion)

Pos.	Description
1	Flushing head D 100 x H 55 LHT female (E) x SW 76 LHT female, complete with flushing ring (Pos. 2) and seals (Pos. 3), but without holder.
2	Flushing ring D 100 x connection G 1 1/4" female.
2a	Holder for flushing ring, suitable for hydraulic drifter (indicated with order).
3	Seals for flushing ring.
4	Balancing rod d 80mm, SW 76 LHT male x T 58 LHT female (C) x length according to double head system (indicated with order).
5	Ejection bell, suitable to rotary head (indicated with order).
6	Flange D 114.3, 2 starts, cyl. RHT female (G), suitable for ejection bell Pos. 5.
7	Casing D 114.3, 2 starts, cyl. RHT (G) x 8.8mm (10mm) wth x 92mm (d1). Quality tubes: S355J2H; Welding ends: high tempered steel. Welding ends friction welded
7.1	3000 mm length
7.2	2000 mm length
7.3	1500 mm length
7.4	1000 mm length
8	Casing bit D 114.3, 2 starts, cyl. RHT male x D 120mm, hexagon type, lateral wear protection.
8.1	Casing bit D 114.3, 2 starts, cyl. RHT male x D 120mm, fitted with special TC inserts, lateral wear protection.
9	Rotary percussion tube d 76.1, T 58 LHT (C) x 8.8mm wth x 35mm (d1), with spanner flats. Quality tubes: high tempered steel quality, nitrated surface; Welding ends: friction welded.
9.1	3000 mm length
9.2	2000 mm length
9.3	1500 mm length
9.4	1000 mm length
10	Percussion bit d 76.1, T 58 LHT male x D 89mm, button type.
11	Percussion bit d 76.1, T 58 LHT male x D 89mm, X-plate.
12	Percussion bit d 76.1, T 58 LHT male x D 89mm, cross plate.
13	Percussion bit d 76.1, T 58 LHT male x D 89mm, cross plate and special TC inserts.
14	Percussion bit d 76.1, T 58 LHT male x D 89mm, X-plate and special TC inserts.

Tools

Fishing tap d 76.1, T 58 LHT male

Fishing bell d 76.1, T 58 LHT male

Spanner SW 70 x 500mm long

Lifting cap d 76.1, T 58 LHT female

Lifting nipple D 114.3, 2 starts, cyl. RHT male

Signs & Symbols

LHT = left hand thread; RHT = right hand thread; D = outer diameter; d = inner diameter; cyl. = cylindrical; con. = conical
SF = spannerflat; L = length; wth = wall thickness; G = thread connection; SW = Sysbohr thread.

The following threads are on offer: right hand, left hand, cylindrical or conical. All casings can be made friction-welded or with nipples.

Please note that this production sheet shows only standard versions due to the many possible tool variations. Special designs on request.

Overburden Drilling System D 133

with double head drilling unit (rotary/rotary-percussion)

Pos.	Description
1	Flushing head D 100 x H 55 LHT female (E) x SW 76 LHT female, complete with flushing ring (Pos. 2) and seals (Pos. 3), but without holder.
2	Flushing ring D 100 x connection G 1 1/4" female.
2a	Holder for flushing ring, suitable for hydraulic drifter (indicated with order).
3	Seals for flushing ring.
4	Balancing rod d 80mm, SW 76 LHT male x T 58 LHT female (C) x length according to double head system (indicated with order).
5	Ejection bell, suitable to rotary head (indicated with order).
6	Flange D 133, 2 starts, cyl. RHT female (G), suitable for ejection bell Pos. 5.
7	Casing D 133, 2 starts, cyl. RHT (G) x 8.8mm (10mm) wth x 110mm (d1). Quality tubes: S355J2H; Welding ends: high tempered steel. Welding ends friction welded.
7.1	3000 mm length
7.2	2000 mm length
7.3	1500 mm length
7.4	1000 mm length
8	Casing bit D 133, 2 starts, cyl. RHT male x D 140mm, hexagon type, lateral wear protection.
8.1	Casing bit D 133, 2 starts, cyl. RHT male x D 140mm, fitted with special TC inserts, lateral wear protection.
9	Rotary percussion tube d 76.1, T 58 LHT (C) x 8.8mm wth x 35mm (d1), with spanner flats. Quality tubes: high tempered steel quality, nitrated surface; Welding ends: friction welded.
9.1	3000 mm length
9.2	2000 mm length
9.3	1500 mm length
9.4	1000 mm length
10	Percussion bit d 76.1, T 58 LHT male x D 105mm, button type.
11	Percussion bit d 76.1, T 58 LHT male x D 105mm, X-plate.
12	Percussion bit d 76.1, T 58 LHT male x D 105mm, cross plate.
13	Percussion bit d 76.1, T 58 LHT male x D 105mm, cross plate and special TC inserts.
14	Percussion bit d 76.1, T 58 LHT male x D 105mm, X-plate and special TC inserts.

Tools

Fishing tap d 76.1, T 58 LHT male

Fishing bell d 76.1, T 58 LHT male

Spanner SW 70 x 500mm long

Lifting cap d 76.1, T 58 LHT female

Lifting nipple D 133, 2 starts, cyl. RHT male

Signs & Symbols

LHT = left hand thread; RHT = right hand thread; D = outer diameter; d = inner diameter; cyl. = cylindrical; con. = conical
SF = spannerflat; L = length; wth = wall thickness; G = thread connection; SW = Sysbohr thread.

The following threads are on offer: right hand, left hand, cylindrical or conical. All casings can be made friction-welded or with nipples.

Please note that this production sheet shows only standard versions due to the many possible tool variations. Special designs on request.

Overburden Drilling System D 152.4

with double head drilling unit (rotary/rotary-percussion)

Pos.	Description
1	Flushing head D 100 x H 55 LHT female (E) x SW 76 LHT female, complete with flushing ring (Pos. 2) and seals (Pos. 3), but without holder.
2	Flushing ring D 100 x connection G 1 1/4" female.
2a	Holder for flushing ring, suitable for hydraulic drifter (indicated with order).
3	Seals for flushing ring.
4	Balancing rod d 80mm, SW 76 LHT male x T 65 LHT female (C) x length according to double head system (indicated with order).
5	Ejection bell, suitable to rotary head (indicated with order).
6	Flange D 152.4, 2 starts, cyl. RHT female (G), suitable for ejection bell Pos. 5.
7	Casing D 152.4, 2 starts, cyl. RHT (G) x 8.8mm (10mm) wth x 129mm (d1). Quality tubes: S355J2H; Welding ends: high tempered steel. Welding ends friction welded.
7.1	3000 mm length
7.2	2000 mm length
7.3	1500 mm length
7.4	1000 mm length
8	Casing bit D 152.4, 2 starts, cyl. RHT male x D 160mm, hexagon type, lateral wear protection.
8.1	Casing bit D 152.4, 2 starts, cyl. RHT male x D 160mm, fitted with special TC inserts, lateral wear protection.
9	Rotary percussion tube d 88.9, T 65 LHT (C) x 8.8mm wth x 45mm (d1), with spanner flat. Quality tubes: high tempered steel quality, nitrated surface; Welding ends: friction welded.
9.1	3000 mm length
9.2	2000 mm length
9.3	1500 mm length
9.4	1000 mm length
10	Percussion bit d 88.9, T 65 LHT male x D 125mm, button type.
11	Percussion bit d 88.9, T 65 LHT male x D 125mm, X-plate.
12	Percussion bit d 88.9, T 65 LHT male x D 125mm, cross plate.
13	Percussion bit d 88.9, T 65 LHT male x D 125mm, cross plate and special TC inserts.
14	Percussion bit d 88.9, T 65 LHT male x D 125mm, X-plate and special TC inserts.

Tools

Fishing tap d 88.9, T 65 LHT male

Fishing bell d 88.9, T 65 LHT male

Spanner SW 80 x 500mm long

Lifting cap d 88.9, T 65 LHT female

Lifting nipple D 152.4, 2 starts, cyl. RHT male

Signs & Symbols

LHT = left hand thread; RHT = right hand thread; D = outer diameter; d = inner diameter; cyl. = cylindrical; con. = conical
SF = spannerflat; L = length; wth = wall thickness; G = thread connection; SW = Sysbohr thread.

The following threads are on offer: right hand, left hand, cylindrical or conical. All casings can be made friction-welded or with nipples.

Please note that this production sheet shows only standard versions due to the many possible tool variations. Special designs on request.

Overburden Drilling System D 177.8

with double head drilling unit (rotary/rotary-percussion)

Pos.	Description
1	Flushing head D 100 x H 55 LHT female (E) x SW 76 LHT female, complete with flushing ring (Pos. 2) and seals (Pos. 3), but without holder.
2	Flushing ring D 100 x connection G 1 1/4" female.
2a	Holder for flushing ring, suitable for hydraulic drifter (indicated with order).
3	Seals for flushing ring.
4	Balancing rod d 80mm, SW 76 LHT male x T 65 LHT female (C) x length according to double head system (indicated with order).
5	Ejection bell, suitable to rotary head (indicated with order).
6	Flange D 177.8, 2 starts, cyl. RHT female (G) suitable for ejection bell Pos. 5.
7	Casing D 177.8, 2 starts, cyl. RHT (G) x 8.8mm (10mm) wth x 152mm (d1). Quality tubes: S355J2H; Welding ends: high tempered steel. Welding ends: friction welded.
7.1	3000 mm length
7.2	2000 mm length
7.3	1500 mm length
7.4	1000 mm length
8	Casing bit D 177.8, 2 starts, cyl. RHT male x D 185mm, hexagon type, lateral wear protection.
8.1	Casing bit D 177.8, 2 starts, cyl. RHT male x D 185mm, fitted with special TC inserts, lateral wear protection.
9	Rotary percussion tube d 88.9, T 65 LHT (C) x 8.8mm wth x 45mm (d1), with spanner flats. Quality tubes: high tempered steel quality, nitrated surface; Welding ends: friction welded.
9.1	3000 mm length
9.2	2000 mm length
9.3	1500 mm length
9.4	1000 mm length
10	Percussion bit d 88.9, T 65 LHT male x D 145mm, button type.
11	Percussion bit d 88.9, T 65 LHT male x D 145mm, X-plate.
12	Percussion bit d 88.9, T 65 LHT male x D 145mm, cross plate.
13	Percussion bit d 88.9, T 65 LHT male x D 145mm, cross plate and special TC inserts.
14	Percussion bit d 88.9, T 65 LHT male x D 145mm, X-plate and special TC inserts.

Tools

Fishing tap d 88.9, T 65 LHT male

Fishing bell d 88.9, T 65 LHT male

Spanner SW 80 x 500mm long

Lifting cap d 88.9, T 65 LHT female

Lifting nipple D 177.8, 2 starts, cyl. RHT male

Signs & Symbols

LHT = left hand thread; RHT = right hand thread; D = outer diameter; d = inner diameter; cyl. = cylindrical; con. = conical
SF = spannerflat; L = length; wth = wall thickness; G = thread connection; SW = Sysbohr thread.

The following threads are on offer: right hand, left hand, cylindrical or conical. All casings can be made friction-welded or with nipples.

Please note that this production sheet shows only standard versions due to the many possible tool variations. Special designs on request.