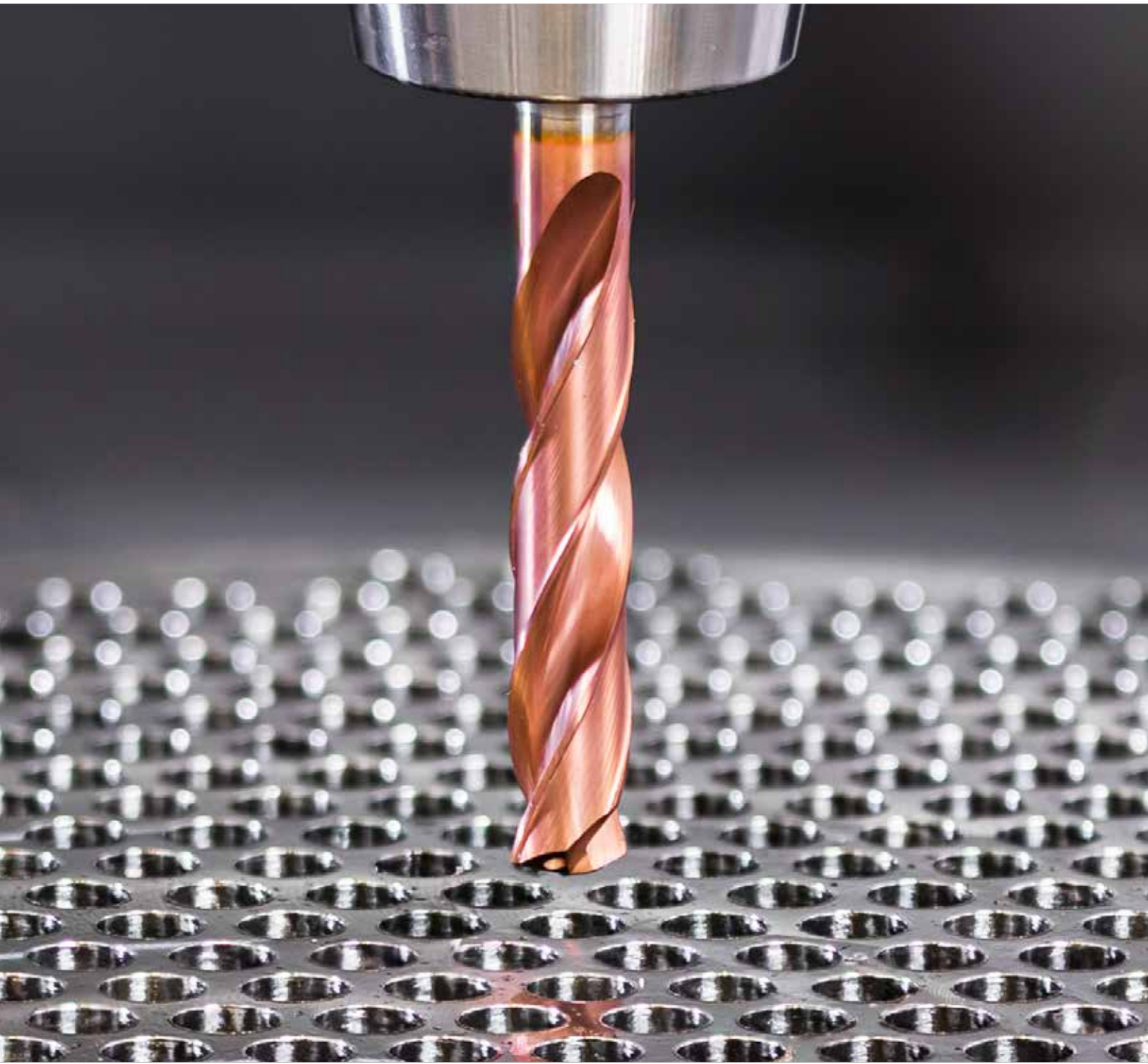


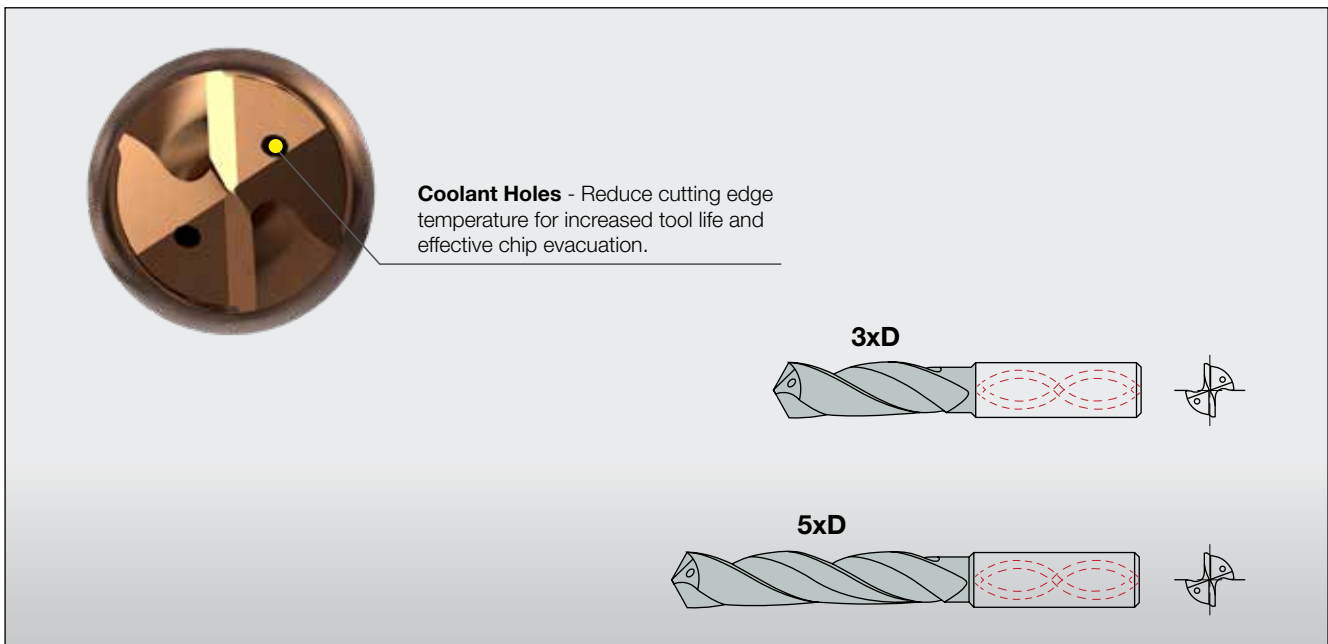
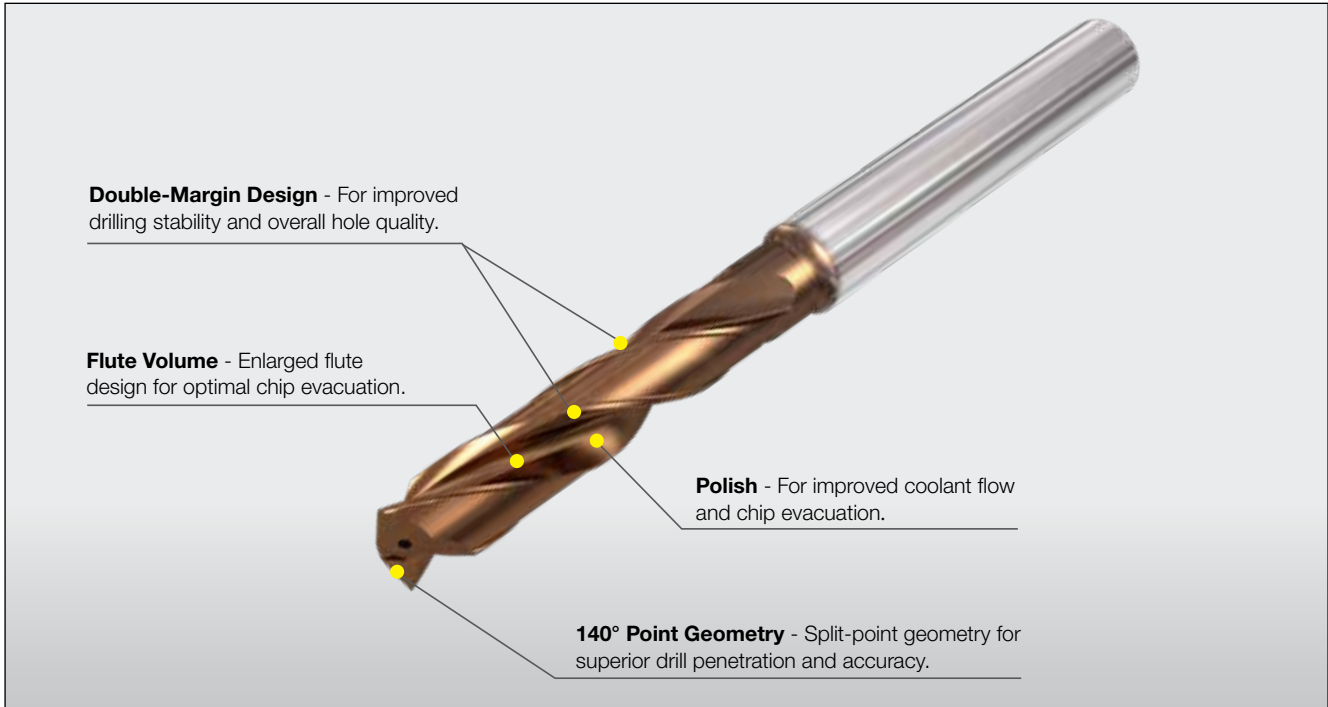
Drilling With ISCAR
FLASHDRILL
ECO SOLID LINE



ISCAR introduces a new Flash solid carbide drill line in the diameter range of .118-.787" or 3-20 mm, 3xD and 5xD drill lengths with internal coolant channels for general applications.

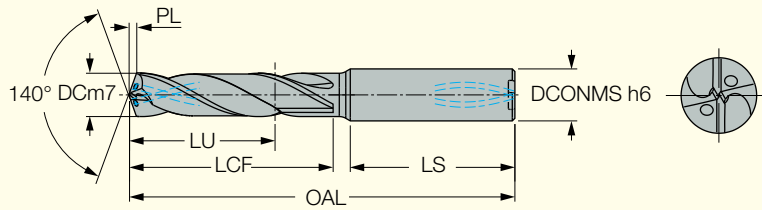
Drill Features

- 140° point geometry.
- **Double-Margin Design** – For improved drilling stability and overall hole quality.
- **Polished Flutes** – Improved chip evacuation process and prolonged tool life.
- **Coolant Holes** – improved cutting edge tool life and chip evacuation.
- **Coating** – A multi-layer IC608 (TiAlCN) coating enables drilling at high speeds.



SCD-ACP3FL (3XD)

Solid Carbide Drills with Coolant Holes,
Drilling Depth 3xD (Available in North America Only)



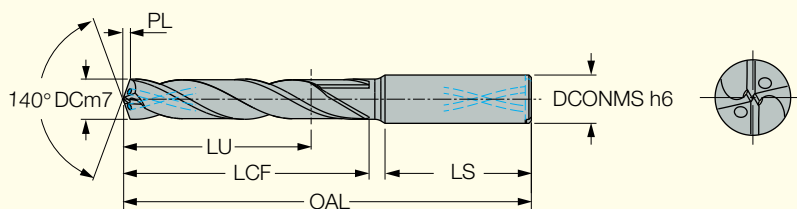
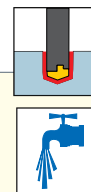
I N C H

Designation	DC	DCONMS	LU	PL	LCF	LS	OAL	IC608
SCD0125-0600-0236 ACP3FL	.125	.236	.6000	.02000	.79	1.65	2.441	●
SCD0141-0577-0236 ACP3FL	.141	.236	.5770	.02250	.79	1.65	2.441	●
SCD0156-0711-0236 ACP3FL	.156	.236	.7110	.02500	.95	1.65	2.598	●
SCD0172-0687-0236 ACP3FL	.172	.236	.6870	.02750	.95	1.65	2.598	●
SCD0185-0667-0236 ACP3FL	.185	.236	.6670	.02960	.95	1.65	2.598	●
SCD0188-0821-0236 ACP3FL	.188	.236	.8210	.03000	1.10	1.50	2.598	●
SCD0189-0819-0236 ACP3FL	.189	.236	.8190	.03020	1.10	1.50	2.598	●
SCD0203-0798-0236 ACP3FL	.203	.236	.7980	.03250	1.10	1.50	2.598	●
SCD0204-0796-0236 ACP3FL	.204	.236	.7960	.03260	1.10	1.50	2.598	●
SCD0219-0774-0236 ACP3FL	.219	.236	.7740	.03500	1.10	1.50	2.598	●
SCD0234-0751-0236 ACP3FL	.234	.236	.7510	.03750	1.10	1.50	2.598	●
SCD0250-0964-0315 ACP3FL	.250	.315	.9640	.04000	1.34	1.77	3.110	●
SCD0266-0940-0315 ACP3FL	.266	.315	.9400	.04250	1.34	1.77	3.110	●
SCD0281-1192-0315 ACP3FL	.281	.315	1.1920	.04500	1.61	1.50	3.110	●
SCD0297-1169-0315 ACP3FL	.297	.315	1.1690	.04750	1.61	1.50	3.110	●
SCD0313-1146-0315 ACP3FL	.313	.315	1.1460	.05000	1.61	1.50	3.110	●
SCD0328-1358-0394 ACP3FL	.328	.394	1.3580	.05250	1.85	1.65	3.504	●
SCD0344-1335-0394 ACP3FL	.344	.394	1.3350	.05500	1.85	1.65	3.504	●
SCD0359-1311-0394 ACP3FL	.359	.394	1.3110	.05750	1.85	1.65	3.504	●
SCD0375-1288-0394 ACP3FL	.375	.394	1.2880	.06000	1.85	1.65	3.504	●
SCD0391-1265-0394 ACP3FL	.391	.394	1.2650	.06250	1.85	1.65	3.504	●
SCD0406-1556-0472 ACP3FL	.406	.472	1.5560	.06500	2.17	1.85	4.016	●
SCD0422-1533-0472 ACP3FL	.422	.472	1.5330	.06750	2.17	1.85	4.016	●
SCD0438-1509-0472 ACP3FL	.438	.472	1.5090	.07000	2.17	1.85	4.016	●
SCD0453-1486-0472 ACP3FL	.453	.472	1.4860	.07250	2.17	1.85	4.016	●
SCD0469-1462-0472 ACP3FL	.469	.472	1.4620	.07500	2.17	1.85	4.016	●
SCD0484-1636-0551 ACP3FL	.484	.551	1.6360	.07750	2.36	1.85	4.213	●
SCD0500-1612-0551 ACP3FL	.500	.551	1.6120	.08000	2.36	1.85	4.213	●
SCD0531-1565-0551 ACP3FL	.531	.551	1.5650	.08500	2.36	1.85	4.213	●
SCD0563-1715-0630 ACP3FL	.563	.630	1.7150	.09000	2.56	1.97	4.528	●
SCD0625-1622-0630 ACP3FL	.625	.630	1.6220	.10000	2.56	1.97	4.528	●
SCD0688-1772-0709 ACP3FL	.688	.709	1.7720	.09800	2.87	1.97	4.843	●
SCD0750-1985-0787 ACP3FL	.750	.787	1.9850	.12000	3.11	2.05	5.157	●

● Based on DIN 6537 standard

SCD-ACP5FL (5XD)

Solid Carbide Drills with Coolant Holes,
Drilling Depth 5xD (Available in North America Only)



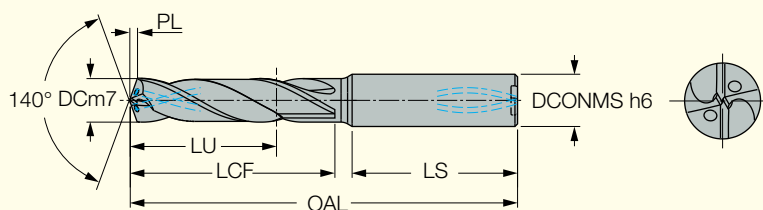
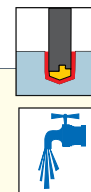
I N C H

Designation	DC	DCONMS	LU	PL	LCF	LS	OAL	IC608
SCD0125-0915-0236 ACP5FL	.125	.236	.9150	.02000	1.10	1.50	2.598	●
SCD0141-0892-0236 ACP5FL	.141	.236	.8920	.02250	1.10	1.50	2.598	●
SCD0156-1183-0236 ACP5FL	.156	.236	1.1830	.02500	1.42	1.50	2.913	●
SCD0172-1160-0236 ACP5FL	.172	.236	1.1600	.02750	1.42	1.50	2.913	●
SCD0185-1140-0236 ACP5FL	.185	.236	1.1400	.02960	1.42	1.50	2.913	●
SCD0188-1451-0236 ACP5FL	.188	.236	1.4510	.03000	1.73	1.50	3.228	●
SCD0189-1449-0236 ACP5FL	.189	.236	1.4490	.03020	1.73	1.50	3.228	●
SCD0203-1428-0236 ACP5FL	.203	.236	1.4280	.03250	1.73	1.50	3.228	●
SCD0204-1426-0236 ACP5FL	.204	.236	1.4260	.03260	1.73	1.50	3.228	●
SCD0219-1404-0236 ACP5FL	.219	.236	1.4040	.03500	1.73	1.50	3.228	●
SCD0234-1381-0236 ACP5FL	.234	.236	1.3810	.03750	1.73	1.50	3.228	●
SCD0250-1712-0315 ACP5FL	.250	.315	1.7120	.04000	2.09	1.50	3.583	●
SCD0266-1688-0315 ACP5FL	.266	.315	1.6880	.04250	2.09	1.50	3.583	●
SCD0281-1665-0315 ACP5FL	.281	.315	1.6650	.04500	2.09	1.50	3.583	●
SCD0297-1641-0315 ACP5FL	.297	.315	1.6410	.04750	2.09	1.50	3.583	●
SCD0313-1618-0315 ACP5FL	.313	.315	1.6180	.05000	2.09	1.50	3.583	●
SCD0328-1910-0394 ACP5FL	.328	.394	1.9100	.05250	2.40	1.65	4.055	●
SCD0344-1886-0394 ACP5FL	.344	.394	1.8860	.05500	2.40	1.65	4.055	●
SCD0359-1863-0394 ACP5FL	.359	.394	1.8630	.05750	2.40	1.65	4.055	●
SCD0375-1839-0394 ACP5FL	.375	.394	1.8390	.06000	2.40	1.65	4.055	●
SCD0391-1816-0394 ACP5FL	.391	.394	1.8160	.06250	2.40	1.65	4.055	●
SCD0406-2186-0472 ACP5FL	.406	.472	2.1860	.06500	2.80	1.85	4.646	●
SCD0422-2163-0472 ACP5FL	.422	.472	2.1630	.06750	2.80	1.85	4.646	●
SCD0438-2139-0472 ACP5FL	.438	.472	2.1390	.07000	2.80	1.85	4.646	●
SCD0453-2116-0472 ACP5FL	.453	.472	2.1160	.07250	2.80	1.85	4.646	●
SCD0469-2092-0472 ACP5FL	.469	.472	2.0920	.07500	2.80	1.85	4.646	●
SCD0484-2305-0551 ACP5FL	.484	.551	2.3050	.07750	3.03	1.85	4.882	●
SCD0500-2282-0551 ACP5FL	.500	.551	2.2820	.08000	3.03	1.85	4.882	●
SCD0531-2235-0551 ACP5FL	.531	.551	2.2350	.08500	3.03	1.85	4.882	●
SCD0563-2424-0630 ACP5FL	.563	.630	2.4240	.09000	3.27	1.97	5.236	●
SCD0625-2330-0630 ACP5FL	.625	.630	2.3300	.10000	3.27	1.97	5.236	●
SCD0688-2598-0709 ACP5FL	.688	.709	2.5980	.10000	3.66	1.97	5.630	●
SCD0750-2851-0787 ACP5FL	.750	.787	2.8510	.12000	3.98	2.05	6.024	●

● Based on DIN 6537 standard

SCD-ACP3FL (3XD)

Solid Carbide Drills with Coolant Holes,
Drilling Depth 3xD (Available in North America Only)



M E T R I C

Designation	Dimensions							IC608
	DC	DCONMS	OAL	LU	LCF	PL	LS	
SCD 030-014-060 ACP3FL	3.00	6.00	62.00	14.00	20.0	0.430	42.0	●
SCD 031-014-060 ACP3FL	3.10	6.00	62.00	14.00	20.0	0.440	42.0	●
SCD 032-014-060 ACP3FL	3.20	6.00	62.00	14.00	20.0	0.460	42.0	●
SCD 033-014-060 ACP3FL	3.30	6.00	62.00	14.00	20.0	0.470	42.0	●
SCD 034-014-060 ACP3FL	3.40	6.00	62.00	14.00	20.0	0.490	42.0	●
SCD 035-014-060 ACP3FL	3.50	6.00	62.00	14.00	20.0	0.500	42.0	●
SCD 036-014-060 ACP3FL	3.60	6.00	62.00	14.00	20.0	0.510	42.0	●
SCD 037-014-060 ACP3FL	3.70	6.00	62.00	14.00	20.0	0.530	42.0	●
SCD 038-017-060 ACP3FL	3.80	6.00	66.00	17.00	24.0	0.540	42.0	●
SCD 039-017-060 ACP3FL	3.90	6.00	66.00	17.00	24.0	0.560	42.0	●
SCD 040-017-060 ACP3FL	4.00	6.00	66.00	17.00	24.0	0.570	42.0	●
SCD 041-017-060 ACP3FL	4.10	6.00	66.00	17.00	24.0	0.590	42.0	●
SCD 042-017-060 ACP3FL	4.20	6.00	66.00	17.00	24.0	0.600	42.0	●
SCD 043-017-060 ACP3FL	4.30	6.00	66.00	17.00	24.0	0.610	42.0	●
SCD 044-017-060 ACP3FL	4.40	6.00	66.00	17.00	24.0	0.630	42.0	●
SCD 045-017-060 ACP3FL	4.50	6.00	66.00	17.00	24.0	0.640	42.0	●
SCD 046-017-060 ACP3FL	4.60	6.00	66.00	17.00	24.0	0.660	42.0	●
SCD 047-017-060 ACP3FL	4.70	6.00	66.00	17.00	28.0	0.670	38.0	●
SCD 048-019-060 ACP3FL	4.80	6.00	66.00	19.00	28.0	0.690	38.0	●
SCD 049-019-060 ACP3FL	4.90	6.00	66.00	19.00	28.0	0.700	38.0	●
SCD 050-019-060 ACP3FL	5.00	6.00	66.00	19.00	28.0	0.720	38.0	●
SCD 051-019-060 ACP3FL	5.10	6.00	66.00	19.00	28.0	0.730	38.0	●
SCD 052-019-060 ACP3FL	5.20	6.00	66.00	19.00	28.0	0.740	38.0	●
SCD 053-019-060 ACP3FL	5.30	6.00	66.00	19.00	28.0	0.760	38.0	●
SCD 054-019-060 ACP3FL	5.40	6.00	66.00	19.00	28.0	0.770	38.0	●
SCD 055-019-060 ACP3FL	5.50	6.00	66.00	19.00	28.0	0.790	38.0	●
SCD 056-019-060 ACP3FL	5.60	6.00	66.00	19.00	28.0	0.800	38.0	●
SCD 057-019-060 ACP3FL	5.70	6.00	66.00	19.00	28.0	0.820	38.0	●
SCD 058-019-060 ACP3FL	5.80	6.00	66.00	19.00	28.0	0.830	38.0	●
SCD 059-019-060 ACP3FL	5.90	6.00	66.00	19.00	28.0	0.840	38.0	●
SCD 060-019-060 ACP3FL	6.00	6.00	66.00	19.00	28.0	0.860	38.0	●
SCD 061-023-080 ACP3FL	6.10	8.00	79.00	23.00	34.0	0.870	45.0	●
SCD 062-023-080 ACP3FL	6.20	8.00	79.00	23.00	34.0	0.890	45.0	●
SCD 063-023-080 ACP3FL	6.30	8.00	79.00	23.00	34.0	0.900	45.0	●
SCD 064-023-080 ACP3FL	6.40	8.00	79.00	23.00	34.0	0.920	45.0	●
SCD 065-023-080 ACP3FL	6.50	8.00	79.00	23.00	34.0	0.930	45.0	●
SCD 066-023-080 ACP3FL	6.60	8.00	79.00	23.00	34.0	0.940	45.0	●
SCD 067-023-080 ACP3FL	6.70	8.00	79.00	23.00	34.0	0.960	45.0	●
SCD 068-023-080 ACP3FL	6.80	8.00	79.00	23.00	34.0	0.970	45.0	●
SCD 069-028-080 ACP3FL	6.90	8.00	79.00	28.00	41.0	0.990	38.0	●
SCD 070-028-080 ACP3FL	7.00	8.00	79.00	28.00	41.0	1.000	38.0	●
SCD 071-028-080 ACP3FL	7.10	8.00	79.00	28.00	41.0	1.020	38.0	●
SCD 072-028-080 ACP3FL	7.20	8.00	79.00	28.00	41.0	1.030	38.0	●
SCD 073-028-080 ACP3FL	7.30	8.00	79.00	28.00	41.0	1.040	38.0	●
SCD 074-028-080 ACP3FL	7.40	8.00	79.00	28.00	41.0	1.060	38.0	●
SCD 075-028-080 ACP3FL	7.50	8.00	79.00	28.00	41.0	1.070	38.0	●
SCD 076-028-080 ACP3FL	7.60	8.00	79.00	28.00	41.0	1.090	38.0	●
SCD 077-028-080 ACP3FL	7.70	8.00	79.00	28.00	41.0	1.100	38.0	●
SCD 078-028-080 ACP3FL	7.80	8.00	79.00	28.00	41.0	1.120	38.0	●
SCD 079-028-080 ACP3FL	7.90	8.00	79.00	28.00	41.0	1.130	38.0	●
SCD 080-028-080 ACP3FL	8.00	8.00	79.00	28.00	41.0	1.140	38.0	●
SCD 081-032-100 ACP3FL	8.10	10.00	89.00	32.00	47.0	1.160	42.0	●
SCD 082-032-100 ACP3FL	8.20	10.00	89.00	32.00	47.0	1.170	42.0	●
SCD 083-032-100 ACP3FL	8.30	10.00	89.00	32.00	47.0	1.190	42.0	●

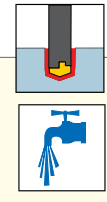
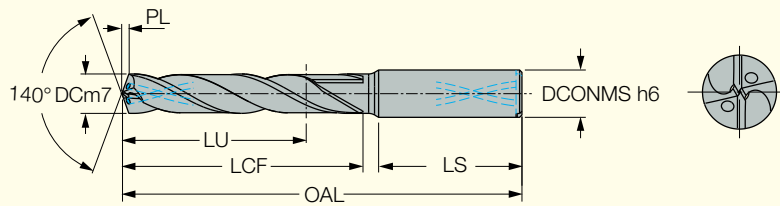
● Based on DIN 6537 standard

M E T R I C								
Designation	Dimensions							IC608
	DC	DCONMS	OAL	LU	LCF	PL	LS	
SCD 084-032-100 ACP3FL	8.40	10.00	89.00	32.00	47.0	1.200	42.0	●
SCD 085-032-100 ACP3FL	8.50	10.00	89.00	32.00	47.0	1.220	42.0	●
SCD 086-032-100 ACP3FL	8.60	10.00	89.00	32.00	47.0	1.230	42.0	●
SCD 087-032-100 ACP3FL	8.70	10.00	89.00	32.00	47.0	1.240	42.0	●
SCD 088-032-100 ACP3FL	8.80	10.00	89.00	32.00	47.0	1.260	42.0	●
SCD 089-032-100 ACP3FL	8.90	10.00	89.00	32.00	47.0	1.270	42.0	●
SCD 090-032-100 ACP3FL	9.00	10.00	89.00	32.00	47.0	1.290	42.0	●
SCD 091-032-100 ACP3FL	9.10	10.00	89.00	32.00	47.0	1.300	42.0	●
SCD 092-032-100 ACP3FL	9.20	10.00	89.00	32.00	47.0	1.320	42.0	●
SCD 093-032-100 ACP3FL	9.30	10.00	89.00	32.00	47.0	1.330	42.0	●
SCD 094-032-100 ACP3FL	9.40	10.00	89.00	32.00	47.0	1.340	42.0	●
SCD 095-032-100 ACP3FL	9.50	10.00	89.00	32.00	47.0	1.360	42.0	●
SCD 096-032-100 ACP3FL	9.60	10.00	89.00	32.00	47.0	1.370	42.0	●
SCD 097-032-100 ACP3FL	9.70	10.00	89.00	32.00	47.0	1.390	45.0	●
SCD 098-032-100 ACP3FL	9.80	10.00	89.00	32.00	47.0	1.400	42.0	●
SCD 099-032-100 ACP3FL	9.90	10.00	89.00	32.00	47.0	1.420	42.0	●
SCD 100-032-100 ACP3FL	10.00	10.00	89.00	32.00	47.0	1.430	42.0	●
SCD 101-037-120 ACP3FL	10.10	12.00	102.00	37.00	55.0	1.440	47.0	●
SCD 102-037-120 ACP3FL	10.20	12.00	102.00	37.00	55.0	1.460	47.0	●
SCD 103-037-120 ACP3FL	10.30	12.00	102.00	37.00	55.0	1.470	47.0	●
SCD 104-037-120 ACP3FL	10.40	12.00	102.00	37.00	55.0	1.490	47.0	●
SCD 105-037-120 ACP3FL	10.50	12.00	102.00	37.00	55.0	1.500	47.0	●
SCD 106-037-120 ACP3FL	10.60	12.00	102.00	37.00	55.0	1.520	47.0	●
SCD 107-037-120 ACP3FL	10.70	12.00	102.00	37.00	55.0	1.530	47.0	●
SCD 108-037-120 ACP3FL	10.80	12.00	102.00	37.00	55.0	1.540	47.0	●
SCD 109-037-120 ACP3FL	10.90	12.00	102.00	37.00	55.0	1.560	47.0	●
SCD 110-037-120 ACP3FL	11.00	12.00	102.00	37.00	55.0	1.570	47.0	●
SCD 111-037-120 ACP3FL	11.10	12.00	102.00	37.00	55.0	1.590	47.0	●
SCD 112-037-120 ACP3FL	11.20	12.00	102.00	37.00	55.0	1.600	47.0	●
SCD 113-037-120 ACP3FL	11.30	12.00	102.00	37.00	55.0	1.620	47.0	●
SCD 114-037-120 ACP3FL	11.40	12.00	102.00	37.00	55.0	1.630	47.0	●
SCD 115-037-120 ACP3FL	11.50	12.00	102.00	37.00	55.0	1.640	47.0	●
SCD 116-037-120 ACP3FL	11.60	12.00	102.00	37.00	55.0	1.660	47.0	●
SCD 117-037-120 ACP3FL	11.70	12.00	102.00	37.00	55.0	1.670	47.0	●
SCD 118-037-120 ACP3FL	11.80	12.00	102.00	37.00	55.0	1.690	47.0	●
SCD 119-037-120 ACP3FL	11.90	12.00	102.00	37.00	55.0	1.700	47.0	●
SCD 120-037-120 ACP3FL	12.00	12.00	102.00	37.00	55.0	1.720	47.0	●
SCD 121-039-140 ACP3FL	12.10	14.00	107.00	39.00	60.0	1.730	47.0	●
SCD 122-039-140 ACP3FL	12.20	14.00	107.00	39.00	60.0	1.740	47.0	●
SCD 123-039-140 ACP3FL	12.30	14.00	107.00	39.00	60.0	1.760	47.0	●
SCD 124-039-140 ACP3FL	12.40	14.00	107.00	39.00	60.0	1.770	47.0	●
SCD 125-039-140 ACP3FL	12.50	14.00	107.00	39.00	60.0	1.790	47.0	●
SCD 126-039-140 ACP3FL	12.60	14.00	107.00	39.00	60.0	1.800	47.0	●
SCD 127-039-140 ACP3FL	12.70	14.00	107.00	39.00	60.0	1.820	47.0	●
SCD 128-039-140 ACP3FL	12.80	14.00	107.00	39.00	60.0	1.830	47.0	●
SCD 129-039-140 ACP3FL	12.90	14.00	107.00	39.00	60.0	1.840	47.0	●
SCD 130-039-140 ACP3FL	13.00	14.00	107.00	39.00	60.0	1.860	47.0	●
SCD 133-039-140 ACP3FL	13.30	14.00	107.00	39.00	60.0	1.900	47.0	●
SCD 135-039-140 ACP3FL	13.50	14.00	107.00	39.00	60.0	1.930	47.0	●
SCD 140-039-140 ACP3FL	14.00	14.00	107.00	39.00	60.0	2.000	47.0	●
SCD 145-041-160 ACP3FL	14.50	16.00	115.00	41.00	65.0	2.070	50.0	●
SCD 150-041-160 ACP3FL	15.00	16.00	115.00	41.00	65.0	2.150	50.0	●
SCD 155-041-160 ACP3FL	15.50	16.00	115.00	41.00	65.0	2.220	50.0	●
SCD 160-041-160 ACP3FL	16.00	16.00	115.00	41.00	65.0	2.290	50.0	●
SCD 165-045-180 ACP3FL	16.50	18.00	123.00	45.00	73.0	2.360	50.0	●
SCD 170-045-180 ACP3FL	17.00	18.00	123.00	45.00	73.0	2.430	50.0	●
SCD 175-045-180 ACP3FL	17.50	18.00	123.00	45.00	73.0	2.500	50.0	●
SCD 180-045-180 ACP3FL	18.00	18.00	123.00	45.00	73.0	2.570	50.0	●
SCD 185-048-200 ACP3FL	18.50	20.00	131.00	48.00	79.0	2.650	52.0	●
SCD 190-048-200 ACP3FL	19.00	20.00	131.00	48.00	79.0	2.720	52.0	●
SCD 195-048-200 ACP3FL	19.50	20.00	131.00	48.00	79.0	2.790	52.0	●
SCD 200-048-200 ACP3FL	20.00	20.00	131.00	48.00	79.0	2.860	52.0	●

● Based on DIN 6537 standard

SCD-ACP5FL (5XD)

Solid Carbide Drills with Coolant Holes,
Drilling Depth 5xD (Available in North America Only)



M E T R I C

Designation	Dimensions							IC608
	DC	DCONMS	OAL	LU	LCF	PL	LS	
SCD 030-022-060 ACP5FL	3.00	6.00	66.00	22.00	28.0	0.430	38.0	●
SCD 031-022-060 ACP5FL	3.10	6.00	66.00	22.00	28.0	0.440	38.0	●
SCD 032-022-060 ACP5FL	3.20	6.00	66.00	22.00	28.0	0.460	38.0	●
SCD 033-022-060 ACP5FL	3.30	6.00	66.00	22.00	28.0	0.470	38.0	●
SCD 034-022-060 ACP5FL	3.40	6.00	66.00	22.00	28.0	0.490	38.0	●
SCD 035-022-060 ACP5FL	3.50	6.00	66.00	22.00	28.0	0.500	38.0	●
SCD 036-022-060 ACP5FL	3.60	6.00	66.00	22.00	28.0	0.510	38.0	●
SCD 037-022-060 ACP5FL	3.70	6.00	66.00	22.00	28.0	0.530	38.0	●
SCD 038-029-060 ACP5FL	3.80	6.00	74.00	29.00	36.0	0.540	38.0	●
SCD 039-029-060 ACP5FL	3.90	6.00	74.00	29.00	36.0	0.560	38.0	●
SCD 040-029-060 ACP5FL	4.00	6.00	74.00	29.00	36.0	0.570	38.0	●
SCD 041-029-060 ACP5FL	4.10	6.00	74.00	29.00	36.0	0.590	38.0	●
SCD 042-029-060 ACP5FL	4.20	6.00	74.00	29.00	36.0	0.600	38.0	●
SCD 043-029-060 ACP5FL	4.30	6.00	74.00	29.00	36.0	0.610	38.0	●
SCD 044-029-060 ACP5FL	4.40	6.00	74.00	29.00	36.0	0.630	38.0	●
SCD 045-029-060 ACP5FL	4.50	6.00	74.00	29.00	36.0	0.640	38.0	●
SCD 046-029-060 ACP5FL	4.60	6.00	74.00	29.00	36.0	0.660	38.0	●
SCD 047-029-060 ACP5FL	4.70	6.90	82.00	29.00	44.0	0.670	38.0	●
SCD 048-035-060 ACP5FL	4.80	6.00	82.00	35.00	44.0	0.690	38.0	●
SCD 049-035-060 ACP5FL	4.90	6.00	82.00	35.00	44.0	0.700	38.0	●
SCD 050-035-060 ACP5FL	5.00	6.00	82.00	35.00	44.0	0.720	38.0	●
SCD 051-035-060 ACP5FL	5.10	6.00	82.00	35.00	44.0	0.730	38.0	●
SCD 052-035-060 ACP5FL	5.20	6.00	82.00	35.00	44.0	0.740	38.0	●
SCD 053-035-060 ACP5FL	5.30	6.00	82.00	35.00	44.0	0.760	38.0	●
SCD 054-035-060 ACP5FL	5.40	6.00	82.00	35.00	44.0	0.770	38.0	●
SCD 055-035-060 ACP5FL	5.50	6.00	82.00	35.00	44.0	0.790	38.0	●
SCD 056-035-060 ACP5FL	5.60	6.00	82.00	35.00	44.0	0.800	38.0	●
SCD 057-035-060 ACP5FL	5.70	6.00	82.00	35.00	44.0	0.820	38.0	●
SCD 058-035-060 ACP5FL	5.80	6.00	82.00	35.00	44.0	0.830	38.0	●
SCD 059-035-060 ACP5FL	5.90	6.00	82.00	35.00	44.0	0.840	38.0	●
SCD 060-035-060 ACP5FL	6.00	6.00	82.00	35.00	44.0	0.860	38.0	●
SCD 061-041-080 ACP5FL	6.10	8.00	91.00	41.00	53.0	0.870	38.0	●
SCD 062-041-080 ACP5FL	6.20	8.00	91.00	41.00	53.0	0.890	38.0	●
SCD 063-041-080 ACP5FL	6.30	8.00	91.00	41.00	53.0	0.900	38.0	●
SCD 064-041-080 ACP5FL	6.40	8.00	91.00	41.00	53.0	0.920	38.0	●
SCD 065-041-080 ACP5FL	6.50	8.00	91.00	41.00	53.0	0.930	38.0	●
SCD 066-041-080 ACP5FL	6.60	8.00	91.00	41.00	53.0	0.940	38.0	●
SCD 067-041-080 ACP5FL	6.70	8.00	91.00	41.00	53.0	0.960	38.0	●
SCD 068-041-080 ACP5FL	6.80	8.00	91.00	41.00	53.0	0.970	38.0	●
SCD 069-041-080 ACP5FL	6.90	8.00	91.00	41.00	53.0	0.990	38.0	●
SCD 070-041-080 ACP5FL	7.00	8.00	91.00	41.00	53.0	1.000	38.0	●
SCD 071-041-080 ACP5FL	7.10	8.00	91.00	41.00	53.0	1.020	38.0	●
SCD 072-041-080 ACP5FL	7.20	8.00	91.00	41.00	53.0	1.030	38.0	●
SCD 073-041-080 ACP5FL	7.30	8.00	91.00	41.00	53.0	1.040	38.0	●
SCD 074-041-080 ACP5FL	7.40	8.00	91.00	41.00	53.0	1.060	38.0	●
SCD 075-041-080 ACP5FL	7.50	8.00	91.00	41.00	53.0	1.070	38.0	●
SCD 076-041-080 ACP5FL	7.60	8.00	91.00	41.00	53.0	1.090	38.0	●
SCD 077-041-080 ACP5FL	7.70	8.00	91.00	41.00	53.0	1.100	38.0	●
SCD 078-041-080 ACP5FL	7.80	8.00	91.00	41.00	53.0	1.120	38.0	●
SCD 079-041-080 ACP5FL	7.90	8.00	91.00	41.00	53.0	1.130	38.0	●
SCD 080-041-080 ACP5FL	8.00	8.00	91.00	41.00	53.0	1.140	38.0	●
SCD 081-046-100 ACP5FL	8.10	10.00	103.00	46.00	61.0	1.160	42.0	●
SCD 082-046-100 ACP5FL	8.20	10.00	103.00	46.00	61.0	1.170	42.0	●
SCD 083-046-100 ACP5FL	8.30	10.00	103.00	46.00	61.0	1.190	42.0	●

• Based on DIN 6537 standard

M E T R I C								
Designation	Dimensions							IC608
	DC	DCONMS	OAL	LU	LCF	PL	LS	
SCD 084-046-100 ACP5FL	8.40	10.00	103.00	46.00	61.0	1.200	42.0	●
SCD 085-046-100 ACP5FL	8.50	10.00	103.00	46.00	61.0	1.220	42.0	●
SCD 086-046-100 ACP5FL	8.60	10.00	103.00	46.00	61.0	1.230	42.0	●
SCD 087-046-100 ACP5FL	8.70	10.00	103.00	46.00	61.0	1.240	42.0	●
SCD 088-046-100 ACP5FL	8.80	10.00	103.00	46.00	61.0	1.260	42.0	●
SCD 089-046-100 ACP5FL	8.90	10.00	103.00	46.00	61.0	1.270	42.0	●
SCD 090-046-100 ACP5FL	9.00	10.00	103.00	46.00	61.0	1.290	42.0	●
SCD 091-046-100 ACP5FL	9.10	10.00	103.00	46.00	61.0	1.300	42.0	●
SCD 092-046-100 ACP5FL	9.20	10.00	103.00	46.00	61.0	1.320	42.0	●
SCD 093-046-100 ACP5FL	9.30	10.00	103.00	46.00	61.0	1.330	42.0	●
SCD 094-046-100 ACP5FL	9.40	10.00	103.00	46.00	61.0	1.340	42.0	●
SCD 095-046-100 ACP5FL	9.50	10.00	103.00	46.00	61.0	1.360	42.0	●
SCD 096-046-100 ACP5FL	9.60	10.00	103.00	46.00	61.0	1.370	42.0	●
SCD 097-046-100 ACP5FL	9.70	10.00	103.00	46.00	61.0	1.390	42.0	●
SCD 098-046-100 ACP5FL	9.80	10.00	103.00	46.00	61.0	1.400	42.0	●
SCD 099-046-100 ACP5FL	9.90	10.00	103.00	46.00	61.0	1.420	42.0	●
SCD 100-046-100 ACP5FL	10.00	10.00	103.00	46.00	61.0	1.430	42.0	●
SCD 101-053-120 ACP5FL	10.10	12.00	118.00	53.00	71.0	1.440	47.0	●
SCD 102-053-120 ACP5FL	10.20	12.00	118.00	53.00	71.0	1.460	47.0	●
SCD 103-053-120 ACP5FL	10.30	12.00	118.00	53.00	71.0	1.470	47.0	●
SCD 104-053-120 ACP5FL	10.40	12.00	118.00	53.00	71.0	1.490	47.0	●
SCD 105-053-120 ACP5FL	10.50	12.00	118.00	53.00	71.0	1.500	47.0	●
SCD 106-053-120 ACP5FL	10.60	12.00	118.00	53.00	71.0	1.520	47.0	●
SCD 107-053-120 ACP5FL	10.70	12.00	118.00	53.00	71.0	1.530	47.0	●
SCD 108-053-120 ACP5FL	10.80	12.00	118.00	53.00	71.0	1.540	47.0	●
SCD 109-053-120 ACP5FL	10.90	12.00	118.00	53.00	71.0	1.560	47.0	●
SCD 110-053-120 ACP5FL	11.00	12.00	118.00	53.00	71.0	1.570	47.0	●
SCD 111-053-120 ACP5FL	11.10	12.00	118.00	53.00	71.0	1.590	47.0	●
SCD 112-053-120 ACP5FL	11.20	12.00	118.00	53.00	71.0	1.600	47.0	●
SCD 113-053-120 ACP5FL	11.30	12.00	118.00	53.00	71.0	1.620	47.0	●
SCD 114-053-120 ACP5FL	11.40	12.00	118.00	53.00	71.0	1.630	47.0	●
SCD 115-053-120 ACP5FL	11.50	12.00	118.00	53.00	71.0	1.640	47.0	●
SCD 116-053-120 ACP5FL	11.60	12.00	118.00	53.00	71.0	1.660	47.0	●
SCD 117-053-120 ACP5FL	11.70	12.00	118.00	53.00	71.0	1.670	47.0	●
SCD 118-053-120 ACP5FL	11.80	12.00	118.00	53.00	71.0	1.690	47.0	●
SCD 119-053-120 ACP5FL	11.90	12.00	118.00	53.00	71.0	1.700	47.0	●
SCD 120-053-120 ACP5FL	12.00	12.00	118.00	53.00	71.0	1.720	47.0	●
SCD 121-056-140 ACP5FL	12.10	14.00	124.00	56.00	77.0	1.730	47.0	●
SCD 122-056-140 ACP5FL	12.20	14.00	124.00	56.00	77.0	1.740	47.0	●
SCD 123-056-140 ACP5FL	12.30	14.00	124.00	56.00	77.0	1.760	47.0	●
SCD 124-056-140 ACP5FL	12.40	12.00	124.00	56.00	77.0	1.770	47.0	●
SCD 125-056-140 ACP5FL	12.50	14.00	124.00	56.00	77.0	1.790	47.0	●
SCD 126-056-140 ACP5FL	12.60	14.00	124.00	56.00	77.0	1.800	47.0	●
SCD 127-056-140 ACP5FL	12.70	14.00	124.00	56.00	77.0	1.820	47.0	●
SCD 128-056-140 ACP5FL	12.80	14.00	124.00	56.00	77.0	1.830	47.0	●
SCD 129-056-140 ACP5FL	12.90	14.00	124.00	56.00	77.0	1.840	47.0	●
SCD 130-056-140 ACP5FL	13.00	14.00	124.00	56.00	77.0	1.860	47.0	●
SCD 133-056-140 ACP5FL	13.30	14.00	124.00	56.00	77.0	1.900	47.0	●
SCD 135-056-140 ACP5FL	13.50	14.00	124.00	56.00	77.0	1.930	47.0	●
SCD 140-056-140 ACP5FL	14.00	14.00	124.00	56.00	77.0	2.000	47.0	●
SCD 145-059-160 ACP5FL	14.50	16.00	133.00	59.00	83.0	2.070	50.0	●
SCD 150-059-160 ACP5FL	15.00	16.00	133.00	59.00	83.0	2.150	50.0	●
SCD 155-059-160 ACP5FL	15.50	16.00	133.00	59.00	83.0	2.220	50.0	●
SCD 160-059-160 ACP5FL	16.00	16.00	133.00	59.00	83.0	2.290	50.0	●
SCD 165-066-180 ACP5FL	16.50	18.00	143.00	66.00	93.0	2.360	50.0	●
SCD 170-066-180 ACP5FL	17.00	18.00	143.00	66.00	93.0	2.430	50.0	●
SCD 175-066-180 ACP5FL	17.50	18.00	143.00	66.00	93.0	2.500	50.0	●
SCD 180-066-180 ACP5FL	18.00	18.00	143.00	66.00	93.0	2.570	50.0	●
SCD 185-071-200 ACP5FL	18.50	20.00	153.00	71.00	101.0	2.650	52.0	●
SCD 190-071-200 ACP5FL	19.00	20.00	153.00	71.00	101.0	2.720	52.0	●
SCD 195-071-200 ACP5FL	19.50	20.00	153.00	71.00	101.0	2.790	52.0	●
SCD 200-071-200 ACP5FL	20.00	20.00	153.00	71.00	101.0	2.860	52.0	●

● Based on DIN 6537 standard

Tool Performance

Ø 7mm

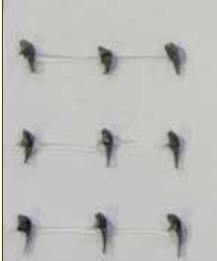




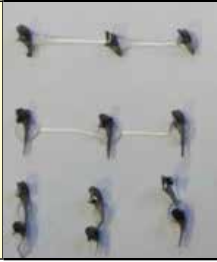




D.O.C – 25mm

Machining material – Alloy steel AISI 4340

Machine power – 22KW

Tool Tested - SCD 070-028-080 ACP3FL

VC (m/min)	80	80	80	80	80	100	100	100	100	100
f (mm/rev)	0.12	0.16	0.2	0.24	0.26	0.12	0.16	0.2	0.24	0.26
Top Diameter (mm)	7.01	7.009	7.01	7.012	7.014	7.011	7.014	7.014	7.012	7.016
Bottom Diameter (mm)	7.007	7.008	7.01	7.012	7.016	7.011	7.013	7.016	7.016	7.019
Cone Value (mm)	0.003	0.001	0	0	0.002	0	0.001	0.002	0.004	0.003
Roughness (Ra)	0.327	0.325	0.389	0.558	0.565	0.388	0.307	0.373	0.41	0.572
Roughness (Rz)	2.06	2.6	2.12	3.81	3.61	2.54	3.23	2.01	2.32	3.12
Hole Roundness (mm)	0.002	0.001	0.001	0.002	0.002	0.001	0.002	0.002	0.001	0.001
Min. Machine Power	18	20	23	26	27	26	28	32	34	37
Max. Machine Power	19	22	24	27	28	27	31	33	36	39
Noise	None	None	None	None	None	None	None	None	None	None
Vibration	None	None	None	None	None	None	None	None	None	None
Chip Evacuation	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Chip Formation	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Penetration	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good

F mm/rev (IPR)	0.12 (0.0047)	0.16 (0.0062)	0.20 (0.0078)	0.24 (0.0094)	0.26 (0.0102)
VC m/min (SFM)					
80 (264)					
100 (330)					

The tool performs well in all recommended cutting parameters

Machining Data for Solid Carbide Drills - IC608 D=.118"-.787"

I N C H						
ISO	Material		Condition	Tensile Strength [Kpsi]	Hardness HB	Material No.
P	Non-alloy steel and cast steel, free cutting steel	< 0.25 %C	Annealed	61	125	1
		>= 0.25 %C	Annealed	94	190	2
		< 0.55 %C	Quenched and tempered	123	250	3
		>= 0.55 %C	Annealed	109	220	4
			Quenched and tempered	145	300	5
	Low alloy steel and cast steel (less than 5% of alloying elements)		Annealed	87	200	6
		Quenched and tempered		35	275	7
				145	300	8
				174	350	9
	High alloyed steel, cast steel, and tool steel		Annealed	99	200	10
			Quenched and tempered	160	325	11
	Stainless steel and cast steel		Ferritic/martensitic	99	200	12
			Martensitic	119	240	13
M	Stainless steel		Austenitic	87	180	14
K	Grey cast iron (GG)		Ferritic/pearlitic		180	15
			Pearlitic		260	16
	Nodular cast iron (GGG)		Ferritic		160	17
			Pearlitic		250	18
	Malleable cast iron		Ferritic		130	19
		Pearlitic		230	20	
N	Aluminum-wrought alloy		Not cureable		60	21
			Cured		100	22
	Aluminum-cast, alloyed	<=12% Si	Not cureable		75	23
			Cured		90	24
		>12% Si	High temperature		130	25
	Copper alloys	>1% Pb	Free cutting		110	26
			Brass		90	27
			Electrolytic copper		100	28
	Non-metallic		Duroplastics, fiber plastics			29
			Hard rubber			30
S	High temp. alloys	Fe based	Annealed		200	31
			Cured		280	32
		Ni or Co based	Annealed		250	33
			Cured		350	34
			Cast		320	35
	Titanium Ti alloys			58		36
			Alpha+beta alloys cured	152		37
H	Hardened steel		Hardened		55 HRC	38
			Hardened		60 HRC	39
	Chilled cast iron	Cast		400	40	
	Cast iron	Hardened		55 HRC	41	

- When using external coolant supply only, reduce cutting speed by 10%
- Use internal coolant supply when machining austenitic stainless steel

I N C H

Cutting Speed V _c (SFM)	Feed (IPR) vs. Drill Diameter				
	Ø.118-.197	Ø.200-.315	Ø.319-.472	Ø.476-.630	Ø.633-.787
262-393	0.004-0.007	0.006-0.010	0.008-0.012	0.008-0.014	0.010-0.016
262-360	0.004-0.007	0.006-0.010	0.008-0.012	0.008-0.014	0.010-0.016
230-328	0.004-0.008	0.006-0.011	0.008-0.014	0.008-0.015	0.010-0.017
230-295	0.004-0.007	0.006-0.010	0.008-0.012	0.008-0.014	0.010-0.016
196-262	0.004-0.007	0.006-0.010	0.008-0.012	0.008-0.014	0.010-0.016
164-230	0.004-0.008	0.006-0.011	0.008-0.014	0.008-0.015	0.010-0.017
196-262	0.004-0.008	0.006-0.011	0.007-0.014	0.008-0.015	0.010-0.017
164-230	0.004-0.006	0.005-0.008	0.006-0.010	0.006-0.012	0.007-0.013
82-246	0.002-0.004	0.002-0.006	0.002-0.007	0.003-0.008	0.004-0.008
82-246	0.002-0.004	0.002-0.006	0.002-0.007	0.003-0.008	0.004-0.008
82-246	0.002-0.004	0.002-0.006	0.002-0.007	0.003-0.008	0.004-0.008
278-344	0.006-0.010	0.008-0.014	0.010-0.018	0.012-0.020	0.014-0.022
246-295	0.006-0.010	0.008-0.014	0.010-0.018	0.012-0.020	0.014-0.022
212-262	0.005-0.008	0.006-0.010	0.080-0.014	0.010-0.016	0.012-0.018
230-980	0.004-0.010	0.006-0.014	0.010-0.018	0.012-0.020	0.014-0.022
230-650					
230-980	0.003-0.007	0.005-0.010	0.008-0.014	0.010-0.018	0.012-0.020
48-115	0.001-0.003	0.002-0.004	0.002-0.005	0.003-0.006	0.003-0.007
130-230	0.002-0.004	0.003-0.005	0.004-0.006	0.005-0.006	0.006-0.007

As a starting value, the middle of the recommended machining range should be used.
Then, (according to wear results), conditions can be changed in order to optimize performance.

Machining Data for Solid Carbide Drills - IC608 D=3.0-20.0 mm

M E T R I C									
ISO	Material		Condition	Tensile Strength [N/mm ²]	Hardness HB	Material No.			
P	Non-alloy steel and cast steel, free cutting steel	< 0.25 %C	Annealed	420	125	1			
		>= 0.25 %C	Annealed	650	190	2			
		< 0.55 %C	Quenched and tempered	850	250	3			
		>= 0.55 %C	Annealed	750	220	4			
			Quenched and tempered	1000	300	5			
	Low alloy steel and cast steel (less than 5% of alloying elements)			Annealed	600	200	6		
				Quenched and tempered	930	275	7		
					1000	300	8		
	High alloyed steel, cast steel, and tool steel			Annealed	680	200	10		
				Quenched and tempered	1100	325	11		
	Stainless steel and cast steel			Ferritic/martensitic	680	200	12		
				Martensitic	820	240	13		
	M	Stainless steel		Austenitic	600	180	14		
K	Grey cast iron (GG)		Ferritic/pearlitic		180	15			
			Pearlitic		260	16			
	Nodular cast iron (GGG)		Ferritic		160	17			
			Pearlitic		250	18			
	Malleable cast iron		Ferritic		130	19			
Pearlitic				230	20				
N	Aluminum-wrought alloy		Not cureable		60	21			
			Cured		100	22			
	Aluminum-cast, alloyed	<=12% Si	Not cureable		75	23			
			Cured		90	24			
		>12% Si	High temperature		130	25			
	Copper alloys	>1% Pb		Free cutting		110	26		
				Brass		90	27		
			Electrolitic copper		100	28			
	Non-metallic		Duroplastics, fiber plastics				29		
Hard rubber					30				
S	High temp. alloys		Fe based	Annealed		200	31		
					Cured		280	32	
			Ni or Co based			Annealed		250	33
						Cured		350	34
						Cast		320	35
	Titanium Ti alloys				RM 400		36		
					Alpha+beta alloys cured	RM 1050		37	
H	Hardened steel		Hardened		55 HRC	38			
			Hardened		60 HRC	39			
	Chilled cast iron		Cast		400	40			
	Cast iron		Hardened		55 HRC	41			

- When using external coolant supply only, reduce cutting speed by 10%
- Use internal coolant supply when machining austenitic stainless steel

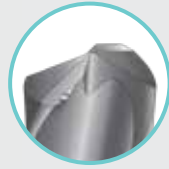
M E T R I C

Cutting Speed V _c (m/min)	Feed (mm/rev) vs. Drill Diameter				
	Ø3-5	Ø5.1-8	Ø8.1-12	Ø12.1-16	Ø16.1-20
80-120	0.10-0.18	0.15-0.25	0.2-0.30	0.20-0.35	0.25-0.40
80-110	0.10-0.18	0.15-0.25	0.2-0.30	0.20-0.35	0.25-0.40
70-100	0.10-0.20	0.15-0.28	0.2-0.35	0.20-0.38	0.25-0.42
70-90	0.10-0.18	0.15-0.25	0.2-0.30	0.20-0.35	0.25-0.40
60-80	0.10-0.18	0.15-0.25	0.2-0.30	0.20-0.35	0.25-0.40
50-70	0.10-0.20	0.15-0.28	0.2-0.35	0.20-0.38	0.25-0.42
60-80	0.10-0.20	0.15-0.28	0.18-0.35	0.20-0.38	0.25-0.42
50-70	0.10-0.15	0.12-0.20	0.14-0.25	0.16-0.30	0.18-0.32
25-75	0.04-0.10	0.05-0.15	0.05-0.18	0.08-0.20	0.10-0.20
25-75	0.04-0.10	0.05-0.15	0.05-0.18	0.08-0.20	0.10-0.20
25-75	0.04-0.10	0.05-0.15	0.05-0.18	0.08-0.20	0.10-0.20
85-105	0.15-0.25	0.20-0.35	0.25-0.45	0.30-0.50	0.35-0.55
75-90	0.15-0.25	0.20-0.35	0.25-0.45	0.30-0.50	0.35-0.55
65-80	0.12-0.20	0.15-0.25	0.20-0.35	0.25-0.40	0.30-0.45
70-300	0.10-0.25	0.15-0.35	0.25-0.45	0.30-0.50	0.35-0.55
70-200					
70-300	0.07-0.18	0.12-0.25	0.20-0.35	0.25-0.45	0.30-0.50
15-35	0.02-0.07	0.04-0.10	0.06-0.12	0.08-0.15	0.08-0.18
40-70	0.06-0.10	0.08-0.12	0.10-0.14	0.12-0.16	0.14-0.18

As a starting value, the middle of the recommended machining range should be used.
Then, (according to wear results), conditions can be changed in order to optimize performance.

Drilling Tool Wear

Edge Chipping



Cause

- Low wear resistance carbide grade
- Built-up edge has been formed
- Insufficient coolant fluid

Remedy

- Reduce feed rate
- Increase cutting speed
- Increase coolant pressure
- Improve jet direction in case of external coolant supply
- Change to different geometry
- Check tool and part clamping rigidity

Land Wear



Cause

- Cutting speed too high
- Low wear resistance carbide grade
- Radial run-out is too high

Remedy

- Check that the correct geometry is used
- Check that T.I.R. run-out does not exceed 0.02 mm
- Reduce cutting speed
- Increase coolant pressure
- Improve jet direction in case of external coolant supply
- Check and improve tool and part clamping rigidity
- Check if pocket gripping forces are too low - if so, replace the tool body

Corner Fracture



Cause

Caused by excessive insert wear before indexing the insert

- The grade and geometry could be too weak for the applications
- Excessive load on the insert
- Built-up edge has been formed on the insert

Remedy

- Check radial run-out
- Reduce feed rate
- Increase the speed
- Check tool and part clamping rigidity
- Check if pocket gripping forces are too low, replace the holder
- Increase coolant pressure
- Improve jet direction in case of external coolant supply

Corner Chipping



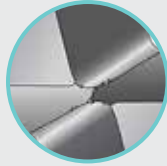
Cause

- Radial run-out is too high
- Insufficient coolant fluid

Remedy

- Check radial run-out
- Reduce feed rate increase the speed
- Check tool and part clamping rigidity
- Check if pocket gripping forces are too low - if so, replace the holder
- Increase coolant pressure
- Improve jet direction in case of external coolant supply

Chisel Chipping



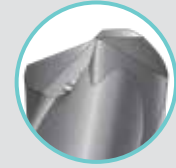
Cause

- Chisel run-out is too big
- Combine of high feed and low speed

Remedy

- Reduce feed rate and increase the cutting speed
- Check that chisel misalignment does not exceed 0.02 mm
- Check tool and part clamping rigidity
- Check if pocket gripping forces are too low - if so, replace the holder

Built-up Edge



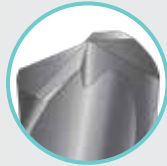
Cause

- Cutting zone temperature is too low
- Negative cutting geometry
- Machining of very sticky materials such as low-carbon steel, stainless steels, and aluminum

Remedy

- Increase the feed
- Increase cutting speed
- Increase coolant pressure
- Check oil percentage in the coolant fluid

Plastic Deformation



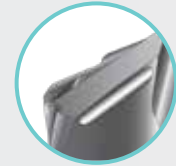
Cause

- Cutting temperature is too high

Remedy

- Check cutting parameters
- Reduce cutting feed
- Increase coolant pressure/volume
- Use harder grade
- Check that the correct geometry is used

Crater Wear



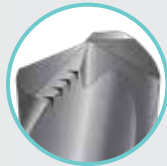
Cause

- Excessive cutting temperatures and pressures on the top of the insert

Remedy

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

Thermal Cracking



Cause

- Excessive variations in surface temperature, intermittent machining, or variations in coolant supply

Remedy

- Increase coolant pressure/volume
- Increase oil concentration percentage

Flank Wear



Cause

- High cutting speed
- Low wear resistance carbide grade

Remedy

- Check that the correct geometry is used
- Increase coolant pressure
- Change to harder grade
- Increase oil concentration percentage
- Reduce cutting speed and increase feed

Drilling With ISCAR
FLASHDRILL
ECO SOLID LINE



3425134 G 05/2022 © ISCAR LTD All Rights Reserved