CATALOG & TECHNICAL GUIDE 2020.2

HOLEMAKING

SECO

Seco Crownloc®

Seco Crownloc® is a range of exchangeable tip drills designed to offer high quality holes at a lower cost. Matching the quality of high precision drills, Crownloc uses replaceable crowns to eliminate the need for and cost of regrinding.

- Double coolant holes through the crown permit a high volume of coolant to reach the cutting edges.
- Crownloc® is available in a large range of optimized tip geometries for different applications and workpiece materials.

Range overview

Crownloc®	∅ Range	Drill depth	Drill ∅ tolerance	Hole tolerance (1)	Surface finish (2)
SD101  Page(s) 180	12,00-25,99 mm *0.472-1.023”*	~ 1,5 x D	k7	**IT 10**	R_a 1-3 µm R_a 39-118 µin
SD103  Page(s) 182	9,52-25,99 mm *(0.375-1.023”)*	~ 3 x D	k7	**IT 10**	R_a 1-3 µm R_a 39-118 µin
SD105  Page(s) 184	10,00-25,99 mm *(0.394-1.023”)*	~ 5 x D	k7	**IT 10**	R_a 1-3 µm R_a 39-118 µin
SD107  Page(s) 186	12,00-25,99 mm *(0.472-1.023”)*	~ 7 x D	k7	**IT 10**	R_a 1-4 µm R_a 39-157 µin
Chamfer module  Page(s) 193	12.00-19,99mm *(0.1472-0.787”)*	–	–	–	–

1) Variations can occur depending on the material and the cutting data used.
2) Drill depth, cutting data, coolant pressure and material can cause deterioration of the surface finish.

Code key

Code key crowns

Drill diameter

SD100 – **14.00** – **P**

Type of geometry
P = Steel
M = Stainless Steel
K = Cast iron

Code key drill bodies

Metric

Type of drill
SD101: 1,5 x D
SD103: 3 x D
SD105: 5 x D
SD107: 7 x D

Min/max
Crown diameter

SD103 – **14.00/14.99** – **50** – **16** – **R** **7**

Drilling depth
Shank diameter
Right hand rotation
Type of shank
1. Cylindrical
7. ISO 9766

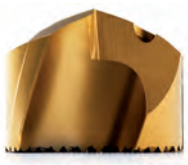
Inch

50 – **0750** – **R** **7**

Geometries

P-geometry
- Universal geometry, first choice for drilling in steel

M-geometry
- For stainless steels and high temp alloys



K-geometry
- First choice for drilling in cast iron

Mounting instructions

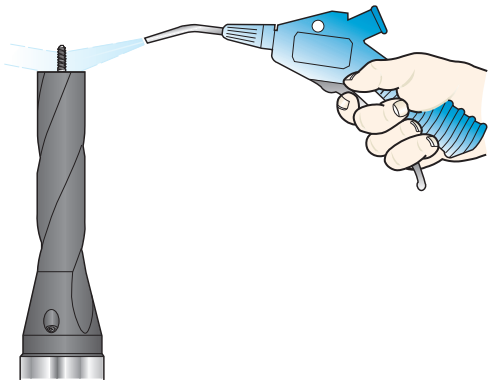
1. Clean the locking interface of the drill body carefully to remove any chips or debris.
2. Make sure that the pull rod is fully extended.
3. Mount new crown onto the pull rod and turn it until it reaches the bottom of the thread.

Turn the crown slightly counterclockwise (backwards) until the locking interfaces fit.
Push the crown towards the body into the right position while turning the clamping screw.
Make sure the interfaces fit.
Tighten the clamping screw firmly using the torque key.

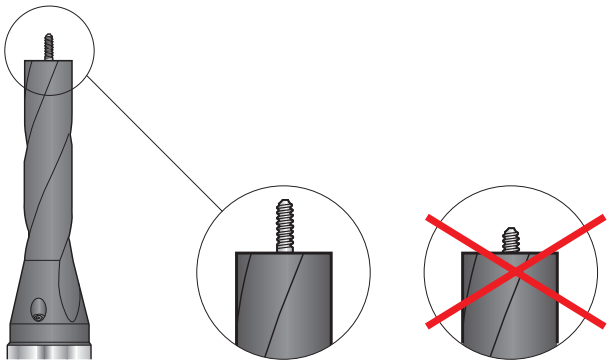
Stability
The stability of the applicationis important in obtaining the best tool life and hole accuracy. Check the condition of the machine spindle, fixture and fixturing of the component to secure maximum stability and rigidity. Unstable conditions can cause tool breakages.

Rotating
Total Indicated Run-out (TIR) should not exceed 0,06 mm *(0.002")* in a rotating application. Measure the run-out when the drill is mounted in the spindle.

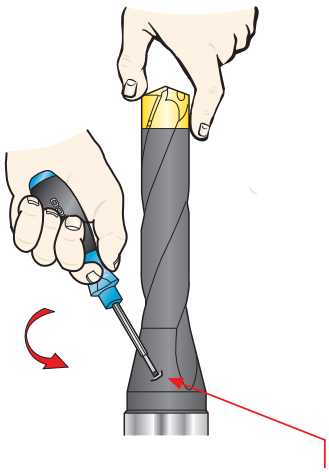
1.



2.

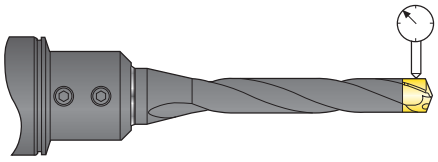


3.



Drill Ø DC mm	Drill Ø DC *(inch)*	M_c N_m	M_c in/lbs
10,00-13,99	*0.394-0.551*	0,8-1,0	7-9
14,00-16,99	*0.551-0.669*	1,8-2,2	16-19.5
17,00-25,99	*0.669-1.023*	2,5-3,0	22-26

Stationary
The distance between the drill point and the rotating center of the workpiece should not exceed 0.03 mm *(0.001")* radially in a stationary application.

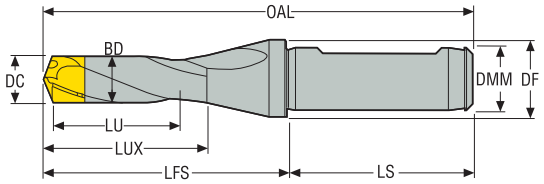


Recommended tool holders
For best results, use holders type DIN 1835 B/DIN 6535 HB (Weldon). For further information see Tooling catalog.

Weldon

SD101

Drilling depth ~ 1,5 x D – metric shank



- SD101 -R7 shank
- Internal coolant
- ISO9766 fits holders: Weldon 1835B, ISO 5414, DIN 60880
- For cutting data see page(s) 196

Designation	Item number	DC	LU	OAL	LUX	BD	LFS	LS	DMM	DF
		mm	mm	mm	mm	mm	mm	mm	mm	mm
SD101-12.00/12.49-20-16R7	02445790	12,0-12,49	20,0	96,0	32,0	11,5	48,0	48,0	16,0	20,0
SD101-12.50/12.99-20-16R7	02445791	12,5-12,99	20,0	96,4	32,4	12,0	48,4	48,0	16,0	20,0
SD101-13.00/13.99-20-16R7	02445792	13,0-13,99	20,0	96,8	32,8	12,5	48,8	48,0	16,0	20,0
SD101-14.00/14.99-25-16R7	02445793	14,0-14,99	25,0	102,4	38,4	13,5	54,4	48,0	16,0	20,0
SD101-15.00/15.99-25-16R7	02445794	15,0-15,99	25,0	103,3	39,3	14,5	55,3	48,0	16,0	20,0
SD101-16.00/16.99-25-16R7	02445795	16,0-16,99	25,0	104,0	40,0	15,5	56,0	48,0	16,0	20,0
SD101-17.00/17.99-30-20R7	02445796	17,0-17,99	30,0	110,7	44,7	16,5	60,7	50,0	20,0	25,0
SD101-18.00/18.99-30-20R7	02445797	18,0-18,99	30,0	111,7	45,7	17,5	61,7	50,0	20,0	25,0
SD101-19.00/19.99-30-20R7	02445798	19,0-19,99	30,0	112,5	46,5	18,5	62,5	50,0	20,0	25,0
SD101-20.00/21.99-40-25R7	02462832	20,0-21,99	40,0	129,5	53,5	19,5	73,5	56,0	25,0	31,0
SD101-22.00/23.99-40-25R7	02462833	22,0-23,99	40,0	129,5	53,5	21,5	73,5	56,0	25,0	31,0
SD101-24.00/25.99-40-25R7	02462834	24,0-25,99	40,0	129,5	53,5	23,5	73,5	56,0	25,0	31,0

Spare parts

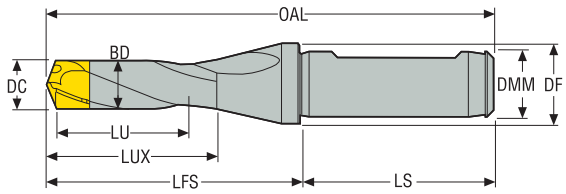
For drill dia. (mm)	Locking key	Locking screw	Spare parts set
			
12,00-13,99	H1.5-2D	MP6SS3X12	SD101-SP-5.0
14,00-16,99	H2.0-2D	MP6SS4X12	SD101-SP-6.0
17,00-19,99	H2.5-2D	MP6SS5X16	SD101-SP-7.0
20,00-25,99	H2.5-2D	MP6SS5X16	SD101-SP-8.0

Accessories

Replacement blade	Torque key
	
H00-1.5	H00-1509
H00-2.0	H00-2020
H00-2.5	H00-2530
H00-2.5	H00-2535

SD101 -R7 shank

Drilling depth ~ 1,5 x D – Inch shank



- ISO9766 fits holders: Weldon 1835B, ISO 5414, DIN 60880
- Internal coolant
- For cutting data see page(s) 196

Designation	Item number	Max drilling depth	Drill dia. DC	DF	OAL	LC	LFS	LUX	DMM
		Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch
SD101-12.00/12.49-20-0625R7	02445817	0.787	0.472-0.492	0.787	3.780	1.890	1.890	1.260	0.625
SD101-12.50/12.99-20-0625R7	02445818	0.787	0.492-0.511	0.787	3.795	1.890	1.906	1.276	0.625
SD101-13.00/13.99-20-0625R7	02445819	0.787	0.512-0.551	0.787	3.811	1.890	1.921	1.291	0.625
SD101-14.00/14.99-25-0625R7	02445820	0.984	0.551-0.590	0.787	4.031	1.890	2.142	1.512	0.625
SD101-15.00/15.99-25-0625R7	02445821	0.984	0.591-0.630	0.787	4.067	1.890	2.177	1.547	0.625
SD101-16.00/16.99-25-0625R7	02445822	0.984	0.630-0.669	0.787	4.094	1.890	2.205	1.575	0.625
SD101-17.00/17.99-30-0750R7	02445823	1.181	0.669-0.708	0.984	4.358	1.969	2.390	1.760	0.750
SD101-18.00/18.99-30-0750R7	02445824	1.181	0.709-0.748	0.984	4.398	1.969	2.429	1.799	0.750
SD101-19.00/19.99-30-0750R7	02445825	1.181	0.748-0.787	0.984	4.429	1.969	2.461	1.831	0.750
SD101-20.00/21.99-40-1000R7	02466044	1.575	0.787-0.866	1.220	5.098	2.205	2.894	2.106	1.000
SD101-22.00/23.99-40-1000R7	02466045	1.575	0.866-0.944	1.220	5.098	2.205	2.894	2.106	1.000
SD101-24.00/25.99-40-1000R7	02466046	1.575	0.945-1.023	1.220	5.098	2.205	2.894	2.106	1.000

Spare parts

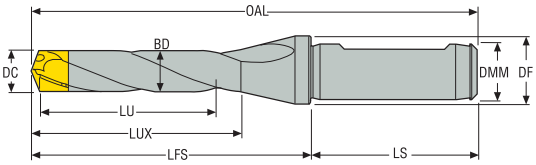
For drill dia. (inch)	Locking key	Locking screw	Spare parts set
			
0.472-0.551	H1.5-2D	MP6SS3X12	SD101-SP-5.0
0.551-0.669	H2.0-2D	MP6SS4X12	SD101-SP-6.0
0.669-0.787	H2.5-2D	MP6SS5X16	SD101-SP-7.0
0.787-1.023	H2.5-2D	MP6SS5X16	SD101-SP-8.0

Accessories

Replacement blade	Torque key
	
H00-1.5	H00-1509
H00-2.0	H00-2020
H00-2.5	H00-2530
H00-2.5	H00-2535

SD103

Drilling depth ~ 3 x D – Metric shank



- SD103 -R7 shank
- Internal coolant
- ISO9766 fits holders: Weldon 1835B, ISO 5414, DIN 60880
- For cutting data see page(s) 197

Designation	Item number	DC	LU	OAL	LUX	BD	LFS	LS	DMM	DF
		mm	mm	mm	mm	mm	mm	mm	mm	mm
SD103-10.00/10.49-30-16R7	02462815	10,0-10,49	30,0	101,0	38,0	9,5	53,0	48,0	16,0	20,0
SD103-10.50/10.99-30-16R7	02462818	10,5-10,99	30,0	101,0	38,0	10,0	53,0	48,0	16,0	20,0
SD103-11.00/11.49-30-16R7	02462819	11,0-11,49	30,0	101,0	38,0	10,5	53,0	48,0	16,0	20,0
SD103-11.50/11.99-30-16R7	02462820	11,5-11,99	30,0	101,0	38,0	11,0	53,0	48,0	16,0	20,0
SD103-12.00/12.49-40-16R7	02445799	12,0-12,49	40,0	116,0	48,0	11,5	68,0	48,0	16,0	20,0
SD103-12.50/12.99-40-16R7	02445800	12,5-12,99	40,0	116,4	48,4	12,0	68,4	48,0	16,0	20,0
SD103-13.00/13.99-40-16R7	02445801	13,0-13,99	40,0	116,8	48,8	12,5	68,8	48,0	16,0	20,0
SD103-14.00/14.99-50-16R7	02445802	14,0-14,99	50,0	127,4	59,4	13,5	79,4	48,0	16,0	20,0
SD103-15.00/15.99-50-16R7	02445803	15,0-15,99	50,0	128,3	60,3	14,5	80,3	48,0	16,0	20,0
SD103-16.00/16.99-50-16R7	02445804	16,0-16,99	50,0	129,0	61,0	15,5	81,0	48,0	16,0	20,0
SD103-17.00/17.99-60-20R7	02445805	17,0-17,99	60,0	140,7	67,7	16,5	90,7	50,0	20,0	25,0
SD103-18.00/18.99-60-20R7	02445806	18,0-18,99	60,0	141,7	68,7	17,5	91,7	50,0	20,0	25,0
SD103-19.00/19.99-60-20R7	02445807	19,0-19,99	60,0	142,5	69,5	18,5	92,7	50,0	20,0	25,0
SD103-20.00/21.99-75-25R7	02462836	20,0-21,99	75,0	164,5	88,5	19,5	108,5	56,0	25,0	31,0
SD103-22.00/23.99-75-25R7	02462838	22,0-23,99	75,0	164,5	88,5	21,5	108,5	56,0	25,0	31,0
SD103-24.00/25.99-75-25R7	02462841	24,0-25,99	75,0	164,5	88,5	23,5	108,5	56,0	25,0	31,0

Spare parts

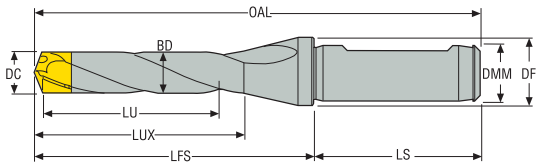
For drill dia. (mm)	Locking key	Locking screw	Spare parts set
			
10,00-11,99	H1.5-2D	MP6SS3X12	SD103-SP-4.0
12,00-13,99	H1.5-2D	MP6SS3X12	SD103-SP-5.0
14,00-16,99	H2.0-2D	MP6SS4X12	SD103-SP-6.0
17,00-19,99	H2.5-2D	MP6SS5X16	SD103-SP-7.0
20,00-25,99	H2.5-2D	MP6SS5X16	SD103-SP-8.0

Accessories

Replacement blade	Torque key
	
H00-1.5	H00-1509
H00-1.5	H00-1509
H00-2.0	H00-2020
H00-2.5	H00-2530
H00-2.5	H00-2535

SD103 -R7 shank

Drilling depth ~ 3 x D – Inch shank



- ISO9766 fits holders: Weldon 1835B, ISO 5414, DIN 60880
- Internal coolant
- For cutting data see page(s) 197

Designation	Item number	Max drilling depth	Drill dia. DC	DF	OAL	LC	LFS	LUX	DMM
		Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch
SD103-09.50/09.99-30-0625R7	02673828	1.181	0.374-0.393	0.787	4.252	1.969	2.323	1.835	0.625
SD103-10.00/10.49-30-0625R7	02466011	1.181	0.394-0.413	0.787	3.976	1.890	2.087	1.496	0.625
SD103-10.50/10.99-30-0625R7	02466012	1.181	0.413-0.433	0.787	3.976	1.890	2.087	1.496	0.625
SD103-11.00/11.49-30-0625R7	02466013	1.181	0.433-0.452	0.787	3.976	1.890	2.087	1.496	0.625
SD103-11.50/11.99-30-0625R7	02466014	1.181	0.453-0.472	0.787	3.976	1.890	2.087	1.496	0.625
SD103-12.00/12.49-40-0625R7	02445826	1.575	0.472-0.492	0.787	4.567	1.890	2.677	1.890	0.625
SD103-12.50/12.99-40-0625R7	02445827	1.575	0.492-0.511	0.787	4.583	1.890	2.693	1.906	0.625
SD103-13.00/13.99-40-0625R7	02445828	1.575	0.512-0.551	0.787	4.598	1.890	2.709	1.921	0.625
SD103-14.00/14.99-50-0625R7	02445829	1.969	0.551-0.590	0.787	5.016	1.890	3.126	2.339	0.625
SD103-15.00/15.99-50-0625R7	02445830	1.969	0.591-0.630	0.787	5.051	1.890	3.161	2.374	0.625
SD103-16.00/16.99-50-0625R7	02445831	1.969	0.630-0.669	0.787	5.079	1.890	3.189	2.402	0.625
SD103-17.00/17.99-60-0750R7	02445832	2.362	0.669-0.708	0.984	5.539	1.969	3.571	2.665	0.750
SD103-18.00/18.99-60-0750R7	02445833	2.362	0.709-0.748	0.984	5.579	1.969	3.610	2.705	0.750
SD103-19.00/19.99-60-0750R7	02445834	2.362	0.748-0.787	0.984	5.610	1.969	3.650	2.736	0.750
SD103-20.00/21.99-75-1000R7	02466049	2.953	0.787-0.866	1.220	6.476	2.205	4.272	3.484	1.000
SD103-22.00/23.99-75-1000R7	02466050	2.953	0.866-0.944	1.220	6.476	2.205	4.272	3.484	1.000
SD103-24.00/25.99-75-1000R7	02466051	2.953	0.945-1.023	1.220	6.476	2.205	4.272	3.484	1.000

Spare parts

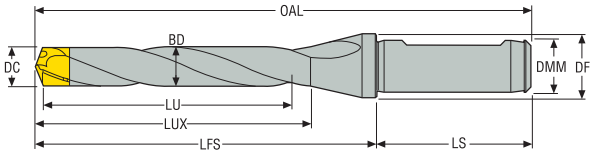
For drill dia. (inch)	Locking key	Locking screw	Spare parts set
			
0.374-0.393	H1.5-2D	MP6SS3X12	–
0.394-0.472	H1.5-2D	MP6SS3X12	SD103-SP-4.0
0.472-0.551	H1.5-2D	MP6SS3X12	SD103-SP-5.0
0.551-0.669	H2.0-2D	MP6SS4X12	SD103-SP-6.0
0.669-0.787	H2.5-2D	MP6SS5X16	SD103-SP-7.0
0.787-1.023	H2.5-2D	MP6SS5X16	SD103-SP-8.0

Accessories

Replacement blade	Torque key
	
H00-1.5	H00-1509
H00-1.5	H00-1509
H00-1.5	H00-1509
H00-2.0	H00-2020
H00-2.5	H00-2530
H00-2.5	H00-2535

SD105

Drilling depth ~ 5 x D – Metric shank



- SD105 -R7 shank
- Internal coolant
- ISO9766 fits holders: Weldon 1835B, ISO 5414, DIN 60880
- For cutting data see page(s) 198

Designation	Item number	DC	LU	OAL	LUX	BD	LFS	LS	DMM	DF
		mm	mm	mm	mm	mm	mm	mm	mm	mm
SD105-10.00/10.49-50-16R7	02462822	10,0-10,49	50,0	120,1	57,3	9,5	72,1	48,0	16,0	20,0
SD105-10.50/10.99-50-16R7	02462824	10,5-10,99	50,0	120,6	57,3	10,0	72,6	48,0	16,0	20,0
SD105-11.00/11.49-50-16R7	02462828	11,0-11,49	50,0	120,9	57,3	10,5	72,9	48,0	16,0	20,0
SD105-11.50/11.99-50-16R7	02462830	11,5-11,99	50,0	121,3	58,3	11,0	73,3	48,0	16,0	20,0
SD105-12.00/12.49-65-16R7	02445808	12,0-12,49	65,0	141,0	73,0	11,5	93,0	48,0	16,0	20,0
SD105-12.50/12.99-65-16R7	02445809	12,5-12,99	65,0	141,4	73,4	12,0	93,4	48,0	16,0	20,0
SD105-13.00/13.99-65-16R7	02445810	13,0-13,99	65,0	141,8	73,8	12,5	93,8	48,0	16,0	20,0
SD105-14.00/14.99-80-16R7	02445811	14,0-14,99	80,0	157,4	89,4	13,5	109,4	48,0	16,0	20,0
SD105-15.00/15.99-80-16R7	02445812	15,0-15,99	80,0	158,3	90,3	14,5	110,3	48,0	16,0	20,0
SD105-16.00/16.99-80-16R7	02445813	16,0-16,99	80,0	159,0	91,0	15,5	111,0	48,0	16,0	20,0
SD105-17.00/17.99-95-20R7	02445814	17,0-17,99	95,0	176,7	107,7	16,5	126,7	50,0	20,0	25,0
SD105-18.00/18.99-95-20R7	02445815	18,0-18,99	95,0	177,7	108,7	17,5	127,7	50,0	20,0	25,0
SD105-19.00/19.99-95-20R7	02445816	19,0-19,99	95,0	178,5	109,5	18,5	128,5	50,0	20,0	25,0
SD105-20.00/21.99-125-25R7	02462843	20,0-21,99	125,0	214,5	138,5	19,5	158,5	56,0	25,0	31,0
SD105-22.00/23.99-125-25R7	02462848	22,0-23,99	125,0	214,5	138,5	21,5	158,5	56,0	25,0	31,0
SD105-24.00/25.99-125-25R7	02462850	24,0-25,99	125,0	214,5	138,5	23,5	158,5	56,0	25,0	31,0

Spare parts

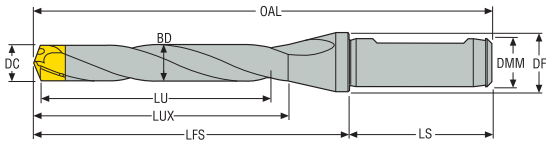
For drill dia. (mm)	Locking key	Locking screw	Spare parts set
			
10,00-11,99	H1.5-2D	MP6SS3X12	SD105-SP-4.0
12,00-13,99	H1.5-2D	MP6SS3X12	SD105-SP-5.0
14,00-16,99	H2.0-2D	MP6SS4X12	SD105-SP-6.0
17,00-19,99	H2.5-2D	MP6SS5X16	SD105-SP-7.0
20,00-25,99	H2.5-2D	MP6SS5X16	SD105-SP-8.0

Accessories

Replacement blade	Torque key
	
H00-1.5	H00-1509
H00-1.5	H00-1509
H00-2.0	H00-2020
H00-2.5	H00-2530
H00-2.5	H00-2535

SD105 -R7 shank

Drilling depth ~ 5 x D – Inch shank



- ISO9766 fits holders: Weldon 1835B, ISO 5414, DIN 60880
- Internal coolant
- For cutting data see page(s) 198

Designation	Item number	Max drilling depth	Drill dia. DC	DF	OAL	LC	LFS	LUX	DMM
		Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch
SD105-10.00/10.49-50-0625R7	02466034	1.969	0.394-0.413	0.787	4.728	1.890	2.839	2.256	0.625
SD105-10.50/10.99-50-0625R7	02466037	1.969	0.413-0.433	0.787	4.748	1.890	2.858	2.256	0.625
SD105-11.00/11.49-50-0625R7	02466041	1.969	0.433-0.452	0.787	4.760	1.890	2.870	2.256	0.625
SD105-11.50/11.99-50-0625R7	02466042	1.969	0.453-0.472	0.787	4.776	1.890	2.886	2.295	0.625
SD105-12.00/12.49-65-0625R7	02445835	2.559	0.472-0.492	0.787	5.551	1.890	3.661	2.874	0.625
SD105-12.50/12.99-65-0625R7	02445836	2.559	0.492-0.511	0.787	5.567	1.890	3.677	2.890	0.625
SD105-13.00/13.99-65-0625R7	02445837	2.559	0.512-0.551	0.787	5.583	1.890	3.693	2.906	0.625
SD105-14.00/14.99-80-0625R7	02445838	3.150	0.551-0.590	0.787	6.197	1.890	4.307	3.520	0.625
SD105-15.00/15.99-80-0625R7	02445839	3.150	0.591-0.630	0.787	6.232	1.890	4.343	3.555	0.625
SD105-16.00/16.99-80-0625R7	02445840	3.150	0.630-0.669	0.787	6.260	1.890	4.370	3.583	0.625
SD105-17.00/17.99-95-0750R7	02445841	3.740	0.669-0.708	0.984	6.957	1.969	4.988	4.240	0.750
SD105-18.00/18.99-95-0750R7	02445842	3.740	0.709-0.748	0.984	6.996	1.969	5.028	4.280	0.750
SD105-19.00/19.99-95-0750R7	02445843	3.740	0.748-0.787	0.984	7.028	1.969	5.059	4.311	0.750
SD105-20.00/21.99-125-1000R7	02466052	4.921	0.787-0.866	1.220	8.445	2.205	6.240	5.453	1.000
SD105-22.00/23.99-125-1000R7	02466053	4.921	0.866-0.944	1.220	8.445	2.205	6.240	5.453	1.000
SD105-24.00/25.99-125-1000R7	02466054	4.921	0.945-1.023	1.220	8.445	2.205	6.240	5.453	1.000

Spare parts

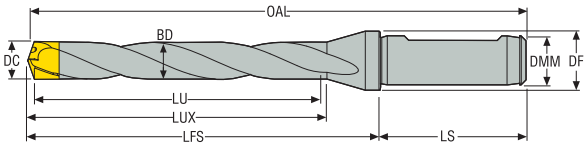
For drill dia. (mm)	Locking key	Locking screw	Spare parts set
			
0.394-0.551	H1.5-2D	MP6SS3X12	SD105-SP-4.0
0.394-0.551	H1.5-2D	MP6SS3X12	SD105-SP-5.0
0.551-0.669	H2.0-2D	MP6SS4X12	SD105-SP-6.0
0.669-0.787	H2.5-2D	MP6SS5X16	SD105-SP-7.0
0.787-1.023	H2.5-2D	MP6SS5X16	SD105-SP-8.0

Accessories

Replacement blade	Torque key
	
H00-1.5	H00-1509
H00-1.5	H00-1509
H00-2.0	H00-2020
H00-2.5	H00-2530
H00-2.5	H00-2535

SD107

Drilling depth ~ 7 x D – Metric shank



- SD107 -R7 shank
- Internal coolant
- ISO9766 fits holders: Weldon 1835B, ISO 5414, DIN 60880
- For cutting data see page(s) 199

Designation	Item number	DC	LU	OAL	LUX	BD	LFS	LS	DMM	DF
		mm	mm	mm	mm	mm	mm	mm	mm	mm
SD107-12.00/12.49-90-16R7	02427470	12,0-12,49	90,0	166,5	100,5	11,5	118,5	48,0	16,0	20,0
SD107-12.50/12.99-90-16R7	02427472	12,5-12,99	90,0	167,0	101,0	12,0	119,0	48,0	16,0	20,0
SD107-13.00/13.99-90-16R7	02427473	13,0-13,99	90,0	167,5	101,5	12,5	119,5	48,0	16,0	20,0
SD107-14.00/14.99-110-16R7	02427474	14,0-14,99	110,0	188,0	122,0	13,5	140,0	48,0	16,0	20,0
SD107-15.00/15.99-110-16R7	02427476	15,0-15,99	110,0	189,0	123,0	14,5	141,0	48,0	16,0	20,0
SD107-16.00/16.99-110-16R7	02427443	16,0-16,99	110,0	189,5	123,5	15,5	141,5	48,0	16,0	20,0
SD107-17.00/17.99-130-20R7	02427478	17,0-17,99	130,0	212,5	144,5	16,5	162,5	50,0	20,0	25,0
SD107-18.00/18.99-130-20R7	02427479	18,0-18,99	130,0	213,5	145,5	17,5	163,5	50,0	20,0	25,0
SD107-19.00/19.99-130-20R7	02427480	19,0-19,99	130,0	214,5	146,5	18,5	164,5	50,0	20,0	25,0
SD107-20.00/21.99-175-25R7	02530422	20,0-21,99	175,0	264,5	188,5	19,5	208,5	56,0	25,0	31,0
SD107-22.00/23.99-175-25R7	02530423	22,0-23,99	175,0	264,5	188,5	21,5	208,5	56,0	25,0	31,0
SD107-24.00/25.99-175-25R7	02517867	24,0-25,99	175,0	264,5	188,5	23,5	208,5	56,0	25,0	31,0

Spare parts

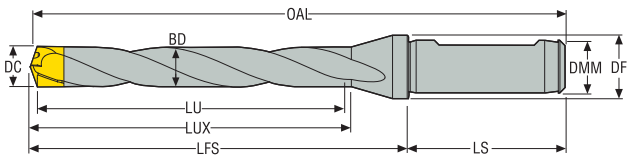
For drill dia. (mm)	Locking key	Locking screw	Spare parts set
			
12,00-13,99	H1.5-2D	MP6SS3X12	SD107-SP-5.0
14,00-16,99	H2.0-2D	MP6SS4X12	SD107-SP-6.0
17,00-19,99	H2.5-2D	MP6SS5X16	SD107-SP-7.0
20,00-25,99	H2.5-2D	MP6SS5X16	SD107-SP-8.0

Accessories

Replacement blade	Torque key
	
H00-1.5	H00-1509
H00-2.0	H00-2020
H00-2.5	H00-2530
H00-2.5	H00-2535

SD107 -R7 shank

Drilling depth ~ 7 x D – Inch shank



- ISO9766 fits holders: Weldon 1835B, ISO 5414, DIN 60880
- Internal coolant
- For cutting data see page(s) 199

Designation	Item number	Max drilling depth	Drill dia. DC	DF	OAL	LC	LFS	LUX	DMM
		Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch
SD107-12.00/12.49-90-0625R7	00040003	3.543	0.472-0.492	0.787	6.555	1.890	4.665	3.957	0.625
SD107-12.50/12.99-90-0625R7	00040004	3.543	0.492-0.511	0.787	6.575	1.890	4.685	3.976	0.625
SD107-13.00/13.99-90-0625R7	00040005	3.543	0.512-0.551	0.787	6.594	1.890	4.705	3.996	0.625
SD107-14.00/14.99-110-0625R7	00040006	4.331	0.551-0.590	0.787	7.402	1.890	5.512	4.803	0.625
SD107-15.00/15.99-110-0625R7	00040007	4.331	0.591-0.630	0.787	7.441	1.890	5.551	4.843	0.625
SD107-16.00/16.99-110-0625R7	00040008	4.331	0.630-0.669	0.787	7.461	1.890	5.571	4.862	0.625
SD107-17.00/17.99-130-0750R7	00040009	5.118	0.669-0.708	0.984	8.366	1.969	6.398	5.689	0.750
SD107-18.00/18.99-130-0750R7	00040010	5.118	0.709-0.748	0.984	8.406	1.969	6.437	5.728	0.750
SD107-19.00/19.99-130-0750R7	00040011	5.118	0.748-0.787	0.984	8.445	1.969	6.476	5.768	0.750
SD107-20.00/21.99-175-1000R7	02529095	6.890	0.787-0.866	1.220	10.413	2.205	8.209	7.421	1.000
SD107-22.00/23.99-175-1000R7	02530424	6.890	0.866-0.944	1.220	10.413	2.205	8.209	7.421	1.000
SD107-24.00/25.99-175-1000R7	02530425	6.890	0.945-1.023	1.220	10.413	2.205	8.209	7.421	1.000

Spare parts

For drill dia. (inch)	Locking key	Locking screw	Spare parts set
			
0.472-0.551	H1.5-2D	MP6SS3X12	SD107-SP-5.0
0.551-0.669	H2.0-2D	MP6SS4X12	SD107-SP-6.0
0.669-0.787	H2.5-2D	MP6SS5X16	SD107-SP-7.0
0.787-1.023	H2.5-2D	MP6SS5X16	SD107-SP-8.0

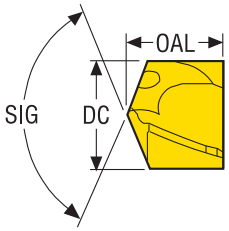
Accessories

For drill dia. (inch)	Replacement blade	Torque key
		
0.472-0.551	H00-1.5	H00-1509
0.551-0.669	H00-2.0	H00-2020
0.669-0.787	H00-2.5	H00-2530
0.787-1.023	H00-2.5	H00-2535

Crowns – Geometry -P, -M and -K

Point angle: 140°



P-geometry for steel		M-geometry for stainless steels and high temp alloys		K-geometry for cast iron		DC	OAL
Designation	Item number	Designation	Item number	Designation	Item number	mm *Inch*	mm *Inch*
SD100-9.52-P	02673829	SD100-9.52-M	02700334	–	–	9,52 *0.375*	8,08 *0.318*
SD100-10.00-P	02469022	SD100-10.00-M	02469072	–	–	10,0 *0.394*	8,1 *0.319*
SD100-10.10-P	02469024	–	–	–	–	10,1 *0.398*	8,1 *0.319*
SD100-10.20-P	02469025	SD100-10.20-M	02469074	SD100-10.20-K	02544440	10,2 *0.402*	8,1 *0.319*
SD100-10.30-P	02469026	–	–	–	–	10,3 *0.406*	8,1 *0.319*
SD100-10.319-P	02469027	SD100-10.319-M	02469075	–	–	10,319 *0.406*	8,1 *0.319*
SD100-10.40-P	02592734	–	–	–	–	10,4 *0.409*	8,1 *0.319*
SD100-10.50-P	02469034	SD100-10.50-M	02469076	SD100-10.50-K	02556726	10,5 *0.413*	8,5 *0.335*
SD100-10.70-P	02469036	–	–	–	–	10,7 *0.421*	8,5 *0.335*
SD100-10.716-P	02469037	–	–	–	–	10,716 *0.422*	8,5 *0.335*
SD100-10.80-P	02469038	SD100-10.80-M	02469078	–	–	10,8 *0.425*	8,5 *0.335*
SD100-10.90-P	02469041	–	–	–	–	10,9 *0.429*	8,5 *0.335*
SD100-11.00-P	02469052	SD100-11.00-M	02469079	–	–	11,0 *0.433*	8,8 *0.346*
SD100-11.113-P	02469056	SD100-11.113-M	02469080	–	–	11,113 *0.438*	8,8 *0.346*
SD100-11.20-P	02469058	SD100-11.20-M	02469082	–	–	11,2 *0.441*	8,8 *0.346*
SD100-11.30-P	02469063	–	–	–	–	11,3 *0.445*	8,8 *0.346*
SD100-11.50-P	02469065	–	–	–	–	11,5 *0.453*	9,4 *0.370*
SD100-11.509-P	02469067	SD100-11.509-M	02469083	–	–	11,509 *0.453*	9,4 *0.370*
SD100-11.70-P	02469068	–	–	–	–	11,7 *0.461*	9,4 *0.370*
SD100-11.80-P	02469069	SD100-11.80-M	02469085	SD100-11.80-K	02542583	11,8 *0.465*	9,4 *0.370*
SD100-11.907-P	02469070	SD100-11.907-M	02592744	–	–	11,907 *0.469*	9,4 *0.370*
SD100-12.00-P	00090314	SD100-12.00-M	00090315	SD100-12.00-K		12,0 *0.472*	9,6 *0.378*
SD100-12.10-P	00090316	–	–	–	–	12,1 *0.476*	9,6 *0.378*

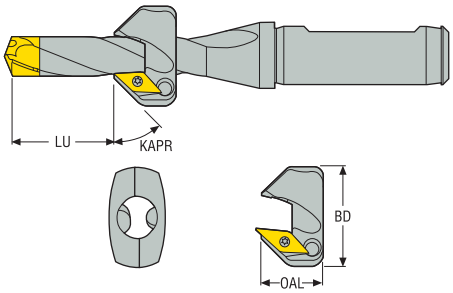
P-geometry for steel		M-geometry for stainless steels and high temp alloys		K-geometry for cast iron		DC	OAL
Designation	Item number	Designation	Item number	Designation	Item number	mm *Inch*	mm *Inch*
SD100-12.20-P	00048248	–	–	–	–	12,2 *0.480*	9,6 *0.378*
SD100-12.30-P	00071546	SD100-12.30-M	00071559	–	–	12,3 *0.484*	9,6 *0.378*
SD100-12.41-P	00059767	SD100-12.41-M	00059768	–	–	12,41 *0.489*	9,6 *0.378*
SD100-12.50-P	00090317	SD100-12.50-M	00090318	SD100-12.50-K	00090319	12,5 *0.492*	10,0 *0.394*
SD100-12.60-P	02207212	–	–	–	–	12,6 *0.496*	10,0 *0.394*
SD100-12.70-P	00059631	SD100-12.70-M	00059632	SD100-12.70-K	00059633	12,7 *0.500*	10,0 *0.394*
SD100-12.80-P	00059634	SD100-12.80-M	00059635	SD100-12.80-K	00059636	12,8 *0.504*	10,0 *0.394*
SD100-12.90-P	00030891	SD100-12.90-M	02503935	–		12,9 *0.508*	10,0 *0.394*
SD100-13.00-P	00098527	SD100-13.00-M	00098528	SD100-13.00-K	00098529	13,0 *0.512*	10,4 *0.409*
SD100-13.10-P	00059637	SD100-13.10-M	00059638	SD100-13.10-K	00059639	13,1 *0.516*	10,4 *0.409*
SD100-13.20-P	00030894	–	–	–	–	13,2 *0.520*	10,4 *0.409*
SD100-13.30-P	00059640	SD100-13.30-M	00059641	–	–	13,3 *0.524*	10,4 *0.409*
SD100-13.50-P	00098530	SD100-13.50-M	00098531	SD100-13.50-K	00098532	13,5 *0.531*	10,4 *0.409*
SD100-13.70-P	00059643	SD100-13.70-M	00059644	–	–	13,7 *0.539*	10,4 *0.409*
SD100-13.80-P	00059646	SD100-13.80-M	00059647	SD100-13.80-K	00059648	13,8 *0.543*	10,4 *0.409*
SD100-13.89-P	00059770	SD100-13.89-M	00059771	–	–	13,89 *0.547*	10,4 *0.409*
SD100-14.00-P	00090320	SD100-14.00-M	00090321	SD100-14.00-K	00090322	14,0 *0.551*	11,0 *0.433*
SD100-14.10-P	00082712	–	–	–	–	14,1 *0.555*	11,0 *0.433*
SD100-14.20-P	00071548	SD100-14.20-M	00071561	SD100-14.20-K	00071549	14,2 *0.559*	11,0 *0.433*
SD100-14.29-P	00059673	SD100-14.29-M	00059674	SD100-14.29-K	00059675	14,29 *0.563*	11,0 *0.433*
SD100-14.40-P	02207869	–	–	–	–	14,4 *0.567*	11,0 *0.433*
SD100-14.50-P	00090323	SD100-14.50-M	00090324	SD100-14.50-K	00090325	14,5 *0.571*	11,0 *0.433*
SD100-14.68-P	00059773	SD100-14.68-M	00059774	SD100-14.68-K	00059775	14,68 *0.578*	11,0 *0.433*
SD100-14.70-P	00059649	SD100-14.70-M	00059650	–	–	14,7 *0.579*	11,0 *0.433*
SD100-14.80-P	00059652	SD100-14.80-M	00059653	–	–	14,8 *0.583*	11,0 *0.433*
SD100-14.90-P	00030895	SD100-14.90-M	02592745	–	–	14,9 *0.587*	11,0 *0.433*
SD100-15.00-P	00090326	SD100-15.00-M	00090327	SD100-15.00-K	00090328	15,0 *0.591*	11,9 *0.469*
SD100-15.08-P	00059776	SD100-15.08-M	00059777	–	–	15,08 *0.594*	11,9 *0.469*
SD100-15.10-P	00079342	–	–	–	–	15,1 *0.594*	11,9 *0.469*
SD100-15.20-P	00030896	–	–	–	–	15,2 *0.598*	11,9 *0.469*

P-geometry for steel		M-geometry for stainless steels and high temp alloys		K-geometry for cast iron		DC	OAL
Designation	Item number	Designation	Item number	Designation	Item number	mm *Inch*	mm *Inch*
SD100-15.25-P	00071550	SD100-15.25-M	00071562	SD100-15.25-K	00071551	15,25 *0.600*	11,9 *0.469*
SD100-15.48-P	00059779	SD100-15.48-M	00059780	SD100-15.48-K	00022926	15,48 *0.609*	11,9 *0.469*
SD100-15.50-P	00098533	SD100-15.50-M	00098534	SD100-15.50-K	00098535	15,5 *0.610*	11,9 *0.469*
SD100-15.70-P	00059655	SD100-15.70-M	00059656	–	–	15,7 *0.618*	11,9 *0.469*
SD100-15.80-P	00059658	SD100-15.80-M	00059659	SD100-15.80-K	00059660	15,8 *0.622*	11,9 *0.469*
SD100-15.88-P	00059676	SD100-15.88-M	00059677	SD100-15.88-K	00059678	15,88 *0.625*	11,9 *0.469*
SD100-16.00-P	00098536	SD100-16.00-M	00098537	SD100-16.00-K	00098538	16,0 *0.630*	12,6 *0.496*
SD100-16.10-P	00077964	–	–	–	–	16,1 *0.634*	12,6 *0.496*
SD100-16.20-P	00047365	–	–	–	–	16,2 *0.638*	12,6 *0.496*
SD100-16.25-P	00034081	–	–	–	–	16,25 *0.640*	12,6 *0.496*
SD100-16.27-P	00022927	SD100-16.27-M	00022928	SD100-16.27-K	00022929	16,27 *0.641*	12,6 *0.496*
SD100-16.40-P	02301114	–	–	–	–	16,4 *0.646*	12,6 *0.496*
SD100-16.50-P	00098539	SD100-16.50-M	00098540	SD100-16.50-K	00098541	16,5 *0.650*	12,6 *0.496*
SD100-16.67-P	00059679	SD100-16.67-M	00059680	SD100-16.67-K	00059681	16,67 *0.656*	12,6 *0.496*
SD100-16.70-P	00059661	SD100-16.70-M	00059662	SD100-16.70-K	00059663	16,7 *0.657*	12,6 *0.496*
SD100-16.80-P	00059664	SD100-16.80-M	00059665	SD100-16.80-K	00059666	16,8 *0.661*	12,6 *0.496*
SD100-16.90-P	00030898	SD100-16.90-M	02593463	–	–	16,9 *0.665*	12,6 *0.496*
SD100-17.00-P	00090329	SD100-17.00-M	00090330	SD100-17.00-K	00090331	17,0 *0.669*	13,3 *0.524*
SD100-17.07-P	00022931	SD100-17.07-M	00022932	SD100-17.07-K	00022933	17,07 *0.672*	13,3 *0.524*
SD100-17.10-P	00034083	–	–	–	–	17,1 *0.673*	13,3 *0.524*
SD100-17.20-P	00047714	–	–	SD100-17.20-K	02515762	17,2 *0.677*	13,3 *0.524*
–	–	–	–	SD100-17.30-K	02203711	17,3 *0.681*	13,3 *0.524*
SD100-17.46-P	00059682	SD100-17.46-M	00059683	–	–	17,46 *0.687*	13,3 *0.524*
SD100-17.50-P	00090332	SD100-17.50-M	00090333	SD100-17.50-K	00090334	17,5 *0.689*	13,3 *0.524*
SD100-17.70-P	00059667	SD100-17.70-M	00059668	SD100-17.70-K	00059669	17,7 *0.697*	13,3 *0.524*
SD100-17.80-P	00059670	SD100-17.80-M	00059671	SD100-17.80-K	00059672	17,8 *0.701*	13,3 *0.524*
SD100-17.86-P	00022934	SD100-17.86-M	00022935	SD100-17.86-K	00022936	17,86 *0.703*	13,3 *0.524*
SD100-17.90-P	00047693	SD100-17.90-M	02442098	–	–	17,9 *0.705*	13,3 *0.524*
SD100-18.00-P	00090335	SD100-18.00-M	00090336	SD100-18.00-K	00090337	18,0 *0.709*	14,4 *0.567*
SD100-18.10-P	00030900	–	–	–	–	18,1 *0.713*	14,4 *0.567*

P-geometry for steel		M-geometry for stainless steels and high temp alloys		K-geometry for cast iron		DC	OAL
Designation	Item number	Designation	Item number	Designation	Item number	mm *Inch*	mm *Inch*
SD100-18.20-P	00038469	–	–	–	–	18,2 *0.717*	14,4 *0.567*
SD100-18.26-P	00022937	SD100-18.26-M	00022938	SD100-18.26-K	00035196	18,26 *0.719*	14,4 *0.567*
SD100-18.50-P	00059685	SD100-18.50-M	00059686	SD100-18.50-K	00059687	18,5 *0.728*	14,4 *0.567*
SD100-18.65-P	00035197	SD100-18.65-M	00035198	–	–	18,65 *0.734*	14,4 *0.567*
SD100-18.70-P	00059688	SD100-18.70-M	00059689	–	–	18,7 *0.736*	14,4 *0.567*
SD100-18.80-P	00059691	SD100-18.80-M	00059692	SD100-18.80-K	00059693	18,8 *0.740*	14,4 *0.567*
SD100-18.90-P	00030901	SD100-18.90-M	02592746	–	–	18,9 *0.744*	14,4 *0.567*
SD100-19.00-P	00059694	SD100-19.00-M	00059695	SD100-19.00-K	00059696	19,0 *0.748*	15,2 *0.598*
SD100-19.05-P	00059697	SD100-19.05-M	00059698	SD100-19.05-K	00059699	19,05 *0.750*	15,2 *0.598*
SD100-19.10-P	00030902	–	–	–	–	19,1 *0.752*	15,2 *0.598*
SD100-19.20-P	00071563	SD100-19.20-M	00071564	SD100-19.20-K	00071566	19,2 *0.756*	15,2 *0.598*
SD100-19.25-P	00048318	–	–	–	–	19,25 *0.758*	15,2 *0.598*
SD100-19.45-P	00035200	SD100-19.45-M	00035201	SD100-19.45-K	00035202	19,45 *0.766*	15,2 *0.598*
SD100-19.50-P	00059700	SD100-19.50-M	00059701	SD100-19.50-K	00059702	19,5 *0.768*	15,2 *0.598*
SD100-19.70-P	00059703	SD100-19.70-M	00059704	SD100-19.70-K	00059705	19,7 *0.776*	15,2 *0.598*
SD100-19.80-P	00059706	SD100-19.80-M	00059707	SD100-19.80-K	00059708	19,8 *0.780*	15,2 *0.598*
SD100-19.84-P	00035203	SD100-19.84-M	00035204	–	–	19,84 *0.781*	15,2 *0.598*
SD100-19.90-P	00010065	SD100-19.90-M	02592747	–	–	19,9 *0.783*	15,2 *0.598*
SD100-19.99-P	00081744	–	–	–	–	19,99 *0.787*	15,2 *0.598*
SD100-20.00-P	02469095	SD100-20.00-M	02469176	SD100-20.00-K	02433368	20,0 *0.787*	15,2 *0.598*
SD100-20.241-P	02469096	–	–	–	–	20,241 *0.797*	15,2 *0.598*
SD100-20.50-P	02469098	SD100-20.50-M	02469178	SD100-20.50-K	02569177	20,5 *0.807*	15,2 *0.598*
SD100-20.638-P	02469100	SD100-20.638-M	02469179	–	–	20,638 *0.813*	15,2 *0.598*
SD100-20.80-P	02508750	–	–	–	–	20,8 *0.819*	15,2 *0.598*
SD100-20.90-P	02586615	–	–	–	–	20,9 *0.823*	15,2 *0.598*
SD100-21.00-P	02469118	SD100-21.00-M	02469180	SD100-21.00-K	02523183	21,0 *0.827*	15,2 *0.598*
SD100-21.034-P	02469120	–	–	–	–	21,034 *0.828*	15,2 *0.598*
SD100-21.20-P	02469121	–	–	–	–	21,2 *0.835*	15,2 *0.598*
SD100-21.30-P	02521624	–	–	–	–	21,3 *0.839*	15,2 *0.598*
SD100-21.430-P	02469122	SD100-21.430-M	02469182	–	–	21,43 *0.844*	15,2 *0.598*

P-geometry for steel		M-geometry for stainless steels and high temp alloys		K-geometry for cast iron		DC	OAL
Designation	Item number	Designation	Item number	Designation	Item number	mm *Inch*	mm *Inch*
SD100-21.50-P	02469124	SD100-21.50-M	02469183	SD100-21.50-K	02521338	21,5 *0.846*	15,2 *0.598*
SD100-21.80-P	02592735	SD100-21.80-M	02555978	SD100-21.80-K	02592763	21,8 *0.858*	15,2 *0.598*
SD100-21.829-P	02469125	–	–	–	–	21,829 *0.859*	15,2 *0.598*
SD100-21.90-P	02592736	SD100-21.90-M	02592752	–	–	21,9 *0.862*	15,2 *0.598*
SD100-22.00-P	02469128	SD100-22.00-M	02469185	SD100-22.00-K	02511599	22,0 *0.866*	15,2 *0.598*
SD100-22.225-P	02469129	SD100-22.225-M	02469186	–	–	22,225 *0.875*	15,2 *0.598*
SD100-22.50-P	02469132	SD100-22.50-M	02469188	SD100-22.50-K	02569178	22,5 *0.886*	15,2 *0.598*
SD100-22.621-P	02469133	–	–	–	–	22,621 *0.891*	15,2 *0.598*
SD100-22.80-P	02539323	SD100-22.80-M	02592754	–		22,8 *0.898*	15,2 *0.598*
SD100-22.90-P	02592738	–	–	–	–	22,9 *0.902*	15,2 *0.598*
SD100-23.00-P	02469134	SD100-23.00-M	02469189	SD100-23.00-K	02515181	23,0 *0.906*	15,2 *0.598*
SD100-23.416-P	02469136	–	–	–	–	23,416 *0.922*	15,2 *0.598*
SD100-23.50-P	02469138	SD100-23.50-M	02469190	SD100-23.50-K	02551252	23,5 *0.925*	15,2 *0.598*
SD100-23.813-P	02469140	SD100-23.813-M	02554971	SD100-23.813-K	02592766	23,813 *0.938*	15,2 *0.598*
SD100-23.90-P	02592739	SD100-23.90-M	02592756	–	–	23,9 *0.941*	15,2 *0.598*
SD100-24.00-P	02469141	SD100-24.00-M	02469191	SD100-24.00-K	02569179	24,0 *0.945*	15,2 *0.598*
SD100-24.209-P	02469142	–	–	–	–	24,209 *0.953*	15,2 *0.598*
SD100-24.50-P	02469144	SD100-24.50-M	02469192	SD100-24.50-K	02569180	24,5 *0.965*	15,2 *0.598*
SD100-24.605-P	02469145	–	–	–	–	24,605 *0.969*	15,2 *0.598*
SD100-24.80-P	02529665	SD100-24.80-M	02508165	SD100-24.80-K	02592767	24,8 *0.976*	15,2 *0.598*
SD100-24.90-P	02592740	SD100-24.90-M	02592757	–	–	24,9 *0.980*	15,2 *0.598*
SD100-25.00-P	02469146	SD100-25.00-M	02469193	SD100-25.00-K	02524629	25,0 *0.984*	15,2 *0.598*
-	–	–	–	SD100-25.40-K	02569181	25,4 *1.000*	15,2 *0.598*
SD100-25.400-P	02469147	SD100-25.400-M	02469194	–	–	25,4 *1.000*	15,2 *0.598*
SD100-25.50-P	02536609	–	–	–	–	25,5 *1.004*	15,2 *0.598*
SD100-25.60-P	02519477	–	–	–	–	25,6 *1.008*	15,2 *0.598*
SD100-25.80-P	02581593	SD100-25.80-M	02592758	–	–	25,8 *1.016*	15,2 *0.598*
SD100-25.90-P	02592741	SD100-25.90-M	02592759	–	–	25,9 *1.020*	15,2 *0.598*
SD100-25.99-P	02516402	–	–	SD100-25.99-K	02516403	25,99 *1.023*	15,2 *0.598*

Chamfer module

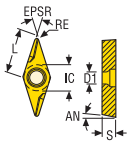


Designation	Item number	For drill body	Drill depth LU								Max chamfer depth	OAL	BD
			SD101 (min-max)		SD103 (min-max)		SD105 (min-max)		SD107 (min-max)				
			mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*	mm *Inch*
SD100-C45-12.00/12.49	00014922	SD10x-12.00/12.49	12,0 *0.472*	13,0 *0.512*	12,0 *0.472*	28,0 *1.102*	28,0 *1.102*	53,0 *2.087*	53,0 *2.087*	78,0 *3.071*	1,5 *0.059*	19,0 *0.748*	28,0 *1.102*
SD100-C45-12.50/12.99	00014923	SD10x-12.50/12.99	12,0 *0.472*	14,0 *0.551*	12,0 *0.472*	29,0 *1.142*	29,0 *1.142*	54,0 *2.126*	54,0 *2.126*	79,0 *3.110*	1,5 *0.059*	19,0 *0.748*	28,0 *1.102*
SD100-C45-13.00/13.99	00014924	SD10x-13.00/13.99	13,0 *0.512*	14,0 *0.551*	13,0 *0.512*	29,0 *1.142*	29,0 *1.142*	54,0 *2.126*	54,0 *2.126*	79,0 *3.110*	1,5 *0.059*	19,0 *0.748*	28,0 *1.102*
SD100-C45-14.00/14.99	00014928	SD10x-14.00/14.99	14,0 *0.551*	20,0 *0.787*	14,0 *0.551*	40,0 *1.575*	40,0 *1.575*	70,0 *2.756*	70,0 *2.756*	100,0 *3.937*	2,0 *0.079*	19,0 *0.748*	31,0 *1.220*
SD100-C45-15.00/15.99	00014931	SD10x-15.00/15.99	14,0 *0.551*	21,0 *0.827*	14,0 *0.551*	41,0 *1.614*	41,0 *1.614*	71,0 *2.795*	71,0 *2.795*	101,0 *3.976*	2,0 *0.079*	19,0 *0.748*	31,0 *1.220*
SD100-C45-16.00/16.99	00014932	SD10x-16.00/16.99	15,0 *0.591*	22,0 *0.866*	15,0 *0.591*	42,0 *1.654*	42,0 *1.654*	72,0 *2.835*	72,0 *2.835*	102,0 *4.016*	2,0 *0.079*	19,0 *0.748*	31,0 *1.220*
SD100-C45-17.00/17.99	00014933	SD10x-17.00/17.99	16,0 *0.630*	25,0 *0.984*	16,0 *0.630*	51,0 *2.008*	51,0 *2.008*	87,0 *3.425*	87,0 *3.425*	123,0 *4.843*	2,0 *0.079*	19,0 *0.748*	36,0 *1.417*
SD100-C45-18.00/18.99	00014935	SD10x-18.00/18.99	17,0 *0.669*	26,0 *1.024*	17,0 *0.669*	52,0 *2.047*	52,0 *2.047*	88,0 *3.465*	88,0 *3.465*	124,0 *4.882*	2,0 *0.079*	19,0 *0.748*	36,0 *1.417*
SD100-C45-19.00/19.99	00014936	SD10x-19.00/19.99	18,0 *0.709*	27,0 *1.063*	18,0 *0.709*	53,0 *2.087*	53,0 *2.087*	89,0 *3.504*	89,0 *3.504*	125,0 *4.921*	2,0 *0.079*	19,0 *0.748*	36,0 *1.417*

Spare parts

For drill dia. (mm)	Insert screw		Insert key	Locking key
				
	Insert	Module	Insert	Module
SD100-12.00–16.99	C02205-T07P	C04011-T15P	T07P-2	T15P-2
SD100-17.00–19.99	C02205-T07P	C05012-T15P	T07P-2	T15P-2

Insert



Tolerances: mm *Inch*

IC = ±0,025 *±0.0009842*

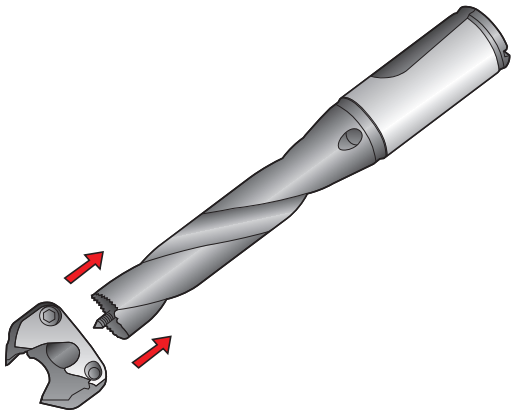
S = ±0,07 *±0.0027559*

RE = ±0,10 *±0.0039370*

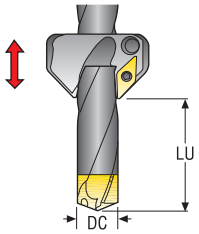
Size	IC mm *Inch*	L mm *Inch*	S mm *Inch*	D1 mm *Inch*	RE mm *Inch*
09	5,556 *0.2187*	9,0 *0.2187*	2,5 *0.0984*	2,9 *0.1141*	0,2 *0.0078*
Grade: T400D					
Designation: VCGX090202-D1					
Item number: 00014948					

Chamfer module – Mounting instruction/placement of module

1. Fit the module on the drill without chamfer insert or crown mounted.

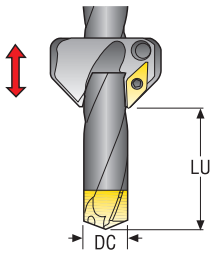


2.1 If possible, place the module as close to the shank as possible.



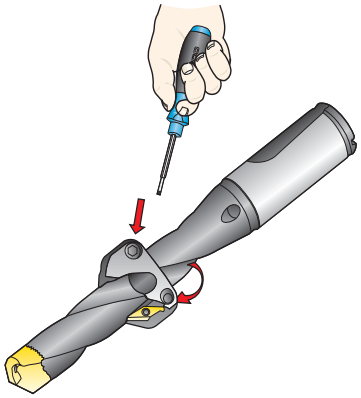
LU drilling depth					
DC		SD101 (min-max)		SD103 (min-max)	
mm	*(inch)*	mm	*(inch)*	mm	*(inch)*
12	*.472*	12-13	*.472-.512*	12-28	*.472-1.102*
12,5	*.492*	12-14	*.472-.551*	12-29	*.472-1.142*
13	*.512*	13-14	*.512-.551*	13-29	*.512-1.142*
14	*.551*	14-20	*.551-.787*	14-40	*.551-1.575*
15	*.591*	14-21	*.551-.827*	14-41	*.551-1.614*
16	*.630*	15-22	*.591-.866*	15-42	*.591-1.654*
17	*.669*	16-25	*.630-.984*	16-51	*.630-2.008*
18	*.709*	17-26	*.669-1.024*	17-52	*.669-2.047*
19	*.748*	18-27	*.709-1.063*	18-53	*.709-2.087*

2.2 If possible, place the module as close to the shank as possible.



LU drilling depth					
DC		SD105 (min-max)		SD107 (min-max)	
mm	*(inch)*	mm	*(inch)*	mm	*(inch)*
12	*.472*	28-53	*1.102-2.087*	53-78	*2.087-3.071*
12,5	*.492*	29-54	*1.142-2.126*	54-79	*2.126-3.110*
13	*.512*	29-54	*1.142-2.126*	54-79	*2.126-3.110*
14	*.551*	40-70	*1.575-2.756*	70-100	*2.756-3.937*
15	*.591*	41-71	*1.614-2.785*	71-101	*2.795-3.976*
16	*.630*	42-72	*1.654-2.835*	72-102	*2.835-4.016*
17	*.669*	51-87	*2.008-3.425*	87-123	*3.425-4.843*
18	*.709*	52-88	*2.047-3.465*	88-124	*3.465-4.882*
19	*.748*	53-89	*2.087-3.504*	89-125	*3.504-4.921*

3. Tighten both screws according to the table below.



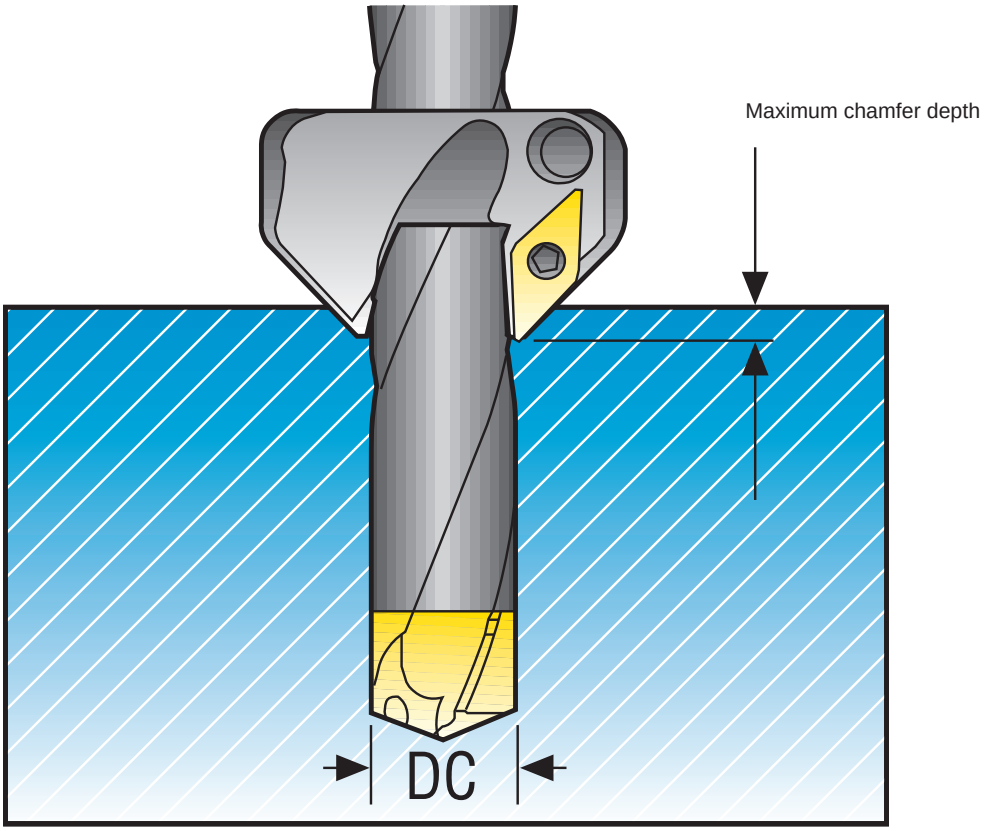
DC		M	
mm	*(inch)*	Nm	*(in-lbs)*
12-19	*.472-.748*	3-4	26-35

Chamfer module – Cutting data

The recommended cutting speeds and feeds for Crownloc® on page 193-196 should also be used during the chamfering operation.

Troubleshooting
Vibrations during chamfering

- Reduce cutting speed
- If possible, move the module closer to the shank of the drill
- If possible, use a shorter drill



DC		Max	
mm	*(inch)*	mm	*(inch)*
12-13	*.472-.512*	1,5	*.059*
14-19	*.551-.748*	2	*.079*

SD101 – Ø 10-26 mm / 0.394-1.024 in

SMG	Grade	f									v_c
		Ø10.00 ***Ø 0.394***	Ø12.00 ***Ø 0.472***	Ø14.00 ***Ø 0.551***	Ø16.00 ***Ø 0.630***	Ø18.00 ***Ø 0.709***	Ø20.00 ***Ø 0.787***	Ø22.00 ***Ø 0.866***	Ø24.00 ***Ø 0.945***	Ø26.00 ***Ø 1.024***	
P1	P	0,20 *0.0080*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,34 *0.013*	0,36 *0.014*	125 *410*
P2	P	0,20 *0.0080*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,36 *0.014*	120 *395*
P3	P	0,19 *0.0075*	0,22 *0.0085*	0,25 *0.010*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,34 *0.013*	105 *345*
P4	P	0,19 *0.0075*	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	0,34 *0.013*	95 *310*
P5	P	0,19 *0.0075*	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	90 *295*
P6	P	0,18 *0.0070*	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	100 *330*
P7	P	0,18 *0.0070*	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	95 *310*
P8	P	0,19 *0.0075*	0,22 *0.0085*	0,25 *0.010*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,34 *0.013*	90 *295*
P11	P	0,18 *0.0070*	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	90 *295*
P12	P	0,13 *0.0050*	0,15 *0.0060*	0,16 *0.0065*	0,18 *0.0070*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	55 *180*
M1	M	0,14 *0.0055*	0,15 *0.0060*	0,15 *0.0060*	0,16 *0.0065*	0,16 *0.0065*	0,16 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	85 *280*
M2	M	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,15 *0.0060*	0,15 *0.0060*	0,16 *0.0065*	0,16 *0.0065*	70 *230*
M3	M	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	50 *165*
M4	M	0,090 *0.0036*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	39 *130*
M5	M	0,090 *0.0036*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	33 *110*
K1	K	0,28 *0.011*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,38 *0.015*	0,40 *0.016*	0,42 *0.017*	0,42 *0.017*	0,44 *0.017*	100 *330*
K2	K	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,38 *0.015*	0,38 *0.015*	0,40 *0.016*	85 *280*
K3	K	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,38 *0.015*	0,38 *0.015*	0,40 *0.016*	70 *230*
K4	K	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,38 *0.015*	0,38 *0.015*	0,40 *0.016*	70 *230*
K5	K	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,36 *0.014*	41 *135*
N1	M	0,18 *0.0070*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	0,22 *0.0085*	335 *1100*
N2	M	0,18 *0.0070*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	0,22 *0.0085*	215 *710*
N3	M	0,18 *0.0070*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	0,22 *0.0085*	145 *475*
N11	M	0,18 *0.0070*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	0,22 *0.0085*	170 *560*
S1	M	0,090 *0.0036*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	34 *110*
S2	M	0,090 *0.0036*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	25 *80*
S3	M	0,085 *0.0034*	0,085 *0.0034*	0,090 *0.0036*	0,095 *0.0038*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	25 *80*
S11	M	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	65 *215*
S12	M	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	49 *160*
S13	M	0,090 *0.0036*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	38 *125*
H3	P	0,085 *0.0034*	0,095 *0.0038*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	27 *90*
H5	P	0,13 *0.0050*	0,15 *0.0060*	0,16 *0.0065*	0,18 *0.0070*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	50 *165*
H7	P	0,085 *0.0034*	0,095 *0.0038*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	27 *90*
H8	P	0,095 *0.0038*	0,11 *0.0044*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,15 *0.0060*	0,16 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	50 *165*
H11	P	0,13 *0.0050*	0,15 *0.0060*	0,16 *0.0065*	0,18 *0.0070*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	65 *215*
H12	P	0,095 *0.0038*	0,11 *0.0044*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,15 *0.0060*	0,16 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	32 *105*
H21	P *P*	0,095 *0.0038*	0,11 *0.0044*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,15 *0.0060*	0,16 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	50 *165*

SMG = Seco material group. f = mm/rev (IPR). V_c = m/min (sf/min). All cutting data are start values

SD103 – Ø 10-26 mm / 0.394-1.024 in

SMG	Grade	f									v_c
		Ø10.00 ***Ø 0.394***	Ø12.00 ***Ø 0.472***	Ø14.00 ***Ø 0.551***	Ø16.00 ***Ø 0.630***	Ø18.00 ***Ø 0.709***	Ø20.00 ***Ø 0.787***	Ø22.00 ***Ø 0.866***	Ø24.00 ***Ø 0.945***	Ø26.00 ***Ø 1.024***	
P1	P	0,20 *0.0080*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,34 *0.013*	0,36 *0.014*	120 *395*
P2	P	0,20 *0.0080*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,36 *0.014*	115 *375*
P3	P	0,19 *0.0075*	0,22 *0.0085*	0,25 *0.010*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,34 *0.013*	100 *330*
P4	P	0,19 *0.0075*	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	0,34 *0.013*	85 *280*
P5	P	0,19 *0.0075*	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	85 *280*
P6	P	0,18 *0.0070*	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	95 *310*
P7	P	0,18 *0.0070*	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	90 *295*
P8	P	0,19 *0.0075*	0,22 *0.0085*	0,25 *0.010*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,34 *0.013*	85 *280*
P11	P	0,18 *0.0070*	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	85 *280*
P12	P	0,13 *0.0050*	0,15 *0.0060*	0,16 *0.0065*	0,18 *0.0070*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	50 *165*
M1	M	0,14 *0.0055*	0,15 *0.0060*	0,15 *0.0060*	0,16 *0.0065*	0,16 *0.0065*	0,16 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	80 *260*
M2	M	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,15 *0.0060*	0,15 *0.0060*	0,16 *0.0065*	0,16 *0.0065*	65 *215*
M3	M	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	49 *160*
M4	M	0,090 *0.0036*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	37 *120*
M5	M	0,090 *0.0036*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	31 *100*
K1	K	0,28 *0.011*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,38 *0.015*	0,40 *0.016*	0,42 *0.017*	0,42 *0.017*	0,44 *0.017*	90 *295*
K2	K	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,38 *0.015*	0,38 *0.015*	0,40 *0.016*	80 *260*
K3	K	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,38 *0.015*	0,38 *0.015*	0,40 *0.016*	65 *215*
K4	K	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,38 *0.015*	0,38 *0.015*	0,40 *0.016*	65 *215*
K5	K	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,36 *0.014*	38 *125*
N1	M	0,18 *0.0070*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	0,22 *0.0085*	315 *1025*
N2	M	0,18 *0.0070*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	0,22 *0.0085*	200 *660*
N3	M	0,18 *0.0070*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	0,22 *0.0085*	135 *445*
N11	M	0,18 *0.0070*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	0,22 *0.0085*	160 *520*
S1	M	0,090 *0.0036*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	32 *105*
S2	M	0,090 *0.0036*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	23 *75*
S3	M	0,085 *0.0034*	0,085 *0.0034*	0,090 *0.0036*	0,095 *0.0038*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	23 *75*
S11	M	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	60 *195*
S12	M	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	46 *150*
S13	M	0,090 *0.0036*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	36 *120*
H3	P	0,085 *0.0034*	0,095 *0.0038*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	25 *80*
H5	P	0,13 *0.0050*	0,15 *0.0060*	0,16 *0.0065*	0,18 *0.0070*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	46 *150*
H7	P	0,085 *0.0034*	0,095 *0.0038*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	25 *80*
H8	P	0,095 *0.0038*	0,11 *0.0044*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,15 *0.0060*	0,16 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	46 *150*
H11	P	0,13 *0.0050*	0,15 *0.0060*	0,16 *0.0065*	0,18 *0.0070*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	60 *195*
H12	P	0,095 *0.0038*	0,11 *0.0044*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,15 *0.0060*	0,16 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	30 *100*
H21	P	0,095 *0.0038*	0,11 *0.0044*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,15 *0.0060*	0,16 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	46 *150*

SMG = Seco material group. f = mm/rev (IPR). V_c = m/min (sf/min). All cutting data are start values

SD105 – Ø 10-26 mm / 0.394-1.024 in

SMG	Grade	f									v_c
		Ø10.00 ***Ø 0.394***	Ø12.00 ***Ø 0.472***	Ø14.00 ***Ø 0.551***	Ø16.00 ***Ø 0.630***	Ø18.00 ***Ø 0.709***	Ø20.00 ***Ø 0.787***	Ø22.00 ***Ø 0.866***	Ø24.00 ***Ø 0.945***	Ø26.00 ***Ø 1.024***	
P1	P	0,20 *0.0080*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,34 *0.013*	0,36 *0.014*	110 *360*
P2	P	0,20 *0.0080*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,36 *0.014*	110 *360*
P3	P	0,19 *0.0075*	0,22 *0.0085*	0,25 *0.010*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,34 *0.013*	95 *310*
P4	P	0,19 *0.0075*	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	0,34 *0.013*	85 *280*
P5	P	0,19 *0.0075*	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	80 *260*
P6	P	0,18 *0.0070*	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	90 *295*
P7	P	0,18 *0.0070*	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	85 *280*
P8	P	0,19 *0.0075*	0,22 *0.0085*	0,25 *0.010*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,34 *0.013*	80 *260*
P11	P	0,18 *0.0070*	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	80 *260*
P12	P	0,13 *0.0050*	0,15 *0.0060*	0,16 *0.0065*	0,18 *0.0070*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	48 *155*
M1	M	0,14 *0.0055*	0,15 *0.0060*	0,15 *0.0060*	0,16 *0.0065*	0,16 *0.0065*	0,16 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	75 *245*
M2	M	0,13 *0.0050*	0,13 *0.0050*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,15 *0.0060*	0,15 *0.0060*	0,16 *0.0065*	0,16 *0.0065*	60 *195*
M3	M	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	46 *150*
M4	M	0,090 *0.0036*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	35 *115*
M5	M	0,090 *0.0036*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	29 *95*
K1	K	0,28 *0.011*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,38 *0.015*	0,40 *0.016*	0,42 *0.017*	0,42 *0.017*	0,44 *0.017*	90 *295*
K2	K	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,38 *0.015*	0,38 *0.015*	0,40 *0.016*	75 *245*
K3	K	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,38 *0.015*	0,38 *0.015*	0,40 *0.016*	65 *215*
K4	K	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,38 *0.015*	0,38 *0.015*	0,40 *0.016*	60 *195*
K5	K	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,36 *0.014*	36 *120*
N1	M	0,18 *0.0070*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	0,22 *0.0085*	300 *980*
N2	M	0,18 *0.0070*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	0,22 *0.0085*	190 *620*
N3	M	0,18 *0.0070*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	0,22 *0.0085*	130 *425*
N11	M	0,18 *0.0070*	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	0,22 *0.0085*	150 *490*
S1	M	0,090 *0.0036*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	30 *100*
S2	M	0,090 *0.0036*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	22 *70*
S3	M	0,085 *0.0034*	0,085 *0.0034*	0,090 *0.0036*	0,095 *0.0038*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	22 *70*
S11	M	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	55 *180*
S12	M	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	44 *145*
S13	M	0,090 *0.0036*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	34 *110*
H3	P	0,085 *0.0034*	0,095 *0.0038*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	24 *80*
H5	P	0,13 *0.0050*	0,15 *0.0060*	0,16 *0.0065*	0,18 *0.0070*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	44 *145*
H7	P	0,085 *0.0034*	0,095 *0.0038*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	24 *80*
H8	P	0,095 *0.0038*	0,11 *0.0044*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,15 *0.0060*	0,16 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	44 *145*
H11	P	0,13 *0.0050*	0,15 *0.0060*	0,16 *0.0065*	0,18 *0.0070*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	55 *180*
H12	P	0,095 *0.0038*	0,11 *0.0044*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,15 *0.0060*	0,16 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	29 *95*
H21	P *P*	0,095 *0.0038*	0,11 *0.0044*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,15 *0.0060*	0,16 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	44 *145*

SMG = Seco material group. f = mm/rev (IPR). V_c = m/min (sf/min). All cutting data are start values

SD107 – Ø 10-26 mm / 0.394-1.024 in

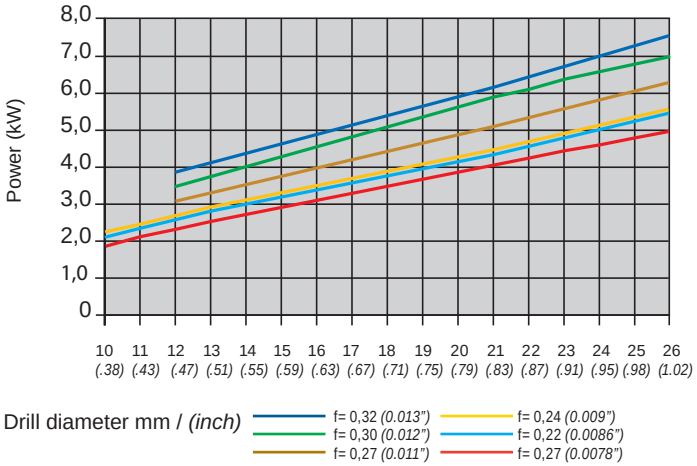
SMG	Grade	f								v_c
		Ø12.00 ***Ø 0.472***	Ø14.00 ***Ø 0.551***	Ø16.00 ***Ø 0.630***	Ø18.00 ***Ø 0.709***	Ø20.00 ***Ø 0.787***	Ø22.00 ***Ø 0.866***	Ø24.00 ***Ø 0.945***	Ø26.00 ***Ø 1.024***	
P1	P	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,34 *0.013*	0,36 *0.014*	110 *360*
P2	P	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,36 *0.014*	105 *345*
P3	P	0,22 *0.0085*	0,25 *0.010*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,34 *0.013*	90 *295*
P4	P	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	0,34 *0.013*	80 *260*
P5	P	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	75 *245*
P6	P	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	85 *280*
P7	P	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	80 *260*
P8	P	0,22 *0.0085*	0,25 *0.010*	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,34 *0.013*	75 *245*
P11	P	0,22 *0.0085*	0,24 *0.0095*	0,26 *0.010*	0,28 *0.011*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	80 *260*
P12	P	0,15 *0.0060*	0,16 *0.0065*	0,18 *0.0070*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	47 *155*
M1	M	0,15 *0.0060*	0,15 *0.0060*	0,16 *0.0065*	0,16 *0.0065*	0,16 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	75 *245*
M2	M	0,13 *0.0050*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	0,15 *0.0060*	0,15 *0.0060*	0,16 *0.0065*	0,16 *0.0065*	60 *195*
M3	M	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	45 *150*
M4	M	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	34 *110*
M5	M	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	28 *90*
K1	K	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,38 *0.015*	0,40 *0.016*	0,42 *0.017*	0,42 *0.017*	0,44 *0.017*	85 *280*
K2	K	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,38 *0.015*	0,38 *0.015*	0,40 *0.016*	75 *245*
K3	K	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,38 *0.015*	0,38 *0.015*	0,40 *0.016*	60 *195*
K4	K	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,38 *0.015*	0,38 *0.015*	0,40 *0.016*	60 *195*
K5	K	0,26 *0.010*	0,28 *0.011*	0,30 *0.012*	0,32 *0.013*	0,32 *0.013*	0,34 *0.013*	0,36 *0.014*	0,36 *0.014*	35 *115*
N1	M	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	0,22 *0.0085*	290 *950*
N2	M	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	0,22 *0.0085*	185 *610*
N3	M	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	0,22 *0.0085*	125 *410*
N11	M	0,19 *0.0075*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	0,22 *0.0085*	145 *475*
S1	M	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	29 *95*
S2	M	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	21 *70*
S3	M	0,085 *0.0034*	0,090 *0.0036*	0,095 *0.0038*	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	21 *70*
S11	M	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	55 *180*
S12	M	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	42 *140*
S13	M	0,095 *0.0038*	0,095 *0.0038*	0,10 *0.0040*	0,10 *0.0040*	0,10 *0.0040*	0,11 *0.0044*	0,11 *0.0044*	0,11 *0.0044*	33 *110*
H3	P	0,095 *0.0038*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	23 *75*
H5	P	0,15 *0.0060*	0,16 *0.0065*	0,18 *0.0070*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	43 *140*
H7	P	0,095 *0.0038*	0,11 *0.0044*	0,12 *0.0048*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,14 *0.0055*	0,15 *0.0060*	23 *75*
H8	P	0,11 *0.0044*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,15 *0.0060*	0,16 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	43 *140*
H11	P	0,15 *0.0060*	0,16 *0.0065*	0,18 *0.0070*	0,19 *0.0075*	0,20 *0.0080*	0,20 *0.0080*	0,22 *0.0085*	0,22 *0.0085*	55 *180*
H12	P	0,11 *0.0044*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,15 *0.0060*	0,16 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	28 *90*
H21	P	0,11 *0.0044*	0,12 *0.0048*	0,13 *0.0050*	0,14 *0.0055*	0,15 *0.0060*	0,16 *0.0065*	0,17 *0.0065*	0,17 *0.0065*	43 *140*

SMG = Seco material group. f = mm/rev (IPR). V_c = m/min (sf/min). All cutting data are start values

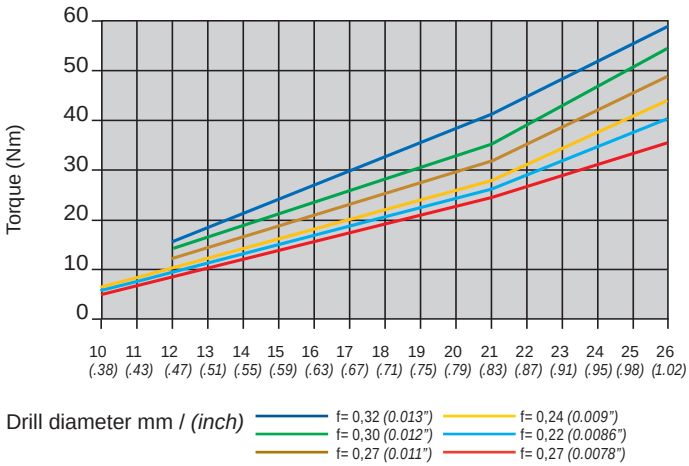
Machining data

The values in the graphs vary with e.g. cutting data, material, efficiency of the machine and tool wear.
The graphs below are valid for Seco Material Group (SMG) P5-P6 and cutting speed 90 m/min (295 SFM).

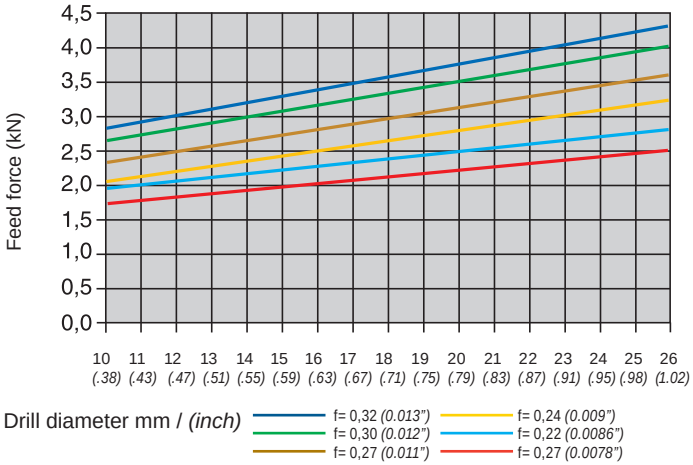
Net power consumption



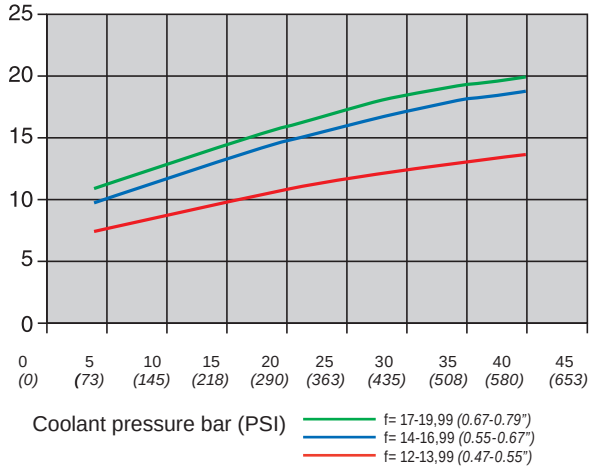
Drilling torque



Feed force



Coolant flow at different pressures



Hole tolerances/Surface finish

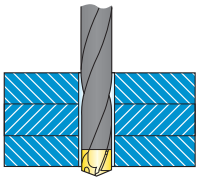
SD101, SD103, SD105 and SD107 IT9-10 / Ra 1-4*		
Drill Ø DC (inch)	**IT9 tolerance (inch)**	**IT10 tolerance (µin/µm)**
0.394-0.709	0.0017	0.0028
0.709-1.181	0.0020	0.0033
Drill Ø DC *(mm)*	**IT9 tolerance *(µm)***	**IT10 tolerance *(µm)***
10-18	43	70
18-30	52	84

*Deterioration of surface finish and hole tolerance can occur when drilling in low carbon steel or stainless steel.
Use the shortest drill possible for best hole quality.

Recommended coolant flow
Dx1 l/min
Minimum coolant flow D/2 l/min
D = Drill diameter
Minimum recommended coolant pressure 10 bar (*145 PSI*) with < 3 x D
Minimum recommended coolant pressure 20 bar (*290 PSI*) with > 3 x D
Minimum recommended coolant pressure 40 bar (*580 PSI*) with > 5 x D

Coolant mix
Recommended emulsion mix is 6–8%.
When drilling in stainless steels, superalloys and high strength steels a mix of 10% is recommended.

Machining recommendations
It is possible to drill stacked material as long as the pieces are securely clamped together, so that there are no air gaps between the parts. Air gaps can affect chip evacuation, and thereby damage the drill.



Troubleshooting – Initial check points

- Fixturing stability
- Machine spindle condition
- Tool holder condition

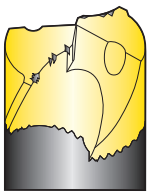
- Clamping of tool:
  - Run-out within 0,04 TIR
  - If using pre drilling within 0,04 TIR

- Chip evacuation:
  - Cutting data

- Coolant:
  - Pressure
  - Flow
  - Concentration

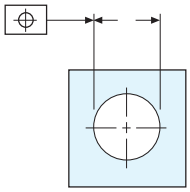
Cutting edges get chipped

- Reduce the feed/rev
- If the drill vibrates, reduce the cutting speed and increase the feed rate
- When drilling through rough, hard or angled surfaces, reduce the feed rate by 30%-50% during entrance and exit



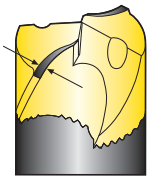
Unsatisfactory diameter tolerance

- Increase the feed/rev
- Use a Seco Feedmax solid carbide drill, see page(s) 18-21
- Use a reaming operation, see page(s) 325
- Use a boring operation, see pages 479-480



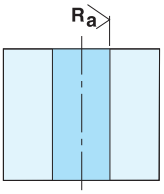
Too fast flank wear

- Check that correct geometry is used
- Reduce the cutting speed



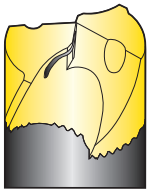
Unsatisfactory surface finish

- Reduce the feed/rev
- If drilling through rough, hard and angled surface - reduce the feed by 30%-50% during entrance and exit
- Pre drill with a 140° point angle
- Use a Seco Feedmax solid carbide drill see Feedmax page(s) 18-21
- Use a boring operation, see pages 479-480



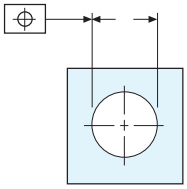
Groove wear

- Reduce the feed /rev
- Reduce the cutting speed
- Increase the coolant concentration



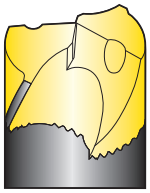
Unsatisfactory positioning of the hole

- Reduce the feed/rev
- If drilling through rough, hard and angled surface - reduce the feed by 30%-50% during entrance and exit
- Pre drill with a 140° point angle
- Use a Seco Feedmax solid carbide drill see Feedmax page(s) 18-21
- Use a boring operation, see pages 479-480



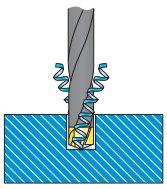
Wear of peripheral land margins

- Check that the correct geometry is used
- Reduce the cutting speed
- Increase the coolant concentration
- When drilling through rough, hard or angled surfaces, reduce the feed rate by 30%-50% during entrance and exit



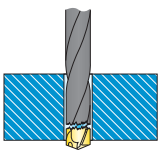
Chip jamming due to long chips

- Increase the feed
- In long chipping materials SMG P1-P4, SMG M1-M2:
  - Increase cutting speed and reduce feed/rev
  - Use the L geometry (Custom Design)



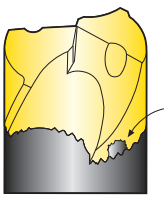
Breakage at hole exit

- If the crown connection breaks when the crown is just about to break through the material. The failure is caused by:
- The interface has not been cleaned thoroughly and there is still dirt or chips left between crown and drill body
- The crown has not been clamped securely. Use the torque key
- Too few threads are holding the crown



Chipping of the locking interface

- Minor chipping is not hazardous to the locking system. It will not affect the drilling result
- If major chipping occurs when using a high feed rate or when drilling through angled surfaces - reduce the feed rate



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