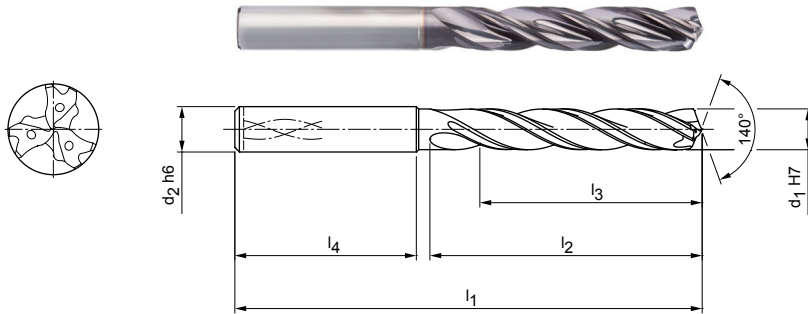


Tritan-Drill-Reamer

Solid carbide twist drill reamer
SCD641C (3xD), internal coolant supply

Design:
 Drill diameter: 4,00 – 20,00 mm
 Bore tolerance: $\geq IT 7$
 Coating material: HP358
 Number of cutting edges: 3
 Number of guiding chamfers: 6
 Point geometry: Specific geometry
 Tip angle: 140°
 Side rake angle: 30°

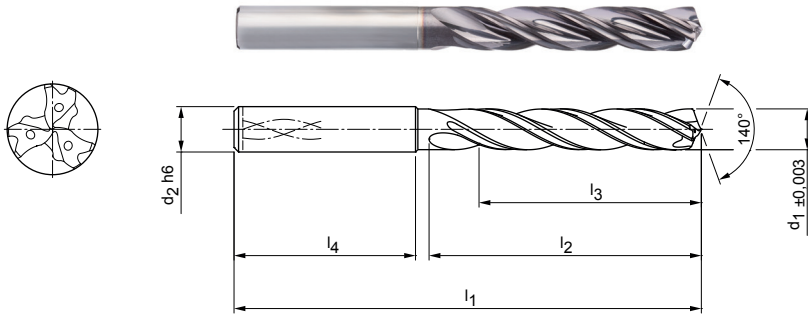


Dimensions						Shank form HA	
$d_1 H7$	$d_2 h6$	l_1	l_2	l_3	l_4	Specification	Order no.
4,00	6	66	24	17,0	36	SCD641C-0400-3-6-140HA03-HP358	31196337
5,00	6	66	28	20,0	36	SCD641C-0500-3-6-140HA03-HP358	31196338
6,00	6	66	28	20,0	36	SCD641C-0600-3-6-140HA03-HP358	31196339
8,00	8	79	41	29,0	36	SCD641C-0800-3-6-140HA03-HP358	31196560
10,00	10	89	47	35,0	40	SCD641C-1000-3-6-140HA03-HP358	31196561
12,00	12	102	55	40,0	45	SCD641C-1200-3-6-140HA03-HP358	31196562
14,00	14	107	60	43,0	45	SCD641C-1400-3-6-140HA03-HP358	31196563
16,00	16	115	65	45,0	48	SCD641C-1600-3-6-140HA03-HP358	31196564
18,00	18	123	73	51,0	48	SCD641C-1800-3-6-140HA03-HP358	31196565
20,00	20	131	79	55,0	50	SCD641C-2000-3-6-140HA03-HP358	31196566

Tritan-Drill-Reamer

Solid carbide twist drill reamer
SCD641 (3xD), internal coolant supply

Design:
 Drill diameter: 3,97 – 20,02 mm
 Bore tolerance: $\geq IT 7$
 Coating material: HP358
 Number of cutting edges: 3
 Number of guiding chamfers: 6
 Point geometry: Specific geometry
 Tip angle: 140°
 Side rake angle: 30°



Dimensions						Shank form HA	
$d_1 \pm 0,003$	$d_2 h6$	l_1	l_2	l_3	l_4	Specification	Order no.
3,97	6	66	24	17	36	SCD641-0397-3-6-140HA03-HP358	31196567
3,98	6	66	24	17	36	SCD641-0398-3-6-140HA03-HP358	31196568
3,99	6	66	24	17	36	SCD641-0399-3-6-140HA03-HP358	31196569
4,00	6	66	24	17	36	SCD641-0400-3-6-140HA03-HP358	31196570
4,01	6	66	24	17	36	SCD641-0401-3-6-140HA03-HP358	31196571
4,02	6	66	24	17	36	SCD641-0402-3-6-140HA03-HP358	31196572
4,97	6	66	28	20	36	SCD641-0497-3-6-140HA03-HP358	31196573
4,98	6	66	28	20	36	SCD641-0498-3-6-140HA03-HP358	31196574
4,99	6	66	28	20	36	SCD641-0499-3-6-140HA03-HP358	31196575
5,00	6	66	28	20	36	SCD641-0500-3-6-140HA03-HP358	31196576
5,01	6	66	28	20	36	SCD641-0501-3-6-140HA03-HP358	31196577
5,02	6	66	28	20	36	SCD641-0502-3-6-140HA03-HP358	31196578
5,97	6	66	28	20	36	SCD641-0597-3-6-140HA03-HP358	31196579
5,98	6	66	28	20	36	SCD641-0598-3-6-140HA03-HP358	31196580
5,99	6	66	28	20	36	SCD641-0599-3-6-140HA03-HP358	31196581
6,00	6	66	28	20	36	SCD641-0600-3-6-140HA03-HP358	31196582
6,01	6	66	28	20	36	SCD641-0601-3-6-140HA03-HP358	31196583
6,02	6	66	28	20	36	SCD641-0602-3-6-140HA03-HP358	31196584
7,97	8	79	41	29	36	SCD641-0797-3-6-140HA03-HP358	31196585
7,98	8	79	41	29	36	SCD641-0798-3-6-140HA03-HP358	31196586
7,99	8	79	41	29	36	SCD641-0799-3-6-140HA03-HP358	31196587
8,00	8	79	41	29	36	SCD641-0800-3-6-140HA03-HP358	31196588
8,01	8	79	41	29	36	SCD641-0801-3-6-140HA03-HP358	31196589
8,02	8	79	41	29	36	SCD641-0802-3-6-140HA03-HP358	31196590
9,97	10	89	47	35	40	SCD641-0997-3-6-140HA03-HP358	31196591
9,98	10	89	47	35	40	SCD641-0998-3-6-140HA03-HP358	31196592
9,99	10	89	47	35	40	SCD641-0999-3-6-140HA03-HP358	31196593
10,00	10	89	47	35	40	SCD641-1000-3-6-140HA03-HP358	31196594

Tritan-Drill-Reamer | Solid carbide twist drill reamer | SCD641 (3xD), internal coolant supply

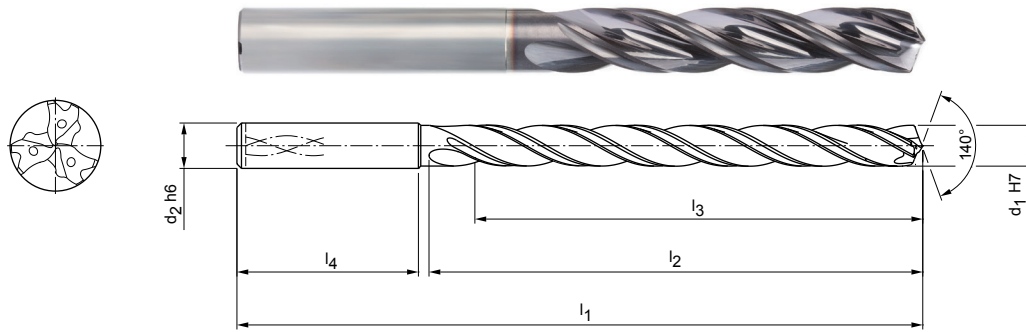
Dimensions						Shank form HA	
d ₁ ±0,003	d ₂ h6	l ₁	l ₂	l ₃	l ₄	Specification	Order no.
10,01	10	89	47	35	40	SCD641-1001-3-6-140HA03-HP358	31196595
10,02	10	89	47	35	40	SCD641-1002-3-6-140HA03-HP358	31196596
11,97	12	102	55	40	45	SCD641-1197-3-6-140HA03-HP358	31196597
11,98	12	102	55	40	45	SCD641-1198-3-6-140HA03-HP358	31196598
11,99	12	102	55	40	45	SCD641-1199-3-6-140HA03-HP358	31196599
12,00	12	102	55	40	45	SCD641-1200-3-6-140HA03-HP358	31196600
12,01	12	102	55	40	45	SCD641-1201-3-6-140HA03-HP358	31196601
12,02	12	102	55	40	45	SCD641-1202-3-6-140HA03-HP358	31196602
13,97	14	107	60	43	45	SCD641-1397-3-6-140HA03-HP358	31196603
13,98	14	107	60	43	45	SCD641-1398-3-6-140HA03-HP358	31196604
13,99	14	107	60	43	45	SCD641-1399-3-6-140HA03-HP358	31196605
14,00	14	107	60	43	45	SCD641-1400-3-6-140HA03-HP358	31196606
14,01	14	107	60	43	45	SCD641-1401-3-6-140HA03-HP358	31196607
14,02	14	107	60	43	45	SCD641-1402-3-6-140HA03-HP358	31196608
15,97	16	115	65	45	48	SCD641-1597-3-6-140HA03-HP358	31196609
15,98	16	115	65	45	48	SCD641-1598-3-6-140HA03-HP358	31196610
15,99	16	115	65	45	48	SCD641-1599-3-6-140HA03-HP358	31196611
16,00	16	115	65	45	48	SCD641-1600-3-6-140HA03-HP358	31196612
16,01	16	115	65	45	48	SCD641-1601-3-6-140HA03-HP358	31196613
16,02	16	115	65	45	48	SCD641-1602-3-6-140HA03-HP358	31196614
17,97	18	123	73	51	48	SCD641-1797-3-6-140HA03-HP358	31196615
17,98	18	123	73	51	48	SCD641-1798-3-6-140HA03-HP358	31196616
17,99	18	123	73	51	48	SCD641-1799-3-6-140HA03-HP358	31196617
18,00	18	123	73	51	48	SCD641-1800-3-6-140HA03-HP358	31196618
18,01	18	123	73	51	48	SCD641-1801-3-6-140HA03-HP358	31196619
18,02	18	123	73	51	48	SCD641-1802-3-6-140HA03-HP358	31196620
19,97	20	131	79	55	50	SCD641-1997-3-6-140HA03-HP358	31196621
19,98	20	131	79	55	50	SCD641-1998-3-6-140HA03-HP358	31196622
19,99	20	131	79	55	50	SCD641-1999-3-6-140HA03-HP358	31196623
20,00	20	131	79	55	50	SCD641-2000-3-6-140HA03-HP358	31196624
20,01	20	131	79	55	50	SCD641-2001-3-6-140HA03-HP358	31196625
20,02	20	131	79	55	50	SCD641-2002-3-6-140HA03-HP358	31196626

Tritan-Drill-Reamer

Solid carbide twist drill reamer
SCD641C (5xD), internal coolant supply

Design:

Drill diameter: 4,00 – 20,00 mm
Hole tolerance: $\geq IT 7$
Coating material: HP358
Number of cutting edges: 3
Number of guiding chamfers: 6
Point geometry: Specific geometry
Tip angle: 140°
Side rake angle: 30°



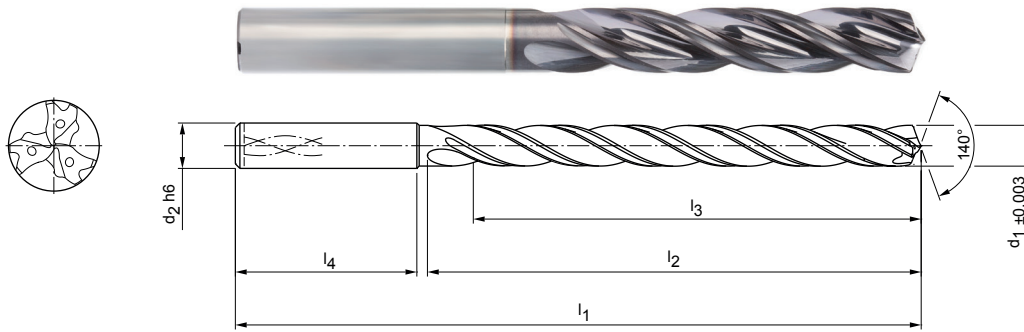
Dimensions						Shank form HA	
d ₁ H7	d ₂ h6	l ₁	l ₂	l ₃	l ₄	Specification	Order no.
4,00	6	74	36	29,0	36	SCD641C-0400-3-6-140HA05-HP358	31196627
5,00	6	82	44	35,0	36	SCD641C-0500-3-6-140HA05-HP358	31196628
6,00	6	82	44	35,0	36	SCD641C-0600-3-6-140HA05-HP358	31196629
8,00	8	91	53	43,0	36	SCD641C-0800-3-6-140HA05-HP358	31196630
10,00	10	103	61	49,0	40	SCD641C-1000-3-6-140HA05-HP358	31196631
12,00	12	118	71	56,0	45	SCD641C-1200-3-6-140HA05-HP358	31196632
14,00	14	124	77	60,0	45	SCD641C-1400-3-6-140HA05-HP358	31196633
16,00	16	133	83	63,0	48	SCD641C-1600-3-6-140HA05-HP358	31196634
18,00	18	143	93	71,0	48	SCD641C-1800-3-6-140HA05-HP358	31196635
20,00	20	153	101	77,0	50	SCD641C-2000-3-6-140HA05-HP358	31196636

Tritan-Drill-Reamer

Solid carbide twist drill reamer
SCD641 (5xD), internal coolant supply

Design:

Drill diameter: 3,97 – 20,02 mm
Hole tolerance: $\geq IT 7$
Coating material: HP358
Number of cutting edges: 3
Number of guiding chamfers: 6
Point geometry: Specific geometry
Tip angle: 140°
Side rake angle: 30°



Dimensions						Shank form HA	
$d_1 \pm 0,003$	$d_2 h6$	l_1	l_2	l_3	l_4	Specification	Order no.
3,97	6	74	36	29,0	36	SCD641-0397-3-6-140HA05-HP358	31196637
3,98	6	74	36	29,0	36	SCD641-0398-3-6-140HA05-HP358	31196638
3,99	6	74	36	29,0	36	SCD641-0399-3-6-140HA05-HP358	31196639
4,00	6	74	36	29,0	36	SCD641-0400-3-6-140HA05-HP358	31196640
4,01	6	74	36	29,0	36	SCD641-0401-3-6-140HA05-HP358	31196641
4,02	6	74	36	29,0	36	SCD641-0402-3-6-140HA05-HP358	31196642
4,97	6	82	44	35,0	36	SCD641-0497-3-6-140HA05-HP358	31196643
4,98	6	82	44	35,0	36	SCD641-0498-3-6-140HA05-HP358	31196644
4,99	6	82	44	35,0	36	SCD641-0499-3-6-140HA05-HP358	31196645
5,00	6	82	44	35,0	36	SCD641-0500-3-6-140HA05-HP358	31196646
5,01	6	82	44	35,0	36	SCD641-0501-3-6-140HA05-HP358	31196647
5,02	6	82	44	35,0	36	SCD641-0502-3-6-140HA05-HP358	31196648
5,97	6	82	44	35,0	36	SCD641-0597-3-6-140HA05-HP358	31196649
5,98	6	82	44	35,0	36	SCD641-0598-3-6-140HA05-HP358	31196650
5,99	6	82	44	35,0	36	SCD641-0599-3-6-140HA05-HP358	31196651
6,00	6	82	44	35,0	36	SCD641-0600-3-6-140HA05-HP358	31196652
6,01	6	82	44	35,0	36	SCD641-0601-3-6-140HA05-HP358	31196653
6,02	6	82	44	35,0	36	SCD641-0602-3-6-140HA05-HP358	31196654
7,97	8	91	53	43,0	36	SCD641-0797-3-6-140HA05-HP358	31196656
7,98	8	91	53	43,0	36	SCD641-0798-3-6-140HA05-HP358	31196657
7,99	8	91	53	43,0	36	SCD641-0799-3-6-140HA05-HP358	31196658
8,00	8	91	53	43,0	36	SCD641-0800-3-6-140HA05-HP358	31196659
8,01	8	91	53	43,0	36	SCD641-0801-3-6-140HA05-HP358	31196660
8,02	8	91	53	43,0	36	SCD641-0802-3-6-140HA05-HP358	31196661
9,97	10	103	61	49,0	40	SCD641-0997-3-6-140HA05-HP358	31196662
9,98	10	103	61	49,0	40	SCD641-0998-3-6-140HA05-HP358	31196663
9,99	10	103	61	49,0	40	SCD641-0999-3-6-140HA05-HP358	31196664
10,00	10	103	61	49,0	40	SCD641-1000-3-6-140HA05-HP358	31196665
10,01	10	103	61	49,0	40	SCD641-1001-3-6-140HA05-HP358	31196666
10,02	10	103	61	49,0	40	SCD641-1002-3-6-140HA05-HP358	31196667
11,97	12	118	71	56,0	45	SCD641-1197-3-6-140HA05-HP358	31196668
11,98	12	118	71	56,0	45	SCD641-1198-3-6-140HA05-HP358	31196669

Tritan-Drill-Reamer | Solid carbide twist drill reamer | SCD641 (5xD), internal coolant supply

Dimensions						Shank form HA	
d ₁ ±0,003	d ₂ h6	l ₁	l ₂	l ₃	l ₄	Specification	Order no.
11,99	12	118	71	56,0	45	SCD641-1199-3-6-140HA05-HP358	31196670
12,00	12	118	71	56,0	45	SCD641-1200-3-6-140HA05-HP358	31196671
12,01	12	118	71	56,0	45	SCD641-1201-3-6-140HA05-HP358	31196672
12,02	12	118	71	56,0	45	SCD641-1202-3-6-140HA05-HP358	31196673
13,97	14	124	77	60,0	45	SCD641-1397-3-6-140HA05-HP358	31196674
13,98	14	124	77	60,0	45	SCD641-1398-3-6-140HA05-HP358	31196675
13,99	14	124	77	60,0	45	SCD641-1399-3-6-140HA05-HP358	31196676
14,00	14	124	77	60,0	45	SCD641-1400-3-6-140HA05-HP358	31196677
14,01	14	124	77	60,0	45	SCD641-1401-3-6-140HA05-HP358	31196678
14,02	14	124	77	60,0	45	SCD641-1402-3-6-140HA05-HP358	31196679
15,97	16	133	83	63,0	48	SCD641-1597-3-6-140HA05-HP358	31196680
15,98	16	133	83	63,0	48	SCD641-1598-3-6-140HA05-HP358	31196681
15,99	16	133	83	63,0	48	SCD641-1599-3-6-140HA05-HP358	31196682
16,00	16	133	83	63,0	48	SCD641-1600-3-6-140HA05-HP358	31196683
16,01	16	133	83	63,0	48	SCD641-1601-3-6-140HA05-HP358	31196684
16,02	16	133	83	63,0	48	SCD641-1602-3-6-140HA05-HP358	31196685
17,97	18	143	93	71,0	48	SCD641-1797-3-6-140HA05-HP358	31196686
17,98	18	143	93	71,0	48	SCD641-1798-3-6-140HA05-HP358	31196687
17,99	18	143	93	71,0	48	SCD641-1799-3-6-140HA05-HP358	31196688
18,00	18	143	93	71,0	48	SCD641-1800-3-6-140HA05-HP358	31196689
18,01	18	143	93	71,0	48	SCD641-1801-3-6-140HA05-HP358	31196690
18,02	18	143	93	71,0	48	SCD641-1802-3-6-140HA05-HP358	31196691
19,97	20	153	101	77,0	50	SCD641-1997-3-6-140HA05-HP358	31196692
19,98	20	153	101	77,0	50	SCD641-1998-3-6-140HA05-HP358	31196693
19,99	20	153	101	77,0	50	SCD641-1999-3-6-140HA05-HP358	31196694
20,00	20	153	101	77,0	50	SCD641-2000-3-6-140HA05-HP358	31196695
20,01	20	153	101	77,0	50	SCD641-2001-3-6-140HA05-HP358	31196696
20,02	20	153	101	77,0	50	SCD641-2002-3-6-140HA05-HP358	31196697

Cutting data recommendations for solid carbide twist drill reamer

Feed and cutting speed

Tritan-Drill-Reamer | SCD641, SCD641C

3xD | 5xD

MZG*	Workpiece material	Strength/ hardness [N/mm ²] [HRC]	Cutting speed v _c [m/min]				Feed f [mm] for drill diameter							
			Internal cool- ant supply	External cool- ant supply	MQL	Air	4,00	5,50	7,50	10,50	14,50	20,00		
P	1.1	Structural, free-cutting, case hardened and heat-treated	< 700 N/mm ²	70	65	65		0,17	0,21	0,26	0,33	0,40	0,48	
	P2.1	Structural, free-cutting, case hardened and heat-treated	< 1200 N/mm ²	65	55	55		0,22	0,27	0,33	0,41	0,51	0,60	
	2.1	Nitrided, case hardened and heat-treated steels, alloy	< 900 N/mm ²	70	60	60		0,21	0,25	0,31	0,39	0,48	0,57	
	P5	Nitrided, case hardened and heat-treated steels, alloy	< 1.400 N/mm ²	50	40	40		0,17	0,21	0,25	0,31	0,38	0,45	
	3.1	Tool, bearing, spring and high-speed steels**	< 800 N/mm ²	55	45	45		0,18	0,23	0,28	0,35	0,43	0,51	
	P3	Tool, bearing, spring and high-speed steels**	< 1.000 N/mm ²	40	40	40		0,16	0,19	0,23	0,29	0,35	0,42	
	3.3	Tool, bearing, spring and high-speed steels**	< 1.500 N/mm ²	40	30	35								
	P4	4.1	Stainless steels, ferritic and martensitic		40	30	35		0,12	0,15	0,18	0,23	0,28	0,34
P5	5.1	Cast steel		70	60	60		0,21	0,25	0,31	0,39	0,48	0,57	
P6	6.1	Stainless cast steel, ferritic and martensitic		40	30	35		0,12	0,15	0,18	0,23	0,28	0,34	
M	M1	1.1	Stainless steels, austenitic	< 700 N/mm ²	40	25	25		0,09	0,11	0,14	0,17	0,21	0,25
	1.2	Stainless steels, ferritic/austenitic (duplex)	< 1.000 N/mm ²	35	20	20		0,08	0,10	0,12	0,15	0,18	0,22	
	M2	2.1	Stainless/heat-resistant cast steel, austenitic	< 700 N/mm ²	40	25	25		0,09	0,11	0,14	0,17	0,21	0,25
	M3	2.2	Stainless cast steel, ferritic/austenitic (duplex)	< 1.000 N/mm ²	35	20	20		0,08	0,10	0,12	0,15	0,18	0,22
K	K1	1.1	Cast iron with lamellar graphite (grey cast iron), GJL	< 300 N/mm ²	100	70	70	70	0,25	0,32	0,41	0,53	0,66	0,80
	2.1	Cast iron with spheroidal graphite, GJS	< 500 N/mm ²	135	85	100	100	0,25	0,31	0,39	0,50	0,62	0,74	
	K2	2.2	Cast iron with spheroidal graphite, GJS	≤ 800 N/mm ²	85	65	65		0,22	0,27	0,34	0,43	0,53	0,63
	2.3	Cast iron with spheroidal graphite, GJS	> 800 N/mm ²	50	35	45		0,11	0,13	0,16	0,20	0,24	0,29	
	K3	3.1	Cast iron with spheroidal graphite, GJV; malleable cast iron, GJM	< 500 N/mm ²	75	70	70		0,24	0,29	0,37	0,46	0,57	0,68
	3.2	Cast iron with spheroidal graphite, GJV; malleable cast iron, GJM	> 500 N/mm ²	70	60	60		0,20	0,24	0,30	0,37	0,45	0,54	

