

Atlas Copco Exploration Products

Bits product catalogue



Hobic™ core drilling tools

Atlas Copco

Product catalogue – Hobic

Hobic introduction.....	3
Hobic Torpedo technology.....	4
Hobic surface set	5
Hobic drilling parameters	6
Hobic crown profiles	7
Wireline impregnated core bits.....	8
Conventional diamond impregnated bits	26
Hobic unit weights	29
Bit application chart	31





Dedicated to being the best

We are committed to your superior productivity through interaction and innovation.

Atlas Copco Exploration Products continues to set new standards in the design and manufacture of diamond drill bits for the world's exploration industry. As with Atlas Copco drills and in-hole-tools, the company's Hobic bits are the choice of experienced drillers for consistently meeting and exceeding expectations.

Hobic is a true "blue collar" bit. We have incorporated the experiences and on-site requirements of the world's best drillers into the design and development of the Hobic line. Combined with cutting edge metallurgical technology and our ongoing quest to take penetration rates higher, the result is Hobic – for the most demanding core drilling conditions anywhere... today and into the future.

If you're looking for proof of our commitment to continuous improvement, consider that more than ninety percent of the impregnated diamond products in this catalogue are the result of design and technology upgrades that have occurred just in the last two years.

Need more proof? Consider this:

- In South Africa, surface drillers working in platinum formations with Hobic NQ diamond bits exceeded the "dream limit" of 50 cm/minute (20 in./minute) penetration.
- In Nevada, a contractor using an Atlas Copco Diamec U8 rig and Hobic Torpedo Technology bit drilled 185 metres (607 feet) in one ten hour shift.
- In Chile and Peru, Torpedo Technology bits provided exceptionally longer bit life in extremely abrasive rock, averaging 140 metres compared to previous bits that lasted a maximum of 90 metres.

Having the best bits in the business is only part of the Hobic story. Atlas Copco's worldwide distribution network ensures the product arrives where and when it is needed. It's what our customers expect, and we deliver.

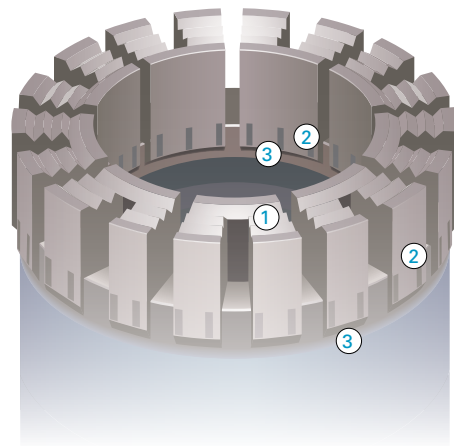


Torpedo technology... a cut above

For more than two decades, Hobic bits have been serving the exploration industries of North and South America. Today, thanks to Torpedo technology, contractors around the world are demanding the kind of results only available from this premium line of diamond products.

Torpedo technology features an exclusive matrix design that actually increases the cutting efficiency of each singular segment. Where traditional matrices have caused irregular wear and even premature failures, Torpedo technology's new alloy-based matrices provide increased toughness and control wear so that our premium synthetic diamonds are consistently exposed for optimum penetration.

Torpedo technology matrices are available on all seven Hobic crown profiles and each matrix formula is able to drill a broad range of formations. Torpedo technology has succeeded in lowering the bit cost per metre drilled. Its exceptional durability and superior abrasion resistance have proven to increase penetration rates by 30% and extend overall bit life by 60%.



① Torpedo "V" design

Although many have tried, Hobic's proprietary Torpedo "V" profile and unique matrix formula are unmatched in the industry. The V-shaped cutting segments and high-speed flushing channels reduce the contact area providing unparalleled penetration rates.

② Torpedo "tough edge"

To reduce wear caused by high speed flushing, Torpedo bits feature abrasion resistant carbide prisms, strategically placed to resist diametric wear and maintain the correct inner/outer gauge for the life of the bit.

③ Torpedo "super bond"

The secret to the longer life and cutting performance of the Torpedo matrices is a new bonding material. Developed especially for the alloy-based matrices, it comprises non-reactive elements so the matrix can maintain its superior metallurgical properties.

Hobic surface set

Surface set and impregnated reaming shells

Hobic reaming shells are manufactured to withstand difficult drilling conditions and provide long life. Surface set reaming shells in all common DCDMA sizes are a stock item. Impregnated reaming shells and reaming shells in full hole profile are also available, but may require longer lead times. Reaming shells are available in industry standard lengths of 15 cm (6"), 25 cm (10") and 46 cm (18 3/8"). A combination of polycrystalline diamonds (PCD) and natural diamonds are utilized for most standard reaming shells and all heavy duty reaming shells.

Casing and rod shoes

Hobic casing and rod shoes are manufactured to handle a broad range of conditions, from unconsolidated overburden to broken, abrasive formations. Impregnated standard and heavy duty casing shoes are stock items. Surface set casing shoes are available, but require longer lead times. Rod shoes are available only in an impregnated design.



Craelius bits

Since 1866, Atlas Copco's Craelius line has pioneered many innovative products in the diamond drilling industry. With over 100 years of experience, Craelius diamond impregnated bits offer an alternative in hard fissured and fractured formations. The full range of complimentary diamond products from Craelius includes the long life, 16 mm Jet Bit.



Atlas Copco geotechnical bits

Developed in South African drilling conditions, Atlas Copco offers a wide range of specialty bits, designed for non-abrasive to soft and broken abrasive formations. These products are used extensively in geotechnical applications as well as coal exploration.

Atlas Copco range of specialty bits:

- Surface set bits
- Polycrystalline diamond bits (PCD)
- Tungsten bits
- Non-coring bits
- Large diameter bits

Hobic drilling parameters

RPI/RPC

Many factors influence the performance of impregnated bits. In addition to the type of formation being drilled, factors such as hole diameter, depth, ground conditions, type of drill, weight on bit, water flow and RPM all have an impact on performance. The top priority of today’s drillers is performance. To achieve optimum drilling production while balancing bit life, a correlation between RPM and penetration rate has been developed for impregnated diamond bits. This parameter is referred to as Rotation per Inch of advance (RPI) or Rotation per centimeter (RPC). This parameter can be utilized as a guideline to increase penetration rates while maintaining reasonable bit life.

ROD SIZE			
Calculation	RPM Penetration rate = RPI/RPC	1200 8"/min = 150 RPM	1200 20,3 cm/min = 59 RPC
Bit sizes	RPM	Optimum RPM	RPI (RPC)
A	1500 - 1700	1650	250 (100)
B	1200 - 1450	1350	200 (79)
N	900 - 1200	1100	170 (67)
H	750 - 950	850	130 (51)
P	600 - 750	650	100 (40)

RPI or RPC = RPM / Penetration rate. This chart has been developed as a guideline for Hobic impregnated diamond bits.

“Polished” bit

Often an indication that an impregnated bit has become polished will be a reduction in torque and penetration rate, with an increase in the weight on bit (WOB). Controlling the flow of water can be used as a method to sharpen the bit. To sharpen a bit in the hole, gradually reduce the flow of water while increasing the weight on the bit to strip the bit and expose fresh diamonds. Once the bit has been sharpened increase the flow of water and reduce the WOB as required.

Water flow

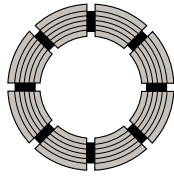
Water flow is a critical parameter. Insufficient or excessive water flow can result in poor performance.

Size	LPM (USGPM)	RPM
A	15-20 (4-5)	1650
B	30-36 (8-10)	1350
N	38-45 (10-12)	1100
H	50-60 (13-16)	850
P	75-84 (20-22)	650

Water flow may vary depending on the specific application and therefore this chart is only to be used as a guideline.

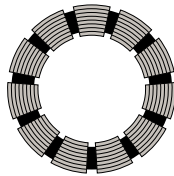


Hobic crown profiles



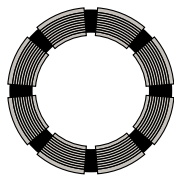
Channel flushing (CF)

- Standard profile - general purpose design
- Suitable for a broad range of formations.



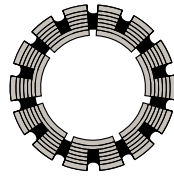
Extended channel flushing (ECF)

- Preferable in competent and semi-broken rock
- Suitable for mixed formations containing broken and competent zones.



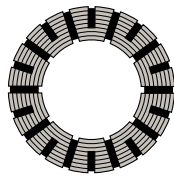
Wedge (pie shaped)

- Superior flushing capability
- Improved productivity
- Preferable in abrasive or broken rock.



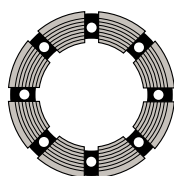
Torpedo "V"

- High performance "free cutting" bit
- High productivity
- Suitable for hard/competent formations.



Turbo

- High productivity
- Suitable for competent formations.



Face discharge (FD)

- Designed to minimize flushing of core sample
- Suitable for broken/granular formations.

Wireline diamond impregnated core bits

AQ Double tube

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
AQ	7AC	Torpedo 'V'	13		7	3760 9034 65
AQ	7AC "F"	Torpedo 'V'	13		7	3760 9038 65
AQ	8AC	ECF	13		7	3760 9039 46
AQ	8AC	Torpedo 'V'	13		7	3760 9039 47
AQ	9AC	CF	10		8	3760 9037 31
AQ	11AC	ECF	13		7	3760 9048 85

BQ Double tube

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
BQ	3AC	CF	13		8	3760 9043 09
BQ	3AC	Torpedo 'V'	10		7	3760 9043 11
BQ	3AC	1/4" Wedge WW	13		6	3760 9040 29
BQ	5AC	CF	10		8	3760 9043 02
BQ	5AC	CF	13		8	3760 9040 86
BQ	5AC	ECF	10		9	3760 9043 20
BQ	5AC	ECF	13		9	3760 9040 91
BQ	5AC	Torpedo 'V'	10		7	3760 9043 12
BQ	5AC	Torpedo 'V'	13		7	3760 9035 38
BQ	5AC	1/4" Wedge WW	10		6	3760 9043 27
BQ	5AC	1/4" Wedge WW	13		6	3760 9040 30
BQ	7AC	CF	10		8	3760 9043 03
BQ	7AC	CF	13		8	3760 9040 85
BQ	7AC	ECF	10		9	3760 9043 21
BQ	7AC	ECF	13		9	3760 9040 90
BQ	7AC	Turbo	13		8	3760 9039 81
BQ	7AC	Torpedo 'V'	10		7	3760 9043 13
BQ	7AC	Torpedo 'V'	13		7	3760 9033 48
BQ	7AC	1/4" Wedge WW	10		6	3760 9043 28
BQ	7AC	1/4" Wedge WW	13		6	3760 9043 35
BQ	7AC "F"	CF	10		8	3760 9043 04
BQ	7AC "F"	CF	13		8	3760 9040 84
BQ	7AC "F"	ECF	10		9	3760 9043 22
BQ	7AC "F"	ECF	13		9	3760 9040 89
BQ	7AC "F"	Torpedo 'V'	10		7	3760 9043 14
BQ	7AC "F"	Torpedo 'V'	13		7	3760 9038 66
BQ	7AC "F"	1/4" Wedge WW	10		6	3760 9043 29
BQ	7AC "F"	1/4" Wedge WW	13		6	3760 9043 36
BQ	7D	Tapered crown	10		8	3760 9032 57
BQ	7D	Torpedo 'V'	10		7	3760 9027 17
BQ	7SA	Turbo	10		8	3760 9017 72
BQ	7SA	Torpedo 'V'	10		7	3760 9024 38
BQ	8AC	CF	10		8	3760 9043 05

Waterways described as WW

"F" - denotes free cutting matrix in hard formations

Products in bold are stock items, other items are produced to order.

Wireline diamond impregnated core bits

BQ Double tube continued						
Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
BQ	8AC	ECF	10		9	3760 9042 24
BQ	8AC	ECF	13		9	3760 9043 26
BQ	8AC	Torpedo 'V'	10		7	3760 9043 15
BQ	8AC	Torpedo 'V'	13		7	3760 9043 19
BQ	8AC	1/4" Wedge WW	10		6	3760 9043 30
BQ	8AC	1/4" Wedge WW	10	R	6	3760 9045 90
BQ	8AC	1/4" Wedge WW	13		6	3760 9043 37
BQ	9AC	CF	10		8	3760 9037 32
BQ	9AC	CF	13		8	3760 9040 83
BQ	9AC	ECF	10		9	3760 9042 25
BQ	9AC	ECF	13		9	3760 9040 88
BQ	9AC	Torpedo 'V'	10		7	3760 9043 16
BQ	9AC	Torpedo 'V'	13		7	3760 9035 45
BQ	9AC	1/4" Wedge WW	10		6	3760 9043 31
BQ	9AC	1/4" Wedge WW	13		6	3760 9043 38
BQ	10E4	CF	10		8	3760 0000 17
BQ	11AC	CF	10		8	3760 9043 06
BQ	11AC	CF	13		8	3760 9040 82
BQ	11AC	ECF	10		9	3760 9043 23
BQ	11AC	ECF	13		9	3760 9040 87
BQ	11AC	Torpedo 'V'	10		7	3760 9033 68
BQ	11AC	Torpedo 'V'	13		7	3760 9035 37
BQ	11AC	1/4" Wedge WW	10		6	3760 9043 32
BQ	11AC	1/4" Wedge WW	13		6	3760 9043 39
BQ	12/14	CF	10		8	3760 9007 53
BQ	12/14	Turbo	10		8	3760 9027 15
BQ	13AC	CF	10		8	3760 9043 07
BQ	13AC	CF	13		8	3760 9040 81
BQ	13AC	ECF	10		9	3760 9043 24
BQ	13AC	ECF	13		9	3760 9039 27
BQ	13AC	Torpedo 'V'	10		7	3760 9043 17
BQ	13AC	Torpedo 'V'	13		7	3760 9039 25
BQ	13AC	1/4" Wedge WW	10		6	3760 9043 33
BQ	13AC	1/4" Wedge WW	13		6	3760 9043 40
BQ	15AC	CF	10		8	3760 9043 08
BQ	15AC	CF	13		8	3760 9043 10
BQ	15AC	ECF	10		9	3760 9043 25
BQ	15AC	ECF	13		9	3760 9039 28
BQ	15AC	Torpedo 'V'	10		7	3760 9043 18
BQ	15AC	Torpedo 'V'	13		7	3760 9039 26
BQ	15AC	1/4" Wedge WW	10		6	3760 9043 34
BQ	15AC	1/4" Wedge WW	13		6	3760 9043 41

Waterways described as WW

"F" - denotes free cutting matrix in hard formations

Products in bold are stock items, other items are produced to order.

Wireline diamond impregnated core bits

NQ Double tube

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
NQ	2C	CF	10		10	3760 9015 32
NQ	3AC	Torpedo 'V'	13		9	3760 9034 45
NQ	3AC	1/4" Wedge WW	10		8	3760 9038 22
NQ	3AC	1/4" Wedge WW	13	R	8	3760 9042 63
NQ	5AC	CF	10		10	3760 9043 79
NQ	5AC	CF	13		10	3760 9040 92
NQ	5AC	ECF	10		11	3760 9043 87
NQ	5AC	ECF	13		11	3760 9040 96
NQ	5AC	Turbo	13		10	3760 9040 97
NQ	5AC	Torpedo 'V'	10		9	3760 9044 05
NQ	5AC	Torpedo 'V'	13		9	3760 9036 65
NQ	5AC	1/4" Wedge WW	10		8	3760 9043 95
NQ	5AC	1/4" Wedge WW	13		8	3760 9041 03
NQ	5AC	1/4" Wedge WW	13	R	8	3760 9042 70
NQ	7AC	CF	10		10	3760 9043 80
NQ	7AC	CF	13		10	3760 9040 93
NQ	7AC	ECF	10		11	3760 9043 88
NQ	7AC	ECF	13		11	3760 9039 83
NQ	7AC	Turbo	13		10	3760 9040 98
NQ	7AC	Torpedo 'V'	10		9	3760 9036 54
NQ	7AC	Torpedo 'V'	13		9	3760 9033 50
NQ	7AC	1/4" Wedge WW	10		8	3760 9043 96
NQ	7AC	1/4" Wedge WW	13		8	3760 9041 04
NQ	7AC	1/4" Wedge WW	13	R	8	3760 9042 64
NQ	7AC "F"	CF	10		10	3760 9043 81
NQ	7AC "F"	CF	13		10	3760 9040 94
NQ	7AC "F"	ECF	10		11	3760 9043 89
NQ	7AC "F"	ECF	13		11	3760 9038 07
NQ	7AC "F"	Turbo	13		10	3760 9040 99
NQ	7AC "F"	Torpedo 'V'	10		9	3760 9044 06
NQ	7AC "F"	Torpedo 'V'	13		9	3760 9038 23
NQ	7AC "F"	1/4" Wedge WW	10		8	3760 9043 97
NQ	7AC "F"	1/4" Wedge WW	13		8	3760 9044 04
NQ	7SA	Turbo	10		10	3760 9027 26
NQ	7SA	Torpedo 'V'	10		9	3760 9025 92
NQ	7SA	Torpedo 'V'	13		9	3760 9018 49
NQ	8AC	CF	10		10	3760 9043 82
NQ	8AC	CF	13		10	3760 9043 86
NQ	8AC	ECF	10		11	3760 9043 90
NQ	8AC	ECF	13		11	3760 9043 94
NQ	8AC	Torpedo 'V'	10		9	3760 9044 07
NQ	8AC	Torpedo 'V'	13		9	3760 9039 62
NQ	8AC	1/4" Wedge WW	10		8	3760 9043 98

Waterways described as WW

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Wireline diamond impregnated core bits

NQ Double tube continued						
Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
NQ	8AC	1/4" Wedge WW	13		8	3760 9042 26
NQ	9AC	CF	10		10	3760 9043 83
NQ	9AC	CF	13		10	3760 9034 76
NQ	9AC	ECF	10		11	3760 9043 91
NQ	9AC	ECF	13		11	3760 9037 63
NQ	9AC	Turbo	13		10	3760 9041 00
NQ	9AC	Torpedo 'V'	10		9	3760 9036 21
NQ	9AC	Torpedo 'V'	13		9	3760 9035 44
NQ	9AC	1/4" Wedge WW	10		8	3760 9043 99
NQ	9AC	1/4" Wedge WW	13		8	3760 9041 06
NQ	9H	CF	10		10	3760 9013 10
NQ	10K	CF	10		10	3760 9020 14
NQ	10K	Torpedo 'V'	10		9	3760 9021 93
NQ	11AC	CF	10		10	3760 9043 84
NQ	11AC	CF	13		10	3760 9034 77
NQ	11AC	ECF	10		9	3760 9036 06
NQ	11AC	ECF	13		11	3760 9037 72
NQ	11AC	ECF	13	R	11	3760 9042 27
NQ	11AC	Turbo	13		10	3760 9041 01
NQ	11AC	Torpedo 'V'	10		9	3760 9036 20
NQ	11AC	Torpedo 'V'	13		9	3760 9033 99
NQ	11AC	Torpedo 'V'	13	R	9	3760 9042 67
NQ	11AC	1/4" Wedge WW	10		8	3760 9044 00
NQ	11AC	1/4" Wedge WW	13		8	3760 9041 07
NQ	12/14	CF	10		10	3760 9028 27
NQ	12/14	Turbo	10		10	3760 0001 04
NQ	12/14	1/4" Wedge WW	10		10	3760 9009 39
NQ	13AC	CF	10		10	3760 9043 85
NQ	13AC	CF	13		10	3760 9040 95
NQ	13AC	ECF	10		11	3760 9043 92
NQ	13AC	ECF	13		11	3760 9038 08
NQ	13AC	Turbo	13		10	3760 9041 02
NQ	13AC	Torpedo 'V'	10		9	3760 9036 59
NQ	13AC	Torpedo 'V'	13		9	3760 9040 02
NQ	13AC	1/4" Wedge WW	10		8	3760 9044 01
NQ	13AC	1/4" Wedge WW	13		8	3760 9041 08
NQ	14/15	CF	10		10	3760 0001 05
NQ	15AC	ECF	13	R	11	3760 9042 66
NQ	15AC	Torpedo 'V'	13		9	3760 9034 21

Waterways described as WW

"F" - denotes free cutting matrix in hard formations

Products in bold are stock items, other items are produced to order.

Wireline diamond impregnated core bits

HQ Double tube

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
HQ	2AC	5/16" Wedge WW	13		10	3760 9041 21
HQ	3AC	CF	10		12	3760 9044 86
HQ	3AC	CF	13		12	3760 9044 92
HQ	3AC	ECF	10		13	3760 9044 94
HQ	3AC	ECF	13		13	3760 9045 02
HQ	3AC	Torpedo 'V'	10		11	3760 9045 08
HQ	3AC	Torpedo 'V'	13		11	3760 9034 80
HQ	3AC	5/16" Wedge WW	10		10	3760 9045 04
HQ	3AC	5/16" Wedge WW	13		10	3760 9045 07
HQ	3AC	5/16" Wedge WW	10	R	10	3760 9036 48
HQ	3AC	5/16" Wedge WW	13	R	10	3760 9038 19
HQ	3J	5/16" Wedge WW	10		10	3760 9020 79
HQ	5AC	CF	10		12	3760 9044 87
HQ	5AC	CF	13		12	3760 9041 09
HQ	5AC	ECF	10		13	3760 9044 95
HQ	5AC	ECF	13		13	3760 9041 15
HQ	5AC	Torpedo 'V'	10		11	3760 9036 29
HQ	5AC	Torpedo 'V'	13		11	3760 9041 25
HQ	5AC	5/16" Wedge WW	10		10	3760 9034 79
HQ	5AC	5/16" Wedge WW	10	R	10	3760 9038 20
HQ	5AC	5/16" Wedge WW, 4140 Grade blank	10	R	10	3760 9038 70
HQ	7AC	CF	10		12	3760 9037 70
HQ	7AC	CF	13		12	3760 9041 10
HQ	7AC	ECF	10		13	3760 9044 96
HQ	7AC	ECF	13		13	3760 9041 16
HQ	7AC	Torpedo 'V'	10		11	3760 9045 09
HQ	7AC	Torpedo 'V'	13		11	3760 9033 63
HQ	7AC	5/16" Wedge WW	10		10	3760 9045 05
HQ	7AC	5/16" Wedge WW	13		10	3760 9041 22
HQ	7AC "F"	CF	10		12	3760 9044 88
HQ	7AC "F"	CF	13		12	3760 9041 11
HQ	7AC "F"	ECF	10		13	3760 9044 97
HQ	7AC "F"	ECF	13		13	3760 9041 17
HQ	7AC "F"	5/16" Wedge WW	13	R	10	3760 9049 15
HQ	7AC "F"	Torpedo 'V'	10		11	3760 9045 10
HQ	7AC "F"	Torpedo 'V'	13		11	3760 9038 24
HQ	7AC "F"	5/16" Wedge WW	10		10	3760 9045 06
HQ	7AC "F"	5/16" Wedge WW	13		10	3760 9039 78
HQ	7SA	Torpedo 'V'	10		11	3760 9014 10
HQ	8A.2	CF	10		12	3760 9012 26
HQ	8AC	CF	10		12	3760 9044 89
HQ	8AC	CF	13		12	3760 9044 93

Waterways described as WW

"F" - denotes free cutting matrix in hard formations

Products in bold are stock items, other items are produced to order.

Wireline diamond impregnated core bits

HQ Double tube continued						
Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
HQ	8AC	ECF	10		13	3760 9044 98
HQ	8AC	ECF	13		13	3760 9045 03
HQ	8AC	Torpedo 'V'	10		11	3760 9039 57
HQ	8AC	Torpedo 'V'	13		11	3760 9039 58
HQ	8AC	5/16" Wedge WW	10		10	3760 9039 59
HQ	8AC	5/16" Wedge WW	13		10	3760 9039 80
HQ	9AC	CF	10		12	3760 9037 69
HQ	9AC	CF	13		12	3760 9041 12
HQ	9AC	ECF	10		13	3760 9044 99
HQ	9AC	ECF	13		13	3760 9041 18
HQ	9AC	Torpedo 'V'	10		11	3760 9045 11
HQ	9AC	Torpedo 'V'	13		11	3760 9035 46
HQ	9AC	5/16" Wedge WW	10		10	3760 9034 98
HQ	9AC	5/16" Wedge WW	13		10	3760 9039 79
HQ	9AC	5/16" Wedge WW	13	R	8	3760 9046 17
HQ	9H	5/16" Wedge WW	10		10	3760 9021 30
HQ	10E4	5/16" Wedge WW	10		8	3760 9009 17
HQ	10K	ECF	10		13	3760 9046 11
HQ	11AC	CF	10		12	3760 9044 90
HQ	11AC	CF	13		12	3760 9041 13
HQ	11AC	ECF	10		13	3760 9045 00
HQ	11AC	ECF	13		13	3760 9041 19
HQ	11AC	Torpedo 'V'	10		11	3760 9045 12
HQ	11AC	Torpedo 'V'	13		11	3760 9035 19
HQ	11AC	5/16" Wedge WW	10		10	3760 9040 27
HQ	11AC	5/16" Wedge WW	10	R	10	3760 9034 99
HQ	11AC	5/16" Wedge WW	13		10	3760 9041 23
HQ	12/14	CF	10		12	3760 0001 90
HQ	12/14	Turbo	10		12	3760 0001 91
HQ	12/14	5/16" Wedge WW	10		10	3760 9029 46
HQ	12/14	5/16" Wedge WW	10	R	10	3760 9021 42
HQ	13AC	CF	10		12	3760 9044 91
HQ	13AC	CF	13		12	3760 9041 14
HQ	13AC	ECF	10		13	3760 9045 01
HQ	13AC	ECF	13		13	3760 9041 20
HQ	13AC	Torpedo 'V'	10		11	3760 9036 63
HQ	13AC	Torpedo 'V'	13		11	3760 9041 26
HQ	13AC	5/16" Wedge WW	10		10	3760 9036 64
HQ	13AC	5/16" Wedge WW	13		10	3760 9041 24
HQ	14/15	5/16" Wedge WW	10		12	3760 0001 92

Waterways described as WW

"F" - denotes free cutting matrix in hard formations

Products in bold are stock items, other items are produced to order.

Wireline diamond impregnated core bits

PQ Double tube

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
PQ	3AC	CF	10		14	3760 9045 52
PQ	3AC	5/16" Wedge WW	10		12	3760 9045 54
PQ	5AC	5/16" Wedge WW	10		12	3760 9042 06
PQ	7AC "F"	CF	10		14	3760 9041 98
PQ	7AC "F"	5/16" Wedge WW	10		12	3760 9042 04
PQ	8AC	CF	10		14	3760 9045 53
PQ	8AC	5/16" Wedge WW	10		12	3760 9045 55
PQ	9AC	CF	10		14	3760 9041 97
PQ	9AC	5/16" Wedge WW	10		12	3760 9042 03
PQ	11AC	CF	10		14	3760 9041 96
PQ	11AC	5/16" Wedge WW	10		12	3760 9042 02
PQ	13AC	CF	10		14	3760 9041 95
PQ	13AC	5/16" Wedge WW	10		12	3760 9042 01

AQTK Double tube thin wall

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
AQTK	7AC	CF	10		8	3760 9035 30
AQTK	7AC	CF	13		8	3760 9042 78
AQTK	7AC	Torpedo 'V'	10		7	3760 9039 85
AQTK	7AC	Torpedo 'V'	13		7	3760 9042 85
AQTK	7AC "F"	CF	13		8	3760 9039 35
AQTK	7AC "F"	Torpedo 'V'	13		7	3760 9038 62
AQTK	8AC	CF	10		8	3760 9042 75
AQTK	8AC	CF	13		8	3760 9042 79
AQTK	8AC	Torpedo 'V'	10		7	3760 9042 82
AQTK	8AC	Torpedo 'V'	13		7	3760 9039 48
AQTK	9AC	CF	10		8	3760 9042 76
AQTK	9AC	CF	13		8	3760 9042 80
AQTK	9AC	Torpedo 'V'	10		7	3760 9042 83
AQTK	9AC	Torpedo 'V'	13		7	3760 9042 86
AQTK	11AC	CF	10		8	3760 9042 77
AQTK	11AC	CF	13		8	3760 9042 81
AQTK	11AC	CF	13		8	3760 9039 36
AQTK	11AC	Torpedo 'V'	10		7	3760 9042 84
AQTK	11AC	Torpedo 'V'	13		7	3760 9039 06

Waterways described as WW

"F" - denotes free cutting matrix in hard formations

Products in bold are stock items, other items are produced to order.

Wireline diamond impregnated core bits

AOTW Double tube thin wall

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
AOTW	7AC	CF	13		8	3760 9042 91
AOTW	7AC	Turbo	10		8	3760 9032 91
AOTW	7AC	Torpedo 'V'	10		7	3760 9037 98
AOTW	7AC "F"	Turbo	13		8	3760 9031 76
AOTW	7AC "F"	Torpedo "V"	13		7	3760 9039 42
AOTW	7AA	CF	13		8	3760 9025 68
AOTW	7AA	Turbo	10		8	3760 9007 41
AOTW	7C	Turbo	10		8	3760 9013 18
AOTW	8AC	CF	10		8	3760 9042 88
AOTW	8AC	CF	13		8	3760 9042 92
AOTW	8AC	Torpedo 'V'	10		7	3760 9042 95
AOTW	8AC	Torpedo 'V'	13		7	3760 9042 99
AOTW	9AC	CF	10		8	3760 9042 89
AOTW	9AC	CF	13		8	3760 9042 93
AOTW	9AC	Torpedo 'V'	10		7	3760 9042 96
AOTW	9AC	Torpedo 'V'	13		7	3760 9043 00
AOTW	11AC	CF	10		8	3760 9042 90
AOTW	11AC	CF	13		8	3760 9042 94
AOTW	11AC	Torpedo 'V'	10		7	3760 9042 97
AOTW	11AC	Torpedo 'V'	13		7	3760 9043 01
AOTW	13AC	Turbo	10		8	3760 9044 23

BQTK Double tube thin wall

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
BQTK	3AC	CF	13	R	8	3760 9042 72
BQTK	3AC	Torpedo 'V'	13		7	3760 9039 31
BQTK	5AC	CF	10		8	3760 9043 42
BQTK	5AC	CF	13		8	3760 9043 50
BQTK	5AC	CF	13	R	8	3760 9042 71
BQTK	5AC	ECF	10		9	3760 9042 55
BQTK	5AC	ECF	13		9	3760 9043 74
BQTK	5AC	Torpedo 'V'	10		7	3760 9043 58
BQTK	5AC	Torpedo 'V'	13		7	3760 9043 66
BQTK	7AC	CF	10		8	3760 9043 43
BQTK	7AC	CF	13		8	3760 9043 51
BQTK	7AC	ECF	10		7	3760 9036 13
BQTK	7AC	ECF	13		9	3760 9043 75
BQTK	7AC	Torpedo 'V'	10		7	3760 9043 59
BQTK	7AC	Torpedo 'V'	13		7	3760 9036 00
BQTK	7AC "F"	CF	10		8	3760 9043 44
BQTK	7AC "F"	CF	13		8	3760 9043 52
BQTK	7AC "F"	ECF	10		9	3760 9043 69

Waterways described as WW

"F" - denotes free cutting matrix in hard formations

Products in bold are stock items, other items are produced to order.

Wireline diamond impregnated core bits

BQTK Double tube thin wall continued						
Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
BQTK	7AC "F"	ECF	13		9	3760 9043 76
BQTK	7AC "F"	Torpedo 'V'	10		7	3760 9043 60
BQTK	7AC "F"	Torpedo 'V'	13		7	3760 9043 67
BQTK	7SA	Torpedo 'V'	13		7	3760 9030 89
BQTK	8AC	CF	10		8	3760 9043 45
BQTK	8AC	CF	13		8	3760 9043 53
BQTK	8AC	ECF	10		9	3760 9043 70
BQTK	8AC	ECF	13		9	3760 9039 86
BQTK	8AC	Torpedo 'V'	10		7	3760 9043 61
BQTK	8AC	Torpedo 'V'	13		7	3760 9039 53
BQTK	9AC	CF	10		8	3760 9043 46
BQTK	9AC	CF	13		8	3760 9043 54
BQTK	9AC	ECF	10		7	3760 9036 12
BQTK	9AC	Torpedo 'V'	10		7	3760 9043 62
BQTK	9AC	Torpedo 'V'	13		7	3760 9038 48
BQTK	11AC	CF	10		8	3760 9043 47
BQTK	11AC	CF	13		8	3760 9043 55
BQTK	11AC	ECF	10		9	3760 9043 71
BQTK	11AC	ECF	13		9	3760 9038 74
BQTK	11AC	Torpedo 'V'	10		7	3760 9043 63
BQTK	13AC	CF	10		8	3760 9043 48
BQTK	13AC	CF	13		8	3760 9043 56
BQTK	13AC	ECF	10		9	3760 9043 72
BQTK	13AC	ECF	13		9	3760 9039 29
BQTK	13AC	Torpedo 'V'	10		7	3760 9043 64
BQTK	13AC	Torpedo 'V'	13		7	3760 9039 30
BQTK	15AC	CF	10		8	3760 9043 49
BQTK	15AC	CF	13		8	3760 9043 57
BQTK	15AC	ECF	10		9	3760 9043 73
BQTK	15AC	ECF	13		9	3760 9043 78
BQTK	15AC	Torpedo 'V'	10		7	3760 9043 65
BQTK	15AC	Torpedo 'V'	13		7	3760 9043 68

Waterways described as WW

"F" - denotes free cutting matrix in hard formations

Products in bold are stock items, other items are produced to order.

Wireline diamond impregnated core bits

BOTW Double tube thin wall

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
BOTW	3J	CF	10		8	3760 9028 21
BOTW	3J	CF	13		8	3760 9040 43
B0TW	5AC	CF	13		8	3760 9046 18
BOTW	7AC	CF	13		8	3760 9040 65
BOTW	7AC	1/4" Wedge WW	13		8	3760 9040 63
BOTW	8AC	CF	13		8	3760 9040 66
BOTW	8AC	1/4" Wedge WW	13		8	3760 9040 64
BOTW	9AC	CF	13		8	3760 9042 48
BOTW	9AC	Turbo	10		8	3760 9037 10
BOTW	11AC	Turbo	10		8	3760 9037 11
BOTW	11AC	3/16" Wedge WW	13		8	3760 9035 98
BOTW	13AC	TB	13		8	3760 9045 86
BOTW	15AC	CF	13		8	3760 9045 96

NQ2 Double tube thin wall

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
NQ2	3AC	Torpedo 'V'	13		9	3760 9034 47
NQ2	3AC	1/4" Wedge WW	13	R	8	3760 9044 25
NQ2	5AC	CF	10		10	3760 9044 42
NQ2	5AC	CF	10	R	10	3760 9042 45
NQ2	5AC	CF	13		10	3760 9041 35
NQ2	5AC	ECF	10		11	3760 9044 49
NQ2	5AC	ECF	10	R	11	3760 9042 54
NQ2	5AC	ECF	13		11	3760 9041 27
NQ2	5AC	Torpedo 'V'	10		9	3760 9044 64
NQ2	5AC	Torpedo 'V'	13		9	3760 9035 23
NQ2	5AC	1/4" Wedge WW	10		8	3760 9044 57
NQ2	5AC	1/4" Wedge WW	10	R	8	3760 9036 39
NQ2	5AC	1/4" Wedge WW	13		8	3760 9041 33
NQ2	5AC	1/4" Wedge WW	13	R	8	3760 9044 26
NQ2	7AC	CF	10		10	3760 9036 97
NQ2	7AC	CF	13		10	3760 9041 36
NQ2	7AC	ECF	10		11	3760 9044 50
NQ2	7AC	ECF	13		11	3760 9041 28
NQ2	7AC	Torpedo 'V'	10		9	3760 9044 65
NQ2	7AC	Torpedo 'V'	13		9	3760 9034 15
NQ2	7AC	1/4" Wedge WW	10		8	3760 9044 58
NQ2	7AC	1/4" Wedge WW	13		8	3760 9035 05
NQ2	7AC "F"	CF	10		10	3760 9044 43
NQ2	7AC "F"	CF	13		10	3760 9041 37
NQ2	7AC "F"	ECF	10		11	3760 9044 51
NQ2	7AC "F"	ECF	13		11	3760 9041 29
NQ2	7AC "F"	Torpedo 'V'	10		9	3760 9044 66

Waterways described as WW

"F" - denotes free cutting matrix in hard formations

Products in bold are stock items, other items are produced to order.

Wireline diamond impregnated core bits

NQ2 Double tube thin wall continued						
Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
NQ2	7AC "F"	Torpedo 'V'	13		9	3760 9040 21
NQ2	7AC "F"	1/4" Wedge WW	10		8	3760 9044 59
NQ2	7AC "F"	1/4" Wedge WW	13		8	3760 9040 18
NQ2	7SA	Torpedo 'V'	10		9	3760 9030 38
NQ2	8A.2	CF	10		10	3760 9010 97
NQ2	8A.2	1/4" Wedge WW	10		8	3760 9012 40
NQ2	8A.4	1/4" Wedge WW	13		8	3760 9026 37
NQ2	8AC	CF	10		10	3760 9044 44
NQ2	8AC	CF	13		10	3760 9044 48
NQ2	8AC	ECF	10		11	3760 9044 52
NQ2	8AC	ECF	13		11	3760 9044 56
NQ2	8AC	Torpedo 'V'	10		9	3760 9044 67
NQ2	8AC	Torpedo 'V'	13		9	3760 9040 22
NQ2	8AC	1/4" Wedge WW	10		8	3760 9044 60
NQ2	8AC	1/4" Wedge WW	13		8	3760 9040 19
NQ2	9AC	CF	10		10	3760 9044 45
NQ2	9AC	CF	13		10	3760 9041 38
NQ2	9AC	ECF	10		11	3760 9044 53
NQ2	9AC	ECF	13		11	3760 9041 30
NQ2	9AC	Torpedo 'V'	10		9	3760 9044 68
NQ2	9AC	Torpedo 'V'	13		9	3760 9032 92
NQ2	9AC	1/4" Wedge WW	10		8	3760 9044 61
NQ2	9AC	1/4" Wedge WW	13		8	3760 9041 34
NQ2	11AC	CF	10		10	3760 9044 46
NQ2	11AC	CF	13		10	3760 9041 39
NQ2	11AC	ECF	10		11	3760 9044 54
NQ2	11AC	ECF	13		11	3760 9041 31
NQ2	11AC	Torpedo 'V'	10		9	3760 9044 69
NQ2	11AC	Torpedo 'V'	13		9	3760 9035 24
NQ2	11AC	1/4" Wedge WW	10		8	3760 9044 62
NQ2	11AC	1/4" Wedge WW	13		8	3760 9040 10
NQ2	12/14	CF	10		10	3760 9020 48
NQ2	12/14	Turbo	10		10	3760 9020 49
NQ2	13AC	CF	10		10	3760 9044 47
NQ2	13AC	CF	13		10	3760 9041 40
NQ2	13AC	ECF	10		11	3760 9044 55
NQ2	13AC	ECF	13		11	3760 9041 32
NQ2	13AC	Torpedo 'V'	10		9	3760 9036 61
NQ2	13AC	Torpedo 'V'	13		9	3760 9040 23
NQ2	13AC	1/4" Wedge WW	10		8	3760 9044 63
NQ2	13AC	1/4" Wedge WW	13		8	3760 9040 20
NQ2	14/15	CF	10		10	3760 9020 50
NQ2	15AC	ECF	13		11	3760 9046 92

Waterways described as WW

"F" - denotes free cutting matrix in hard formations

Products in bold are stock items, other items are produced to order.

Wireline diamond impregnated core bits

NQ3 Triple tube

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
NQ3	5AC	CF	10		10	3760 9044 70
NQ3	5AC	CF	13		10	3760 9041 82
NQ3	5AC	1/4" Wedge WW	10		8	3760 9044 78
NQ3	5AC	1/4" Wedge WW	13		8	3760 9041 88
NQ3	7AC	CF	10		10	3760 9044 71
NQ3	7AC	CF	13		10	3760 9041 81
NQ3	7AC	1/4" Wedge WW	10		8	3760 9044 79
NQ3	7AC	1/4" Wedge WW	13		8	3760 9044 22
NQ3	7AC "F"	CF	10		10	3760 9044 72
NQ3	7AC "F"	CF	13		10	3760 9041 80
NQ3	7AC "F"	1/4" Wedge WW	10		8	3760 9044 80
NQ3	7AC "F"	1/4" Wedge WW	13		8	3760 9041 86
NQ3	8AC	CF	10		10	3760 9044 73
NQ3	8AC	CF	13		10	3760 9044 77
NQ3	8AC	Torpedo 'V'	10		9	3760 9039 64
NQ3	8AC	1/4" Wedge WW	10		8	3760 9044 81
NQ3	8AC	1/4" Wedge WW	13		8	3760 9044 85
NQ3	9AC	CF	10		10	3760 9044 74
NQ3	9AC	CF	13		10	3760 9041 79
NQ3	9AC	1/4" Wedge WW	10		8	3760 9044 82
NQ3	9AC	1/4" Wedge WW	13		8	3760 9041 85
NQ3	11AC	CF	10		10	3760 9044 75
NQ3	11AC	CF	13		10	3760 9041 78
NQ3	11AC	1/4" Wedge WW	10		8	3760 9044 83
NQ3	11AC	1/4" Wedge WW	13		8	3760 9041 84
NQ3	13AC	CF	10		10	3760 9044 76
NQ3	13AC	CF	13		10	3760 9041 77
NQ3	13AC	1/4" Wedge WW	10		8	3760 9044 84
NQ3	13AC	1/4" Wedge WW	13		8	3760 9041 83
NQ3	15AC	CF	13		10	3760 9049 07

Waterways described as WW

"F" - denotes free cutting matrix in hard formations

Products in bold are stock items, other items are produced to order.

Wireline diamond impregnated core bits

HQ3 Triple tube

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
HQ3	3AC	CF	10		12	3760 9045 13
HQ3	3AC	CF	13		12	3760 9045 21
HQ3	3AC	Torpedo 'V'	10		11	3760 9045 33
HQ3	3AC	Torpedo 'V'	13		11	3760 9045 41
HQ3	3AC	5/16" Wedge WW	10		10	3760 9045 23
HQ3	3AC	5/16" Wedge WW	13		10	3760 9045 31
HQ3	5AC	CF	10		12	3760 9045 14
HQ3	5AC	CF	13		12	3760 9041 46
HQ3	5AC	Torpedo 'V'	10		11	3760 9045 34
HQ3	5AC	Torpedo 'V'	13		11	3760 9045 42
HQ3	5AC	5/16" Wedge WW	10		10	3760 9045 24
HQ3	5AC	5/16" Wedge WW	13		12	3760 9041 58
HQ3	7AC	CF	10		12	3760 9045 15
HQ3	7AC	CF	13		12	3760 9041 45
HQ3	7AC	Torpedo 'V'	10		11	3760 9045 35
HQ3	7AC	Torpedo 'V'	13		11	3760 9037 78
HQ3	7AC	5/16" Wedge WW	13		12	3760 9041 57
HQ3	7AC "F"	CF	10		12	3760 9045 16
HQ3	7AC "F"	CF	13		12	3760 9041 44
HQ3	7AC "F"	Torpedo 'V'	10		11	3760 9045 36
HQ3	7AC "F"	Torpedo 'V'	13		11	3760 9045 43
HQ3	7AC "F"	5/16" Wedge WW	10		10	3760 9045 26
HQ3	7AC "F"	5/16" Wedge WW	13		12	3760 9041 56
HQ3	8AC	CF	10		12	3760 9045 17
HQ3	8AC	CF	13		12	3760 9045 22
HQ3	8AC	Torpedo 'V'	10		11	3760 9045 37
HQ3	8AC	Torpedo 'V'	13		11	3760 9045 44
HQ3	8AC	5/16" Wedge WW	10		10	3760 9045 27
HQ3	8AC	5/16" Wedge WW	13		10	3760 9045 32
HQ3	9AC	CF	10		12	3760 9045 18
HQ3	9AC	Torpedo 'V'	10		11	3760 9045 38
HQ3	9AC	Torpedo 'V'	13		11	3760 9045 45
HQ3	9AC	5/16" Wedge WW	10		10	3760 9045 28
HQ3	11AC	CF	10		12	3760 9045 19
HQ3	11AC	Torpedo 'V'	10		11	3760 9045 39
HQ3	11AC	Torpedo 'V'	13		11	3760 9045 46
HQ3	11AC	5/16" Wedge WW	10		10	3760 9045 29
HQ3	11AC	5/16" Wedge WW	13		12	3760 9041 54
HQ3	12/14	Turbo	10		12	3760 0002 11
HQ3	13AC	CF	10		12	3760 9045 20
HQ3	13AC	Torpedo 'V'	10		11	3760 9045 40
HQ3	13AC	Torpedo 'V'	13		11	3760 9045 47
HQ3	13AC	5/16" Wedge WW	10		10	3760 9045 30

Waterways described as WW

"F" - denotes free cutting matrix in hard formations

Products in bold are stock items, other items are produced to order.

Wireline diamond impregnated core bits

HQ3 Triple tube continued

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
HQ3	14/15	CF	10		12	3760 0002 12

PQ3 Triple tube

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
PQ3	3AC	CF	10		14	3760 9045 56
PQ3	3AC	5/16" Wedge WW	10		12	3760 9045 61
PQ3	5AC	CF	10		14	3760 9045 57
PQ3	5AC	5/16" Wedge WW	10		12	3760 9045 62
PQ3	7AC	CF	10		14	3760 9045 58
PQ3	7AC	5/16" Wedge WW	10		12	3760 9045 63
PQ3	7AC "F"	CF	10		14	3760 9045 59
PQ3	7AC "F"	5/16" Wedge WW	10		12	3760 9045 64
PQ3	8AC	CF	10		14	3760 9045 60
PQ3	8AC	5/16" Wedge WW	10		12	3760 9045 65
PQ3	9AC	CF	10		14	3760 9039 65
PQ3	9AC	5/16" Wedge WW	10		12	3760 9045 66
PQ3	11AC	CF	10		14	3760 9042 16
PQ3	11AC	5/16" Wedge WW	10		12	3760 9045 67
PQ3	13AC	CF	10		14	3760 9039 66
PQ3	13AC	5/16" Wedge WW	10		12	3760 9045 68

Waterways described as WW

"F" - denotes free cutting matrix in hard formations

Products in bold are stock items, other items are produced to order.

Wireline diamond impregnated core bits

NQ Double tube face discharge

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
NQ	3AC	FD, 1/4" Wide WW, 3/16" ports	13		8	3760 9040 31
NQ	5AC	FD, 1/4" Wide WW, 3/16" ports	13		8	3760 9040 32
NQ	7AC "F"	FD, 1/4" Wide WW, 3/16" ports	13		8	3760 9040 33
NQ	9AC	FD, 1/4" Wide WW, 3/16" ports	13		8	3760 9040 34
NQ	11AC	FD, 1/4" Wide WW, 3/16" ports	13		8	3760 9039 68
NQ	13AC	FD, 1/4" Wide WW, 3/16" ports	13		8	3760 9039 69

NQ3 Triple tube face discharge

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
NQ3	3J	FD, 1/4" Wedge WW, 3/16" ports	10	R	8	3760 9008 04
NQ3	5AC	FD, 1/4" Wedge WW, 3/16" ports	13		8	3760 9041 94
NQ3	7AC	FD, 1/4" Wedge WW, 3/16" ports	13		8	3760 9041 93
NQ3	7AC "F"	FD, 1/4" Wedge WW, 3/16" ports	13		8	3760 9041 92
NQ3	9AC	FD, 1/4" Wedge WW, 3/16" ports	13		8	3760 9041 91
NQ3	11AC	FD, 1/4" Wedge WW, 3/16" ports	13		8	3760 9041 90
NQ3	13AC	FD, 1/4" Wedge WW, 3/16" ports	13		8	3760 9041 89

HQ Double tube face discharge

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
HQ	3AC	FD, 3/8" Wedge WW, 3/16" ports	13		10	3760 9040 36
HQ	5AC	FD, 3/8" Wedge WW, 3/16" ports	13		10	3760 9040 37
HQ	7AC "F"	FD, 3/8" Wedge WW, 3/16" ports	13		10	3760 9040 38
HQ	8AC	FD, 3/8" Wedge WW, 3/16" ports	13		10	3760 9047 67
HQ	9AC	FD, 3/8" Wedge WW, 3/16" ports	13		10	3760 9042 46
HQ	11AC	FD, 3/8" Wedge WW, 3/16" ports	13		10	3760 9042 60

HQ3 Triple tube face discharge

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
HQ3	3J	FD, 5/16" Wide WW, 1/4" ports	10		8	3760 9042 15
HQ3	5AC	FD, 5/16" Wide WW, 1/4" ports	13		12	3760 9041 52
HQ3	7AC	FD, 5/16" Wide WW, 1/4" ports	13		10	3760 9041 51
HQ3	7AC "F"	FD, 5/16" Wide WW, 1/4" ports	10		8	3760 9040 13
HQ3	7AC "F"	FD, 5/16" Wide WW, 1/4" ports	13		10	3760 9046 79
HQ3	9AC	FD, 5/16" Wide WW, 1/4" ports	13		12	3760 9041 49
HQ3	11AC	FD, 5/16" Wide WW, 1/4" ports	10		8	3760 9040 14
HQ3	11AC	FD, 5/16" Wide WW, 1/4" ports	13		10	3760 9041 48

Waterways described as WW

"F" - denotes free cutting matrix in hard formations

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Wireline diamond impregnated core bits

PQ3 Triple tube face discharge

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
PQ3	5AC	FD, 5/16" Wide WW, 1/4" ports	10		10	3760 9042 11
PQ3	7AC	FD, 5/16" Wide WW, 1/4" ports	10		10	3760 9048 19
PQ3	9AC	FD, 5/16" Wide WW, 1/4" ports	10		10	3760 9042 34
PQ3	11AC	FD, 5/16" Wide WW, 1/4" ports	10		10	3760 9042 35
PQ3	11AC	FD, 5/16" Wide WW, 1/4" ports	10		10	3760 9048 79
PQ3	13AC	FD, 5/16" Wide WW, 1/4" ports	10		10	3760 9042 36

Waterways described as WW

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Wireline diamond impregnated core bits

AQ Reaming shell gauge

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
AQ	7AC "F"	RSG ECF	13		7	3760 9046 47

BQ Reaming shell gauge

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
BQ RSG	5AC	ECF	13		9	3760 9039 12
BQ RSG	5AC	Torpedo 'V'	13		7	3760 9039 13
BQ RSG	7AC	Torpedo 'V'	13		7	3760 9039 14
BQ RSG	8AC	ECF	10		7	3760 9039 51
BQ RSG	9AC	ECF	10		7	3760 9038 52
BQ RSG	9AC	Torpedo 'V'	13		7	3760 9036 70
BQ RSG	11AC	ECF	10		7	3760 9038 53
BQ RSG	11AC	Torpedo 'V'	13		7	3760 9036 71

BOTW Reaming shell gauge

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
BOTW RSG	7AC	Torpedo 'V', 4140 Grade blank	13		7	3760 9037 47
BOTW RSG	8AC	Torpedo 'V'	13		7	3760 9039 56
BOTW RSG	9AC	Torpedo 'V', 4140 Grade blank	13		7	3760 9037 48

NQ Reaming shell gauge

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
NQ RSG	7AC	CF	10		10	3760 9048 46
NQ RSG	9AC	CF	10		10	3760 9048 45
NQ RSG	15AC	Torpedo 'V'	13		9	3760 9038 49

NQ2 Reaming shell gauge

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
NQ2 RSG	3AC	CF	10		10	3760 9045 81
NQ2 RSG	5AC	ECF	10		11	3760 9044 08
NQ2 RSG	7AC	Torpedo 'V'	10		9	3760 9035 84

HQ Reaming shell gauge

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
HQ RSG	9AC	CF	10		12	3760 9045 84
HQ RSG	11AC	CF	10		10	3760 9048 80
HQ RSG	13AC	CF	10		10	3760 9048 81

PQ Reaming shell gauge

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
PQ RSG	2A0	CF	10		14	3760 9042 10
PQ RSG	9H	CF	10		12	3760 9027 06

Waterways described as WW

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Wireline diamond impregnated core bits

BQTK Oversize

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
BQTK 2.405	9AC	ECF	10		9	3760 9040 04
BQTK 2.405	11AC	ECF	10		9	3760 9040 03

BOTW Oversize

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
BOTW 2.375	7AC	Torpedo 'V', 4140 Grade blank	13		7	3760 9031 54
BOTW 2.375	8AC	Torpedo 'V', 4140 Grade blank	13		7	3760 9039 55

NQ Oversize

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
NQ 3.032	7SA	1/4" Wedge WW	10		8	3760 9038 85

NQ2 Oversize

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
NQ2 3.032	5AC	1/4" Wedge WW	10		8	3760 9038 79
NQ2 3.032	7AC	Torpedo 'V'	10		9	3760 9039 74
NQ2 3.032	7AC	Torpedo 'V'	13		9	3760 9034 41
NQ2 3.032	8AC	1/4" Wedge WW	10		8	3760 9039 63
NQ2 3.032	9AC	Torpedo 'V'	13		9	3760 9035 47
NQ2 3.032	9AC	1/4" Wedge WW	10		8	3760 9037 77
NQ2 3.032	11AC	1/4" Wedge WW	10		10	3760 9044 10
NQ2 3.032	13AC	Torpedo 'V'	10		9	3760 9039 75

HQ Oversize

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
HQ 3.830	2A0	5/16" Wedge WW	10		8	3760 9021 47
HQ 3.830	5AC	5/16" Wedge WW	10		8	3760 9039 10
HQ 3.830	5AC	5/16" Wedge WW	10	R	8	3760 9042 61
HQ 3.830	7AC "F"	5/16" Wedge WW	10		8	3760 9039 07
HQ 3.830	8AC	5/16" Wedge WW	10		10	3760 9040 73
HQ 3.830	9AC	5/16" Wedge WW	13		8	3760 9045 93
HQ 3.830	10E.4	5/16" Wedge WW	10		8	3760 9030 43
HQ 3.830	11AC	5/16" Wedge WW	13		10	3760 9042 17
HQ 3.830	13AC	5/16" Wedge WW	10		10	3760 9038 91

Waterways described as WW

"F" - denotes free cutting matrix in hard formations

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Conventional diamond impregnated core bits

TT48/LTK48 Thin wall

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
TT48 / LTK48	7AA	CF	10		8	3760 9018 41
TT48 / LTK48	7AC	CF	10		8	3760 9045 69
TT48 / LTK48	7AC	CF	13		8	3760 9045 72
TT48 / LTK48	7AC "F"	CF	10		6	3760 9031 58
TT48 / LTK48	7AC "F"	CF	13		8	3760 9045 73
TT48 / LTK48	8AC	CF	10		8	3760 9045 70
TT48 / LTK48	8AC	CF	13		8	3760 9045 74
TT48 / LTK48	9AC	CF	10		8	3760 9037 35
TT48 / LTK48	9AC	CF	13		8	3760 9045 75
TT48 / LTK48	11AC	CF	10		8	3760 9038 21
TT48 / LTK48	11AC	CF	13		8	3760 9045 76
TT48 / LTK48	13AC	CF	10		8	3760 9045 71
TT48 / LTK48	13AC	CF	13		8	3760 9045 77

LTK60 Thin wall

Size	Matrix	Crown Profile / Additional info	Crown height	Reinforced (R)	Waterways	Product No.
LTK60	7AA	CF	10		8	3760 0003 15
LTK60	8A.2	CF	10		8	3760 9027 43
LTK60	8A.2	CF	13		8	3760 9027 44
LTK60	10	CF	10		8	3760 0000 75
LTK60	11AC	CF	13		8	3760 9037 43
LTK60	12/14	CF	10		8	3760 0000 79
LTK60	13AC	CF	13		8	3760 9037 49
LTK60	14/15	CF	10		8	3760 0000 81

Waterways described as WW

"F" - denotes free cutting matrix in hard formations

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Reaming shells and casing shoes

Wireline reaming shells

Size	Matrix	Crown Profile / Additional info	Product No.
AQ	STD	Surface set	3760 9011 32
AQTK	STD	Surface set	3760 9006 99
ATW/AGM	STD	Surface set	3760 9014 24
BQ	STD	Surface set	3760 0000 59
BQTK	STD	Surface set	3760 9007 03
BTW/BGM	STD	Surface set	3760 9007 02
NQ	STD	Surface set	3760 0001 68
NQ	STD	Surface set, Full hole	3760 9020 21
NQ	STD	Surface set, Double ring (10")	3760 9026 11
NQ	STD	Surface set, Triple ring (18 3/8")	3760 9026 12
NQ	HD	Surface set, Oversize 3.0832"	3760 9013 45
NTW	STD	Surface set	3760 9034 64
NGM	STD	Surface set	3760 9007 14
HQ	STD	Surface set	3760 0010 76
HQ	STD	Surface set, Full hole	3760 9021 88
HQ	STD	Impregnated, Full hole oversize 3.850"	3760 9028 60
PQ	STD	Surface set	3760 0003 02

Conventional reaming shells

Size	Matrix	Crown Profile / Additional info	Product No.
LTK-48	STD	Surface set	3760 0000 35
LTK-60	STD	Impregnated	3760 0000 83

Casing shoes

Size	Matrix	Crown Profile / Additional info	Product No.
AW	IMP	Heavy duty, 8WW	3760 9029 03
BW	IMP	10WW	3760 9029 06
BW	IMP	Heavy duty, 10WW	3760 9029 05
NW	IMP	12WW	3760 9029 08
NW	IMP	Heavy duty, 12WW	3760 9029 07
HW	IMP	14WW	3760 9029 10
HW	IMP	Heavy duty, 14WW	3760 9029 09
HWT	IMP	Heavy duty, 6WW	3760 9016 48
PW	IMP	Heavy duty, 8WW	3760 9006 69

Rod shoes

Size	Matrix	Crown Profile / Additional info	Product No.
NQ	IMP	Rod shoe	3760 9007 24
NTW	IMP	Rod shoe	3760 9021 33
HQ	IMP	Rod shoe	3760 9007 23
PQ	IMP	Rod shoe	3760 9007 26

Waterways described as WW

"F" - denotes free cutting matrix in hard formations

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Technical information

Hobic impregnated diamond bit unit weights

Size	Unit weight Kg
IEW	0.05
IEWS	
AQ	0.23
AQTK	
AOTW/AGM	
AW34	0.45
TT-46	
TT-48	
LTK-48	
LTK-60	0.68
BQ	
BQTK	
BOTW/BGM	
BQTK (2.405")	0.75
NQ	0.91
NQ2	
NGM	
NTW/NGM	
NQ (3.032")	1.00
NQ2 (3.032)	
NQ3	1.05
HQ	2.27
HTW/HGM	
HQ (3.830")	2.50
HQ3	
HQ3 (3.830")	2.75
PQ	3.64
PQ3	3.86

Hobic reaming shell unit weights

Size	Unit weight Kg
IEW	0.45
IEWS	
AW-34	
TT-46	
JKT-48	
LTK-48	0.68
AQ	
AQTK	
ATW/AGM	1.14
LTK-60	
BQ	
BQTK	
BTW/BGM	1.36
NQ	
NGM	
NTW	2.27
HQ	
HTW/HGM	3.86
PQ	

Hobic casing shoe unit weights

Size	Unit weight Kg
AW	0.45
BW	0.91
NW	1.59
HW	2.27
PW	3.22

Hobic rod shoe unit weights

Size	Unit weight Kg
AQ	0.23
BQ	0.45
NQ	0.91
NTW	
HTW	1.59
HQ	
PQ	2.27
HWT	

ATLAS COPCO BIT TEST DATA

Company Name:

Site:

Shift:

Drilling Location:

Date:

Level:

Bit Size:

Bit Type & Matrix:

Part #:

Driller:

Bit #:

Helper:

Drill #:

Measured in Feet or Meters

Bit in:

Bit out:

Total:

Hole # & Dip:

Bit Grand Total:

Drill Type:

Average Feed Press.
PSI/Bar

Av. System Press.
PSI/Bar

Average Flow Rate
PSI/Bar

Flow rate									
Feed pressure									
System pressure									
Penetration rate									

Average penetration Rate in./min. or cm./min.

RPM @ Depth:

Ground Formation:

Comments:

Completed By:



Hobic Bit matrix selection chart

