

TWIST DRILLS FOR METAL



BLUE-MASTER[®]
by celesa

CUTTING TECHNOLOGIES

FULLY GROUND TWIST DRILLS
**DIN
338**


		BC2	BC82	BC02	BC9	BC5	BC99	BC58	BC16	BC66	BC15	BC18
MATERIAL		HSS	HSS	HSS-G	HSS	HSSCo 5%	HSSCo 5%	HSSCo 8%	HSS	HSS	HSS	HSS
SHARPENING												
POINT ANGLE		118°	118°	118°	118°	135°	135°	135°	135°	118°	118°	118°
HELIX ANGLE		30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	40° "W"	15° "H"	30° "N"	30° "N"
COATING		OX	BRIGHT	GOLD OX	OX	GOLD	GOLD	GOLD	BRIGHT	BRIGHT	OX	TiN
APPLICATION												
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€	€
0,20	19 x 2,50	4,67				7,19						
0,25	19 x 3	4,60				6,98						
0,30	19 x 3	3,65				6,16						
0,35	19 x 4	3,71				6,16						
0,40	20 x 5	3,64				5,07						
0,45	20 x 5	3,64				5,07						
0,50	22 x 6	2,56				3,55						3,48
0,55	24 x 7	3,20				4,74						
0,60	24 x 7	3,19				3,81						3,28
0,65	26 x 8	3,20				4,09						
0,70	28 x 9	3,18				3,77						3,07
0,75	28 x 9	2,34				3,36						3,02
0,80	30 x 10	2,41				3,09						2,88
0,85	30 x 10	2,41				3,54						
0,90	32 x 11	2,41				3,28						2,88
0,95	32 x 11	2,41				3,35						
1,00	34 x 12	1,84	1,84	2,05		2,67		3,95	2,51	3,11	4,15	2,49
1,05	34 x 12	2,05	2,05									
1,10	36 x 14	2,05	2,05			3,23						2,53
1,15	36 x 14	2,05	2,05									
1,19	3/64"	1,88				2,89						
1,20	38 x 16	2,05	2,05			3,17						2,53
1,25	38 x 16	1,62	1,62			3,09		4,52	2,99	3,49		2,35
1,30	38 x 16	1,81	1,81			3,17						2,41
1,35	40 x 18	1,80	1,80									
1,40	40 x 18	1,80	1,80			3,17						2,41
1,45	40 x 18	1,80	1,80									
1,50	40 x 18	1,46	1,46	1,90		2,52		3,74	2,39	3,07	4,15	2,14
1,55	43 x 20	1,76										

FULLY GROUND TWIST DRILLS



10 U. Ø 0,20 - Ø 10,50 mm

6 U. Ø 10,60 - Ø 14 mm

1 U. Ø 14,10 - Ø 20 mm

1 U. BC9-BC99
BC7-BC98-BC42



		BTX	TTX	BC51	BC95	BC55	BC57	BC50	BC7	BC98	BC42
MATERIAL		HSSCo 5%	HSS	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	CARBIDE TIPPED	CARBIDE TIPPED	SOLID CARBIDE
SHARPENING											
POINT ANGLE		135°	135°	135°	130°	135°	135°	118°	118°	135°	135°
HELIX ANGLE		38° "S"	38° "S"	30° "N"	Ø ≥ 3	38° "S"	38° "S"	38° "N"	30° "N"	30° "N"	35° "N"
COATING		GOLD	TiAlSiN	TiAlN	GOLD OX	BRIGHT	TiAlN	TiAlN	BRIGHT	BRIGHT	BRIGHT
APPLICATION											
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€
0,20	19 x 2,50										
0,25	19 x 3										
0,30	19 x 3										
0,35	19 x 4										
0,40	20 x 5										
0,45	20 x 5										
0,50	22 x 6										15,95
0,55	24 x 7										
0,60	24 x 7										
0,65	26 x 8										
0,70	28 x 9										
0,75	28 x 9										
0,80	30 x 10										
0,85	30 x 10										
0,90	32 x 11										
0,95	32 x 11										
1,00	34 x 12			3,48	3,13	4,14	5,90				10,04
1,05	34 x 12										
1,10	36 x 14										
1,15	36 x 14										
1,19	3/64"										
1,20	38 x 16					5,47	5,66				
1,25	38 x 16										
1,30	38 x 16										
1,35	40 x 18										
1,40	40 x 18										
1,45	40 x 18										
1,50	40 x 18			3,51	2,98	4,02	5,89				11,18
1,55	43 x 20										

Twist drills for Metal

Pink

Ø 0,20-1,55mm

FULLY GROUND TWIST DRILLS
**DIN
338**


		BC2	BC82	BC02	BC9	BC5	BC99	BC58	BC16	BC66	BC15	BC18
MATERIAL		HSS	HSS	HSS-G	HSS	HSSCo 5%	HSSCo 5%	HSSCo 8%	HSS	HSS	HSS	HSS
SHARPENING												
POINT ANGLE		118°	118°	118°	118°	135°	135°	135°	135°	118°	118°	118°
HELIX ANGLE		30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	40° "W"	15° "H"	30° "N"	30° "N"
COATING		OX	BRIGHT	GOLD OX	OX	GOLD	GOLD	GOLD	BRIGHT	BRIGHT	OX	TiN
APPLICATION		 70 Kg/mm²	 70 Kg/mm²		 12,70	 120 Kg/mm²	 120 Kg/mm²	 120 Kg/mm²	 Al	 BRASS		 PRODUCTION
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€	€
1,59	1/16"	1,61				2,95						
1,60	43 x 20	1,76	1,76			3,17						2,42
1,65	43 x 20	1,76	1,76									
1,70	43 x 20	1,76	1,76			3,17						2,41
1,75	46 x 22	1,58	1,58			3,09		4,52	2,74	4,44		2,32
1,80	46 x 22	1,57	1,57			3,10						2,27
1,85	46 x 22	1,57	1,57									
1,90	46 x 22	1,57	1,57			3,10						2,27
1,95	48 x 24	1,57										
1,98	5/64"	1,43				2,89						
2,00	49 x 24	1,34	1,34	1,42		2,55		3,74	2,39	2,79	3,76	2,14
2,05	49 x 24	1,37	1,37									
2,10	49 x 24	1,37	1,37			3,01						2,12
2,15	53 x 27	1,37										
2,20	53 x 27	1,37	1,37			3,01						2,11
2,25	53 x 27	1,26	1,26	1,41		2,86		4,52	2,72	3,04		2,05
2,30	53 x 27	1,57	1,57			3,01						2,25
2,35	53 x 27	1,58	1,58									
2,38	3/32"	1,50				2,84						
2,40	57 x 30	1,57	1,57			3,01						2,25
2,45	57 x 30	1,57										
2,50	57 x 30	1,33	1,33	1,49		2,34		3,74	2,23	2,63	3,76	2,12
2,55	57 x 30	1,61	1,61									
2,60	57 x 30	1,61	1,61			2,89						2,26
2,65	57 x 30	1,61										
2,70	61 x 33	1,61	1,61	1,81		2,89						2,26
2,75	61 x 33	1,41	1,41	1,54		2,86		4,52	2,72	3,56		2,20
2,78	7/64"	1,54				2,77						
2,80	61 x 33	1,61	1,61	1,81		2,90						2,26

FULLY GROUND TWIST DRILLS



10 U. Ø 0,20 - Ø 10,50 mm

6 U. Ø 10,60 - Ø 14 mm

1 U. Ø 14,10 - Ø 20 mm

1 U. BC9-BC99
BC7-BC98-BC42



		BTX	TTX	BC51	BC95	BC55	BC57	BC50	BC7	BC98	BC42
MATERIAL		HSSCo 5%	HSS	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	CARBIDE TIPPED	CARBIDE TIPPED	SOLID CARBIDE
SHARPENING											
POINT ANGLE		135°	135°	135°	130°	135°	135°	118°	118°	135°	135°
HELIX ANGLE		38° "S"	38° "S"	30° "N"	0 ≥ 3	38° "S"	38° "S"	38° "N"	30° "N"	30° "N"	35° "N"
COATING		GOLD	TiAlSiN	TiAlN	GOLD OX	BRIGHT	TiAlN	TiAlN	BRIGHT	BRIGHT	BRIGHT
APPLICATION											
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€
1,59	1/16"										
1,60	43 x 20					4,56					
1,65	43 x 20										
1,70	43 x 20					3,87					
1,75	46 x 22										
1,80	46 x 22					4,07	5,80				
1,85	46 x 22										
1,90	46 x 22					4,45					
1,95	48 x 24										
1,98	5/64"										
2,00	49 x 24			3,66	2,98	3,99	5,91	5,02	20,15		13,86
2,05	49 x 24										
2,10	49 x 24					4,17			21,67		19,45
2,15	53 x 27										
2,20	53 x 27					4,22	6,26		21,67		20,91
2,25	53 x 27								21,67		
2,30	53 x 27					4,13			21,67		20,91
2,35	53 x 27										
2,38	3/32"										
2,40	57 x 30					4,23			21,67		21,28
2,45	57 x 30										
2,50	57 x 30			3,39	2,79	3,73	5,49	5,09	20,15		16,80
2,55	57 x 30										
2,60	57 x 30					4,54			21,67		26,26
2,65	57 x 30										
2,70	61 x 33					4,32			20,64		26,26
2,75	61 x 33			3,58					21,67		
2,78	7/64"										
2,80	61 x 33					4,68	8,96		21,67		26,26

Twist drills for Metal

Pink

Ø 1,59-2,80mm

FULLY GROUND TWIST DRILLS
**DIN
338**


		BC2	BC82	BC02	BC9	BC5	BC99	BC58	BC16	BC66	BC15	BC18
MATERIAL		HSS	HSS	HSS-G	HSS	HSSCo 5%	HSSCo 5%	HSSCo 8%	HSS	HSS	HSS	HSS
SHARPENING												
POINT ANGLE		118°	118°	118°	118°	135°	135°	135°	135°	118°	118°	118°
HELIX ANGLE		30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	40° "W"	15° "H"	30° "N"	30° "N"
COATING		OX	BRIGHT	GOLD OX	OX	GOLD	GOLD	GOLD	BRIGHT	BRIGHT	OX	TiN
APPLICATION				<i>Plus</i>					Al	BRASS		
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€	€
2,85	61 x 33	1,63										
2,90	61 x 33	1,61	1,61			2,89						2,26
2,95	61 x 33	1,61										
3,00	61 x 33	1,21	1,21	1,33		2,29		3,62	2,20	2,92	3,26	2,00
3,05	65 x 36	1,56										
3,10	65 x 36	1,41	1,41	1,53		2,78		4,84				2,53
3,15	65 x 36	1,56										
3,17	1/8"	1,35				2,64						
3,20	65 x 36	1,41	1,41	1,53		2,78		4,84	2,72			2,53
3,25	65 x 36	1,41	1,41	1,53		2,78		4,44	2,72	3,56		2,53
3,30	65 x 36	1,41	1,41	1,53		2,78		4,84	2,72			2,53
3,35	65 x 36	1,81										
3,40	70 x 39	1,81	1,81	2,00		2,90						2,72
3,45	70 x 39	1,82										
3,50	70 x 39	1,37	1,37	1,53		2,77		4,36	2,66	3,12	3,88	2,50
3,55	70 x 39	1,88										
3,57	9/64"	1,77				3,32						
3,60	70 x 39	1,88	1,88	2,10		3,49						2,73
3,65	70 x 39	1,88										
3,70	70 x 39	1,88	1,88	2,10		3,49						2,74
3,75	70 x 39	1,57	1,57	1,81		3,28		5,28	3,17	4,64		2,64
3,80	75 x 43	1,93	1,93	2,20		3,49						2,78
3,85	75 x 43	1,93										
3,90	75 x 43	1,93	1,93	2,20		3,49						2,77
3,95	75 x 43	1,93										
3,97	5/32"	1,83				3,32						
4,00	75 x 43	1,53	1,53	1,73		2,95		4,72	2,86	3,39	4,24	2,61
4,05	75 x 43	1,93										
4,10	75 x 43	1,73	1,73	1,93		3,28		5,82	3,12			2,71

FULLY GROUND TWIST DRILLS



- 10 U.** Ø 0,20 - Ø 10,50 mm
- 6 U.** Ø 10,60 - Ø 14 mm
- 1 U.** Ø 14,10 - Ø 20 mm
- 1 U.** BC9-BC99
BC7-BC98-BC42

		BTX	TTX	BC51	BC95	BC55	BC57	BC50	BC7	BC98	BC42
MATERIAL		HSSCo 5%	HSS	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	CARBIDE TIPPED	CARBIDE TIPPED	SOLID CARBIDE
SHARPENING											
POINT ANGLE		135°	135°	135°	130°	135°	135°	118°	118°	135°	135°
HELIX ANGLE		38° "5"	38° "5"	30° "N"	Ø ≥ 3	38° "5"	38° "5"	38° "N"	30° "N"	30° "N"	35° "N"
COATING		GOLD	TiAlSiN	TiAlN	GOLD OX	BRIGHT	TiAlN	TiAlN	BRIGHT	BRIGHT	BRIGHT
APPLICATION											
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€
2,85	61 x 33										
2,90	61 x 33					4,72			21,67		26,26
2,95	61 x 33										
3,00	61 x 33	1,96	1,86	3,34	2,74	3,62	5,44	5,61	20,04	15,03	20,15
3,05	65 x 36										
3,10	65 x 36					4,37	6,68		20,51		26,50
3,15	65 x 36										
3,17	1/8"										
3,20	65 x 36	2,41	2,29		3,35	4,37	6,73		20,13		26,50
3,25	65 x 36								20,72		
3,30	65 x 36	2,41	2,29	4,23	3,36	4,37	6,69	6,81	20,33	17,01	23,30
3,35	65 x 36										
3,40	70 x 39					5,09			20,72		29,07
3,45	70 x 39										
3,50	70 x 39	2,40	2,28	4,19	3,30	4,41	6,64	6,02	19,65	15,70	22,98
3,55	70 x 39										
3,57	9/64"										
3,60	70 x 39					5,09			20,51	17,01	30,46
3,65	70 x 39										
3,70	70 x 39					5,09			21,10		30,46
3,75	70 x 39								21,10		
3,80	75 x 43					5,81	9,65		21,10		31,94
3,85	75 x 43										
3,90	75 x 43					5,55			21,10		31,94
3,95	75 x 43										
3,97	5/32"										
4,00	75 x 43	2,42	2,30	4,33	3,59	4,74	7,00	6,83	20,03	15,28	25,85
4,05	75 x 43										
4,10	75 x 43					5,24	7,54		20,26		33,21

Twist drills for Metal

Pink

Ø 2,85-4,10mm

FULLY GROUND TWIST DRILLS
**DIN
338**


		BC2	BC82	BC02	BC9	BC5	BC99	BC58	BC16	BC66	BC15	BC18
MATERIAL		HSS	HSS	HSS-G	HSS	HSSCo 5%	HSSCo 5%	HSSCo 8%	HSS	HSS	HSS	HSS
SHARPENING												
POINT ANGLE		118°	118°	118°	118°	135°	135°	135°	135°	118°	118°	118°
HELIX ANGLE		30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	40° "W"	15° "H"	30° "N"	30° "N"
COATING		OX	BRIGHT	GOLD OX	OX	GOLD	GOLD	GOLD	BRIGHT	BRIGHT	OX	TiN
APPLICATION		 70 Kg/mm ²	 70 Kg/mm ²		 12,70	 120 Kg/mm ²	 12,70	 120 Kg/mm ²	 Al			 PRODUCTION
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€	€
4,15	75 x 43	1,93										
4,20	75 x 43	1,73	1,73			3,28		5,82	3,12			2,71
4,25	75 x 43	1,73	1,73	1,93		3,28		5,28	3,63	5,03		2,71
4,30	80 x 47	2,29	2,29	2,60		3,49						3,01
4,35	80 x 47	2,27										
4,37	11/64"	2,15				3,32						
4,40	80 x 47	2,29	2,29	2,60		3,49						3,01
4,45	80 x 47	2,29										
4,50	80 x 47	1,81	1,81	1,96		3,38		5,28	3,20	4,14	4,40	2,74
4,55	80 x 47	2,31										
4,60	80 x 47	2,31	2,31			3,88						3,02
4,65	80 x 47	2,31										
4,70	80 x 47	2,31	2,31	2,60		3,88						3,02
4,75	80 x 47	2,05	2,05	2,32		3,69		5,83	4,09	6,09		2,91
4,76	3/16"	1,96				3,45						
4,80	86 x 52	2,60	2,60	2,84		3,91		6,42				3,20
4,85	86 x 52	2,51										
4,90	86 x 52	2,51	2,51	2,78		3,91						3,16
4,95	86 x 52	2,53										
5,00	86 x 52	1,92	1,92	2,14		3,54		5,65	3,43	4,49	4,78	2,80
5,05	86 x 52	2,61	2,61									
5,10	86 x 52	2,60	2,60	2,87		4,24		6,92	3,96		6,63	3,19
5,15	86 x 52	2,61										
5,16	13/64"	2,49				3,65						
5,20	86 x 52	2,60	2,60	2,87		4,24		6,92				3,20
5,25	86 x 52	2,43	2,43	2,76		4,18		6,63	4,88	6,82		3,18
5,30	86 x 52	3,23	3,23	3,57		4,24						3,62
5,35	93 x 57	3,22										
5,40	93 x 57	3,23	3,23			4,24						3,62

FULLY GROUND TWIST DRILLS



		BTX	TTX	BC51	BC95	BC55	BC57	BC50	BC7	BC98	BC42
MATERIAL		HSSCo 5%	HSS	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	CARBIDE TIPPED	CARBIDE TIPPED	SOLID CARBIDE
SHARPENING											
POINT ANGLE		135°	135°	135°	130°	135°	135°	118°	118°	135°	135°
HELIX ANGLE		38° "S"	38° "S"	30° "N"	0 ≥ 3	38° "S"	38° "S"	38° "N"	30° "N"	30° "N"	35° "N"
COATING		GOLD	TiAlSiN	TiAlN	GOLD OX	BRIGHT	TiAlN	TiAlN	BRIGHT	BRIGHT	BRIGHT
APPLICATION											
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€
4,15	75 x 43										
4,20	75 x 43	2,89	2,74	4,55	4,00	5,21	7,52	8,41	20,26	17,80	31,63
4,25	75 x 43			4,55					22,07		
4,30	80 x 47					5,56	8,05		22,07	17,80	39,53
4,35	80 x 47										
4,37	11/64"										
4,40	80 x 47					5,56			22,07	17,80	40,32
4,45	80 x 47										
4,50	80 x 47	2,96	2,81	4,59	4,00	5,40	7,69	7,88	19,88	14,69	31,61
4,55	80 x 47										
4,60	80 x 47					6,72			21,26		39,32
4,65	80 x 47										
4,70	80 x 47					6,24			20,66		39,32
4,75	80 x 47								22,07		
4,76	3/16"										
4,80	86 x 52					6,24	8,53		21,26		40,33
4,85	86 x 52										
4,90	86 x 52					6,88			22,07		40,33
4,95	86 x 52										
5,00	86 x 52	3,99	3,80	4,70	4,27	5,63	7,90	8,30	20,40	14,39	35,06
5,05	86 x 52										
5,10	86 x 52					6,73	8,96		21,81	17,61	45,73
5,15	86 x 52										
5,16	13/64"										
5,20	86 x 52					6,69	9,03		21,71		45,73
5,25	86 x 52								23,20		
5,30	86 x 52					6,73			23,20		45,73
5,35	93 x 57										
5,40	93 x 57					8,71			23,20		51,77

Twist drills for Metal

Pink

Ø 4,15-5,40mm

FULLY GROUND TWIST DRILLS
**DIN
338**


		BC2	BC82	BC02	BC9	BC5	BC99	BC58	BC16	BC66	BC15	BC18
MATERIAL		HSS	HSS	HSS-G	HSS	HSSCo 5%	HSSCo 5%	HSSCo 8%	HSS	HSS	HSS	HSS
SHARPENING												
POINT ANGLE		 118°	 118°	 118°	 118°	 135°	 135°	 135°	 135°	 118°	 118°	 118°
HELIX ANGLE		 30° "N"	 30° "N"	 30° "N"	 30° "N"	 30° "N"	 30° "N"	 30° "N"	 40° "W"	 15° "H"	 30° "N"	 30° "N"
COATING		OX	BRIGHT	GOLD OX	OX	GOLD	GOLD	GOLD	BRIGHT	BRIGHT	OX	TiN
APPLICATION		 70 Kg/mm ²	 70 Kg/mm ²	 Plus	 12,70	 120 Kg/mm ²	 12,70	 120 Kg/mm ²	 Al	 BRASS		 PRODUCTION
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€	€
5,45	93 x 57	3,23										
5,50	93 x 57	2,53	2,53	2,84		4,49		7,14	4,34	5,49	6,31	3,23
5,55	93 x 57	3,42										
5,56	7/32"	3,25				5,07						
5,60	93 x 57	3,43	3,43	3,80		5,33		8,81				3,77
5,65	93 x 57	3,42										
5,70	93 x 57	3,43	3,43	3,80		5,33		8,81				3,77
5,75	93 x 57	3,31	3,31	3,70		5,06		7,98	5,99	8,34		3,73
5,80	93 x 57	3,22	3,22	3,63		5,33		8,81				3,62
5,85	93 x 57	3,23										
5,90	93 x 57	3,22	3,22	3,63		5,33						3,62
5,95	15/64"	3,05				5,54						
6,00	93 x 57	2,64	2,64	2,93		4,83		7,60	4,59	5,90	6,53	3,28
6,05	101 x 63	3,75										
6,10	101 x 63	3,75	3,75	4,23		5,98						6,60
6,15	101 x 63	3,75										
6,20	101 x 63	3,75	3,75	4,23		5,98						6,60
6,25	101 x 63	3,54	3,54	3,96		5,64		8,89	5,99	8,34		6,60
6,30	101 x 63	3,95	3,95			5,98						6,69
6,35	1/4"	2,82				5,68						
6,40	101 x 63	4,07	4,07			5,99						6,79
6,45	101 x 63	3,97										
6,50	101 x 63	3,06	3,06	3,46		5,78		8,87	5,35	6,57	7,59	6,29
6,55	101 x 63	4,94										
6,60	101 x 63	4,91	4,91			7,18						7,32
6,65	101 x 63	4,94										
6,70	101 x 63	4,93	4,93	5,50		7,18		11,36				7,32
6,75	109 x 69	3,71	3,71	4,18		6,74		10,37	7,21	10,06		6,73
6,80	109 x 69	3,71	3,71	4,18		6,74		11,36	6,29			6,74

FULLY GROUND TWIST DRILLS



- 10 U.** Ø 0,20 - Ø 10,50 mm
- 6 U.** Ø 10,60 - Ø 14 mm
- 1 U.** Ø 14,10 - Ø 20 mm
- 1 U.** BC9-BC99
BC7-BC98-BC42

		BTX	TTX	BC51	BC95	BC55	BC57	BC50	BC7	BC98	BC42
MATERIAL		HSSCo 5%	HSS	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	CARBIDE TIPPED	CARBIDE TIPPED	SOLID CARBIDE
SHARPENING											
POINT ANGLE		135°	135°	135°	130°	135°	135°	118°	118°	135°	135°
HELIX ANGLE		38° "5"	38° "5"	30° "N"	Ø ≥ 3	38° "5"	38° "5"	38° "N"	30° "N"	30° "N"	35° "N"
COATING		GOLD	TiAlSiN	TiAlN	GOLD OX	BRIGHT	TiAlN	TiAlN	BRIGHT	BRIGHT	BRIGHT
APPLICATION											
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€
5,45	93 x 57										
5,50	93 x 57	5,06	4,80	5,31	5,42	7,15	9,45	10,14	21,37	15,34	40,92
5,55	93 x 57										
5,56	7/32"										
5,60	93 x 57					8,53			22,71		54,38
5,65	93 x 57										
5,70	93 x 57					9,81			22,69		54,38
5,75	93 x 57					8,07			24,26		
5,80	93 x 57					8,53	10,82		22,69		54,38
5,85	93 x 57										
5,90	93 x 57					8,53			24,26		54,38
5,95	15/64"										
6,00	93 x 57	5,38	5,11	5,50	5,76	7,66	9,93	11,25	22,13	16,35	46,43
6,05	101 x 63										
6,10	101 x 63				6,07	10,64			26,18		67,35
6,15	101 x 63										
6,20	101 x 63					9,46	15,59		26,18		67,35
6,25	101 x 63								26,18		
6,30	101 x 63					10,64			26,18		67,35
6,35	1/4"										
6,40	101 x 63					10,64			26,18		67,35
6,45	101 x 63										
6,50	101 x 63	6,28	5,97	10,24	6,73	9,17	15,31	13,40	24,72	16,66	57,65
6,55	101 x 63										
6,60	101 x 63					12,04			27,00		83,73
6,65	101 x 63										
6,70	101 x 63					12,04			27,00		83,73
6,75	109 x 69			10,74					27,00		
6,80	109 x 69	7,32	6,94	10,74	7,83	10,68	16,84		27,00	19,94	67,59

Twist drills for Metal

Pink

Ø 5,45-6,80mm

FULLY GROUND TWIST DRILLS
**DIN
338**


		BC2	BC82	BC02	BC9	BC5	BC99	BC58	BC16	BC66	BC15	BC18
MATERIAL		HSS	HSS	HSS-G	HSS	HSSCo 5%	HSSCo 5%	HSSCo 8%	HSS	HSS	HSS	HSS
SHARPENING												
POINT ANGLE		118°	118°	118°	118°	135°	135°	135°	135°	118°	118°	118°
HELIX ANGLE		30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	40° "W"	15° "H"	30° "N"	30° "N"
COATING		OX	BRIGHT	GOLD OX	OX	GOLD	GOLD	GOLD	BRIGHT	BRIGHT	OX	TiN
APPLICATION		 70 Kg/mm ²	 70 Kg/mm ²	<i>Plus</i>	 12,70	 120 Kg/mm ²	 12,70	 120 Kg/mm ²	 Al	 BRASS		 PRODUCTION
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€	€
6,85	109 x 69	5,48										
6,90	109 x 69	5,49	5,49			7,18						7,63
6,95	109 x 69	5,49										
7,00	109 x 69	3,71	3,71	4,18		6,33		9,28	5,85	6,98	9,27	6,74
7,05	109 x 69	5,77										
7,10	109 x 69	5,76	5,76			9,15						7,90
7,14	9/32"	5,51				8,63						
7,15	109 x 69	5,78										
7,20	109 x 69	5,76	5,76			9,15					9,73	7,90
7,25	109 x 69	4,75	4,75	5,28		8,58		12,62	9,54	13,18		7,38
7,30	109 x 69	5,77	5,77			9,17						7,90
7,35	109 x 69	5,76										
7,40	109 x 69	5,77	5,77	6,46		9,17						7,90
7,45	109 x 69	5,91										
7,50	109 x 69	3,95	3,95	4,41		6,75		9,90	6,26	8,16	9,73	6,89
7,54	19/64"	6,44				10,45						
7,55	117 x 75	6,84										
7,60	117 x 75	6,79	6,79			11,03						8,68
7,65	117 x 75	6,84										
7,70	117 x 75	6,79	6,79			11,00						8,68
7,75	117 x 75	5,24	5,24	5,86		10,39		15,29	12,13	17,59		7,81
7,80	117 x 75	6,89	6,89	7,75		11,00						8,70
7,85	117 x 75	6,90										
7,90	117 x 75	6,89	6,89	7,75		11,06						8,70
7,94	5/16"	5,90				10,43						
7,95	117 x 75	6,89										
8,00	117 x 75	4,50	4,50	5,06		7,92		12,02	7,29	8,67	11,14	7,21
8,05	117 x 75	7,04										
8,10	117 x 75	7,04	7,04			10,54						9,52

FULLY GROUND TWIST DRILLS



- 10 U.** Ø 0,20 - Ø 10,50 mm
- 6 U.** Ø 10,60 - Ø 14 mm
- 1 U.** Ø 14,10 - Ø 20 mm
- 1 U.** BC9-BC99
BC7-BC98-BC42

		BTX	TTX	BC51	BC95	BC55	BC57	BC50	BC7	BC98	BC42
MATERIAL		HSSCo 5%	HSS	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	CARBIDE TIPPED	CARBIDE TIPPED	SOLID CARBIDE
SHARPENING											
POINT ANGLE		135°	135°	135°	130°	135°	135°	118°	118°	135°	135°
HELIX ANGLE		38° "5"	38° "5"	30° "N"	Ø ≥ 3	38° "5"	38° "5"	38° "N"	30° "N"	30° "N"	35° "N"
COATING		GOLD	TiAlSiN	TiAlN	GOLD OX	BRIGHT	TiAlN	TiAlN	BRIGHT	BRIGHT	BRIGHT
APPLICATION											
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€
6,85	109 x 69										
6,90	109 x 69					12,16			27,00	19,94	83,73
6,95	109 x 69										
7,00	109 x 69	6,87	6,53	10,81	7,36	9,95	16,36	15,75	26,93	18,65	67,14
7,05	109 x 69										
7,10	109 x 69					14,72			28,31	21,49	95,77
7,14	9/32"										
7,15	109 x 69										
7,20	109 x 69					14,10	20,34		28,31		95,77
7,25	109 x 69								28,31		
7,30	109 x 69					15,00			28,31		95,77
7,35	109 x 69										
7,40	109 x 69					15,00			28,31		95,77
7,45	109 x 69										
7,50	109 x 69	7,30	6,93	11,11	7,81	10,64	17,06	18,13	27,81	19,59	71,71
7,54	19/64"										
7,55	117 x 75										
7,60	117 x 75					15,43			30,41		95,77
7,65	117 x 75										
7,70	117 x 75					17,17			30,41		95,77
7,75	117 x 75								30,41		
7,80	117 x 75					17,17	24,19		30,41		95,77
7,85	117 x 75										
7,90	117 x 75					17,17			30,41		95,77
7,94	5/16"										
7,95	117 x 75										
8,00	117 x 75	8,55	8,12	11,77	9,16	12,48	18,83	19,16	28,32	21,89	81,89
8,05	117 x 75										
8,10	117 x 75					18,09			32,49		111,40

Twist drills for Metal

Pink

Ø 6,85-8,10mm

FULLY GROUND TWIST DRILLS



- 10 U.** Ø 0,20 - Ø 10,50 mm
- 6 U.** Ø 10,60 - Ø 14 mm
- 1 U.** Ø 14,10 - Ø 20 mm
- 1 U.** BC9-BC99
BC7-BC98-BC42

		BTX	TTX	BC51	BC95	BC55	BC57	BC50	BC7	BC98	BC42
MATERIAL		HSSCo 5%	HSS	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	CARBIDE TIPPED	CARBIDE TIPPED	SOLID CARBIDE
SHARPENING											
POINT ANGLE		135°	135°	135°	130°	135°	135°	118°	118°	135°	135°
HELIX ANGLE		38° "S"	38° "S"	30° "N"	0 ≥ 3	38° "S"	38° "S"	38° "N"	30° "N"	30° "N"	35° "N"
COATING		GOLD	TiAlSiN	TiAlN	GOLD OX	BRIGHT	TiAlN	TiAlN	BRIGHT	BRIGHT	BRIGHT
APPLICATION											
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€
8,15	117 x 75										
8,20	117 x 75					16,86	24,34		32,49		111,40
8,25	117 x 75								32,49		
8,30	117 x 75					17,92			32,49		111,40
8,33	21/64"										
8,35	117 x 75										
8,40	117 x 75					17,92			32,49		111,40
8,45	117 x 75										
8,50	117 x 75	8,92	8,47	13,18	9,54	12,93	20,46	23,47	31,05	21,89	96,85
8,55	125 x 81										
8,60	125 x 81					18,26			34,88	26,48	129,14
8,65	125 x 81										
8,70	125 x 81					21,25			34,88		129,14
8,73	11/32"										
8,75	125 x 81								34,88		
8,80	125 x 81					20,78	28,17		34,88		129,14
8,85	125 x 81										
8,90	125 x 81					21,25			34,88		129,14
8,95	125 x 81										
9,00	125 x 81	11,36	10,80	14,59	12,17	16,50	24,06	24,92	30,99	23,74	107,07
9,05	125 x 81										
9,10	125 x 81					26,15			37,72		141,86
9,13	23/64"										
9,15	125 x 81										
9,20	125 x 81					26,15	30,36		37,72		141,86
9,25	125 x 81								37,72		
9,30	125 x 81					26,15			37,72		141,86
9,35	125 x 81										
9,40	125 x 81					26,15			37,72		141,86
9,45	125 x 81										

Twist drills for Metal

Pink

Ø 8,15-9,45mm

FULLY GROUND TWIST DRILLS
**DIN
338**


		BC2	BC82	BC02	BC9	BC5	BC99	BC58	BC16	BC66	BC15	BC18
MATERIAL		HSS	HSS	HSS-G	HSS	HSSCo 5%	HSSCo 5%	HSSCo 8%	HSS	HSS	HSS	HSS
SHARPENING												
POINT ANGLE		 118°	 118°	 118°	 118°	 135°	 135°	 135°	 135°	 118°	 118°	 118°
HELIX ANGLE		 30° "N"	 30° "N"	 30° "N"	 30° "N"	 30° "N"	 30° "N"	 30° "N"	 40° "W"	 15° "H"	 30° "N"	 30° "N"
COATING		OX	BRIGHT	GOLD OX	OX	GOLD	GOLD	GOLD	BRIGHT	BRIGHT	OX	TiN
APPLICATION		 70 Kg/mm ²	 70 Kg/mm ²	 <i>Plus</i>	 12,70	 120 Kg/mm ²	 12,70	 120 Kg/mm ²	 Al	 BRASS		 PRODUCTION
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€	€
9,50	125 x 81	6,47	6,47	7,23		10,84		16,52	10,08	12,51	15,94	9,18
9,52	3/8"	6,08				10,33						
9,55	133 x 87	11,17										
9,60	133 x 87	11,03	11,03			17,45						12,21
9,65	133 x 87	11,17										
9,70	133 x 87	11,03	11,03			17,45						12,11
9,75	133 x 87	8,05	8,05	9,12		16,44		25,15	16,48	28,01		10,40
9,80	133 x 87	10,80	10,80			17,45						12,03
9,85	133 x 87	10,91										
9,90	133 x 87	10,91	10,91	12,28		17,45						12,03
9,92	25/64"	10,40				16,48						
9,95	133 x 87	10,90										
10,00	133 x 87	6,97	6,97	7,79	11,73	11,98		18,24	11,15	13,00	17,18	9,51
10,10	133 x 87	9,31	9,31	10,48		20,07						
10,20	133 x 87	8,68	8,68	9,72		16,92		32,99				16,70
10,25	133 x 87	9,69	9,69	12,03	15,46	20,70		32,99	18,30	31,93		16,95
10,30	133 x 87	10,86	10,86	12,14		20,12						
10,32	13/32"	10,40				19,07						
10,40	133 x 87	10,86	10,86			20,07						
10,50	133 x 87	8,66	8,66	9,69	13,13	16,93	25,74	26,84	14,87	15,62	23,49	15,86
10,60	133 x 87	11,97	11,97			23,34						
10,70	142 x 94	11,97	11,97			23,34						
10,72	27/64"	10,66				22,87						
10,75	142 x 94	11,19	11,19	12,38	17,48	24,25		38,38	21,40	29,16		17,49
10,80	142 x 94	13,28	13,28			23,34						
10,90	142 x 94	13,28	13,28			23,39						
11,00	142 x 94	10,11	10,11	11,34	14,87	18,70	27,50	29,60	16,15	17,39	26,92	16,76
11,10	142 x 94	13,55	13,55			26,63						
11,11	7 / 16"	12,89				25,12						
11,20	142 x 94	13,55	13,55			26,63						

FULLY GROUND TWIST DRILLS



10 U. Ø 0,20 - Ø 10,50 mm

6 U. Ø 10,60 - Ø 14 mm

1 U. Ø 14,10 - Ø 20 mm

1 U. BC9-BC99
BC7-BC98-BC42



		BTX	TTX	BC51	BC95	BC55	BC57	BC50	BC7	BC98	BC42
MATERIAL		HSSCo 5%	HSS	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	CARBIDE TIPPED	CARBIDE TIPPED	SOLID CARBIDE
SHARPENING											
POINT ANGLE		135°	135°	135°	130°	135°	135°	118°	118°	135°	135°
HELIX ANGLE		38° "5"	38° "5"	30° "N"	Ø ≥ 3	38° "5"	38° "5"	38° "N"	30° "N"	30° "N"	35° "N"
COATING		GOLD	TiAlSiN	TiAlN	GOLD OX	BRIGHT	TiAlN	TiAlN	BRIGHT	BRIGHT	BRIGHT
APPLICATION											
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€
9,50	125 x 81	11,77	11,18	14,82	12,60	17,14	24,47	28,25	33,80	25,89	119,04
9,52	3/8"										
9,55	133 x 87										
9,60	133 x 87					26,15			40,45		150,46
9,65	133 x 87										
9,70	133 x 87					26,15			40,45		150,46
9,75	133 x 87								40,45		
9,80	133 x 87					26,02	33,52		40,45		150,46
9,85	133 x 87										
9,90	133 x 87					28,25			40,45		150,46
9,92	25/64"										
9,95	133 x 87										
10,00	133 x 87	12,95	12,29	15,54	13,86	18,89	26,32	31,15	33,88	26,57	128,69
10,10	133 x 87								45,31		
10,20	133 x 87	17,47	16,60	26,78	18,71	28,25	42,50	36,26	43,65	34,39	148,77
10,25	133 x 87								45,31		
10,30	133 x 87								45,31	34,39	
10,32	13/32"										
10,40	133 x 87								45,31		
10,50	133 x 87	17,48	16,61	26,75	18,72	26,77	41,83	36,78	40,49	34,13	142,58
10,60	133 x 87								48,19		
10,70	142 x 94								48,19		
10,72	27/64"										
10,75	142 x 94								48,19		
10,80	142 x 94					37,61			48,19		
10,90	142 x 94								48,19		
11,00	142 x 94	19,30	18,33	27,88	20,65	29,60	44,30	39,07	43,50	34,27	169,79
11,10	142 x 94								51,62		
11,11	7 / 16"										
11,20	142 x 94					45,66			51,62		

Twist drills for Metal

Pink

Ø 9,50-11,20mm

FULLY GROUND TWIST DRILLS

Twist drills for Metal

Grey

Pink

**DIN
338**


		BC2	BC82	BC02	BC9	BC5	BC99	BC58	BC16	BC66	BC15	BC18
MATERIAL		HSS	HSS	HSS-G	HSS	HSSCo 5%	HSSCo 5%	HSSCo 8%	HSS	HSS	HSS	HSS
SHARPENING												
POINT ANGLE		 118°	 118°	 118°	 118°	 135°	 135°	 135°	 135°	 118°	 118°	 118°
HELIX ANGLE		 30° "N"	 30° "N"	 30° "N"	 30° "N"	 30° "N"	 30° "N"	 30° "N"	 40° "W"	 15° "H"	 30° "N"	 30° "N"
COATING		OX	BRIGHT	GOLD OX	OX	GOLD	GOLD	GOLD	BRIGHT	BRIGHT	OX	TiN
APPLICATION		 70 Kg/mm ²	 70 Kg/mm ²	 Plus	 12,70	 120 Kg/mm ²	 12,70	 120 Kg/mm ²	 Al	 BRASS		 PRODUCTION
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€	€
11,25	142 x 94	11,49	11,49	13,32	18,49	27,62		45,02	28,17	38,40		17,64
11,30	142 x 94	13,28	13,28			26,61						
11,40	142 x 94	13,28	13,28			26,63						
11,50	142 x 94	10,80	10,80	12,13	15,70	22,37	29,74	37,86	19,09	20,90	31,83	17,23
11,51	29/64"	10,28				21,21						
11,60	142 x 94	13,28	13,28			27,49						
11,70	142 x 94	13,28	13,28			27,49						
11,75	142 x 94	11,49	11,49	13,72	20,14	28,56		48,44	27,64	38,40		17,64
11,80	142 x 94	14,55	14,55			27,49						
11,90	151 x 101	14,55	14,55			27,49						
11,91	15/32"	13,85				26,05						
12,00	151 x 101	12,02	12,02	13,54	17,18	23,85	31,88	40,57	20,47	22,64	32,00	17,99
12,10	151 x 101	16,94	16,94			31,94						
12,20	151 x 101	16,94	16,94			31,94						
12,25	151 x 101	14,97	14,97	16,81	21,86	33,05		57,83	38,42	52,34		22,52
12,30	151 x 101	15,95	15,95			31,94						
12,40	151 x 101	15,95	15,95			31,94						
12,50	151 x 101	13,23	13,23	14,83	18,64	29,14	38,80	50,89	22,77	25,68	39,00	21,37
12,60	151 x 101	16,54	16,54			33,20						
12,70	1/2"	14,64				31,62						
12,75	151 x 101	14,71	14,71	16,80	22,53	34,50		60,39	42,40	58,13		22,35
12,80	151 x 101	18,46	18,46			33,20						
12,90	151 x 101	18,46	18,46			33,20						
13,00	151 x 101	13,71	13,71	15,27	19,16	29,81	40,94	51,61	23,10	27,62	40,37	21,70
13,10	151 x 101	18,89	18,89									
13,20	151 x 101	18,89	18,89									
13,25	160 x 108	21,55	21,55		27,40	41,26						
13,30	160 x 108	29,25	29,25									
13,40	160 x 108	29,25	29,25									
13,49	17/32"	18,50				31,29						

FULLY GROUND TWIST DRILLS



10 U. Ø 0,20 - Ø 10,50 mm

6 U. Ø 10,60 - Ø 14 mm

1 U. Ø 14,10 - Ø 20 mm

1 U. BC9-BC99
BC7-BC98-BC42



		BTX	TTX	BC51	BC95	BC55	BC57	BC50	BC7	BC98	BC42
MATERIAL		HSSCo 5%	HSS	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	CARBIDE TIPPED	CARBIDE TIPPED	SOLID CARBIDE
SHARPENING											
POINT ANGLE		135°	135°	135°	130°	135°	135°	118°	118°	135°	135°
HELIX ANGLE		38° "S"	38° "S"	30° "N"	Ø ≥ 3	38° "S"	38° "S"	38° "N"	30° "N"	30° "N"	35° "N"
COATING		GOLD	TiAlSiN	TiAlN	GOLD OX	BRIGHT	TiAlN	TiAlN	BRIGHT	BRIGHT	BRIGHT
APPLICATION											
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€
11,25	142 x 94								51,62		
11,30	142 x 94								51,62		
11,40	142 x 94								51,62		
11,50	142 x 94	22,21	21,10	29,61	23,78	35,25	49,83	44,81	50,00	39,39	187,56
11,51	29/64"										
11,60	142 x 94								56,91	43,20	
11,70	142 x 94								56,91		
11,75	142 x 94								56,91		
11,80	142 x 94					47,10			56,91		
11,90	151 x 101								56,91		
11,91	15/32"										
12,00	151 x 101	23,82	22,62	30,63	25,49	37,61	52,38	46,68	49,74	39,20	223,49
12,10	151 x 101								59,93	45,48	
12,20	151 x 101								59,93		
12,25	151 x 101								59,93		
12,30	151 x 101								59,93		
12,40	151 x 101								59,93		
12,50	151 x 101	29,06	27,62	37,86	31,11	45,82	56,62	52,83	59,64		305,35
12,60	151 x 101								63,31		
12,70	1/2"								63,31		
12,75	151 x 101								63,31		
12,80	151 x 101								63,31		
12,90	151 x 101								63,31		
13,00	151 x 101	29,49	28,01	38,42	31,57	47,09	65,42	56,86	59,53		241,66
13,10	151 x 101										
13,20	151 x 101										
13,25	160 x 108										
13,30	160 x 108										
13,40	160 x 108										
13,49	17/32"										

Twist drills for Metal

Pink

Ø 11,25-13,49mm

FULLY GROUND TWIST DRILLS
**DIN
338**


		BC2	BC82	BC02	BC9	BC5	BC99	BC58	BC16	BC66	BC15	BC18
MATERIAL		HSS	HSS	HSS-G	HSS	HSSCo 5%	HSSCo 5%	HSSCo 8%	HSS	HSS	HSS	HSS
SHARPENING												
POINT ANGLE		118°	118°	118°	118°	135°	135°	135°	135°	118°	118°	118°
HELIX ANGLE		30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	40° "W"	15° "H"	30° "N"	30° "N"
COATING		OX	BRIGHT	GOLD OX	OX	GOLD	GOLD	GOLD	BRIGHT	BRIGHT	OX	TiN
APPLICATION				<i>Plus</i>					Al	BRASS		
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€	€
13,50	160 x 108	19,43	19,43	21,80	25,55	32,85	43,48	56,88				26,47
13,60	160 x 108	29,25	29,25									
13,70	160 x 108	29,25	29,25									
13,75	160 x 108	21,80	21,80		29,38	41,26						
13,80	160 x 108	27,88	27,88									
13,89	35/64"	26,68				36,94						
13,90	160 x 108	28,00	28,00									
14,00	160 x 108	20,81	20,81	23,33	27,14	32,47	45,71	56,23				27,35
14,10	169 x 114	29,84										
14,20	169 x 114	29,84										
14,25	169 x 114	24,41	24,41		31,37	54,17						
14,29	9/16"	28,91				40,85						
14,30	169 x 114	30,36										
14,40	169 x 114	30,36										
14,50	169 x 114	22,48	22,48		29,34	46,06	61,34	79,73				28,36
14,60	169 x 114	30,92										
14,68	37/64"	23,24				51,60						
14,70	169 x 114	30,92										
14,75	169 x 114	24,41	24,41		36,03	54,17						
14,80	169 x 114	29,80										
14,90	169 x 114	29,80										
15,00	169 x 114	22,68	22,68	25,41	29,62	46,75	64,06	80,92				28,62
15,08	19/32"	21,60				44,52						
15,25	178 x 120	33,22			37,55	74,79						
15,48	39/64"	32,13				71,22						
15,50	178 x 120	26,56	26,56		34,21	54,07	71,49	93,57				31,13
15,75	178 x 120	33,74			38,91	74,77						
15,88	5/8"	26,29				53,46						
16,00	178 x 120	27,61	27,61		35,46	56,12	73,64	97,26				31,74
16,25	184 x 125	49,61			45,65							

FULLY GROUND TWIST DRILLS



10 U. Ø 0,20 - Ø 10,50 mm

6 U. Ø 10,60 - Ø 14 mm

1 U. Ø 14,10 - Ø 20 mm

1 U. BC9-BC99
BC7-BC98-BC42



Anti-slip triangle shank

Anti-slip triangle shank

Anti-slip triangle shank

Twist drills type "5" fluted

Twist drills type "5" fluted

Triple facet sharpening

Carbon Fiber, Phenolic, Cast Iron

HARDOX 600

TURBO

TURBO

		BTX	TTX	BC51	BC95	BC55	BC57	BC50	BC7	BC98	BC42
MATERIAL		HSSCo 5%	HSS	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	CARBIDE TIPPED	CARBIDE TIPPED	SOLID CARBIDE
SHARPENING											
POINT ANGLE		135°	135°	135°	130°	135°	135°	118°	118°	135°	135°
HELIX ANGLE		38° "5"	38° "5"	30° "N"	0 ≥ 3	38° "5"	38° "5"	38° "N"	30° "N"	30° "N"	35° "N"
COATING		GOLD	TiAlSiN	TiAlN	GOLD OX	BRIGHT	TiAlN	TiAlN	BRIGHT	BRIGHT	BRIGHT
APPLICATION											
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€
13,50	160 x 108								68,15		
13,60	160 x 108										
13,70	160 x 108										
13,75	160 x 108										
13,80	160 x 108										
13,89	35/64"										
13,90	160 x 108										
14,00	160 x 108								69,30		
14,10	169 x 114										
14,20	169 x 114										
14,25	169 x 114										
14,29	9/16"										
14,30	169 x 114										
14,40	169 x 114										
14,50	169 x 114								77,39		
14,60	169 x 114										
14,68	37/64"										
14,70	169 x 114										
14,75	169 x 114										
14,80	169 x 114										
14,90	169 x 114										
15,00	169 x 114								79,34		
15,08	19/32"										
15,25	178 x 120										
15,48	39/64"										
15,50	178 x 120								96,37		
15,75	178 x 120										
15,88	5/8"										
16,00	178 x 120								91,53		
16,25	184 x 125										

Twist drills for Metal

Pink

Ø 13,50-16,25mm

FULLY GROUND TWIST DRILLS
**DIN
338**


		BC2	BC82	BC02	BC9	BC5	BC99	BC58	BC16	BC66	BC15	BC18
MATERIAL		HSS	HSS	HSS-G	HSS	HSSCo 5%	HSSCo 5%	HSSCo 8%	HSS	HSS	HSS	HSS
SHARPENING												
POINT ANGLE		118°	118°	118°	118°	135°	135°	135°	135°	118°	118°	118°
HELIX ANGLE		30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	30° "N"	40° "W"	15° "H"	30° "N"	30° "N"
COATING		OX	BRIGHT	GOLD OX	OX	GOLD	GOLD	GOLD	BRIGHT	BRIGHT	OX	TiN
APPLICATION		 70 Kg/mm ²	 70 Kg/mm ²	 Plus	 12,70	 120 Kg/mm ²	 12,70	 120 Kg/mm ²	 Al	 BRASS		 PRODUCTION
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€	€
16,50	184 x 125	32,13	32,13		39,72	64,08	83,96					
16,75	184 x 125	51,97			44,78							
17,00	184 x 125	32,17	32,17		39,72	64,08	84,51					
17,25	191 x 130	53,92			50,43							
17,50	191 x 130	36,87	36,87		45,20	70,99	93,03					
17,75	191 x 130	59,72			53,19							
18,00	191 x 130	39,06	39,06		47,65	77,34	101,93					
18,25	198 x 135	58,58			64,91							
18,50	198 x 135	43,31	43,31		52,58	85,42	113,74					
18,75	198 x 135	60,20			60,05							
19,00	198 x 135	43,31	43,31		52,58	85,42	112,76					
19,25	205 x 140	78,67			64,10							
19,50	205 x 140	46,58	46,58		57,06	94,74	124,94					
19,75	205 x 140	76,58			71,79							
20,00	205 x 140	52,89	52,89		68,29	101,67	133,85					
20,50	205 x 140				79,21		144,17					
21,00	205 x 140				72,32		146,16					
21,50	209 x 140				84,10		160,83					
22,00	209 x 140				79,95		163,21					
22,50	214 x 140				85,53		174,56					
23,00	214 x 140				87,56		178,89					
23,50	220 x 145				97,20		198,58					
24,00	220 x 145				96,11		201,53					
24,50	225 x 150				103,54		217,14					
25,00	225 x 150				105,10		216,15					
26,00	243 x 157				126,07		314,54					
27,00	243 x 157				135,40		323,01					
28,00	253 x 167				140,08		355,85					
29,00	253 x 167				164,45		382,73					
30,00	258 x 171				172,87		396,14					

FULLY GROUND TWIST DRILLS



10 U. Ø 0,20 - Ø 10,50 mm

6 U. Ø 10,60 - Ø 14 mm

1 U. Ø 14,10 - Ø 20 mm

1 U. BC9-BC99
BC7-BC98-BC42



		BTX	TTX	BC51	BC95	BC55	BC57	BC50	BC7	BC98	BC42
MATERIAL		HSSCo 5%	HSS	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	CARBIDE TIPPED	CARBIDE TIPPED	SOLID CARBIDE
SHARPENING											
POINT ANGLE		135°	135°	135°	130°	135°	135°	118°	118°	135°	135°
HELIX ANGLE		38° "S"	38° "S"	30° "N"	Ø ≥ 3	38° "S"	38° "S"	38° "N"	30° "N"	30° "N"	35° "N"
COATING		GOLD	TiAlSiN	TiAlN	GOLD OX	BRIGHT	TiAlN	TiAlN	BRIGHT	BRIGHT	BRIGHT
APPLICATION				HIGH PERFORMANCE	INOX	INOX	INOX	INOX Plus	CAST IRON	70 HRc	HIGH PERFORMANCE
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€
16,50	184 x 125								133,81		
16,75	184 x 125										
17,00	184 x 125								100,49		
17,25	191 x 130										
17,50	191 x 130								150,04		
17,75	191 x 130										
18,00	191 x 130								110,51		
18,25	198 x 135										
18,50	198 x 135								178,87		
18,75	198 x 135										
19,00	198 x 135								134,31		
19,25	205 x 140										
19,50	205 x 140								203,57		
19,75	205 x 140										
20,00	205 x 140								152,86		
20,50	205 x 140										
21,00	205 x 140										
21,50	209 x 140										
22,00	209 x 140										
22,50	214 x 140										
23,00	214 x 140										
23,50	220 x 145										
24,00	220 x 145										
24,50	225 x 150										
25,00	225 x 150										
26,00	243 x 157										
27,00	243 x 157										
28,00	253 x 167										
29,00	253 x 167										
30,00	258 x 171										

Twist drills for Metal

Pink

Ø 16,50-30mm

SOLID CARBIDE REINFORCED SHANK DRILLS WITH & WITHOUT INTERNAL COOLING

Ref. BC84

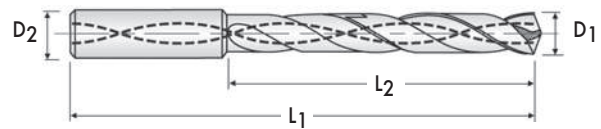
Ref. BC83

3xD
**DIN
6537K**
**SOLID
CARBIDE**
**TOL D₁
m7**
**TOL D₂
h6**

TiAIN
**HARDOX
450**
**HIGH
PERFORMANCE**


Recommended for HARDOX 450

Ref. BC83



BC84						BC83		BC84						BC83	
	D ₁ mm	D ₂ mm	L ₁ mm	L ₂ mm	€		€		D ₁ mm	D ₂ mm	L ₁ mm	L ₂ mm	€		€
BC840300	3,0	6	62	20	48,13	BC830300	85,24	BC840900	9,0	10	89	47	64,95	BC830900	113,43
BC840320	3,2	6	62	20	48,13	BC830320	85,24	BC840930	9,3	10	89	47	64,95	BC830930	113,43
BC840350	3,5	6	62	20	48,13	BC830350	85,24	BC840950	9,5	10	89	47	64,95	BC830950	113,43
BC840380	3,8	6	66	24	48,13	BC830380	85,24	BC840960	9,6	10	89	47	64,95	BC830960	113,43
BC840400	4,0	6	66	24	48,13	BC830400	85,24	BC840980	9,8	10	89	47	64,95	BC830980	113,43
BC840420	4,2	6	66	24	48,13	BC830420	85,24	BC841000	10,0	10	89	47	64,95	BC831000	113,43
BC840450	4,5	6	66	24	48,13	BC830450	85,24	BC841020	10,2	12	102	55	97,42	BC831020	162,10
BC840480	4,8	6	66	28	48,13	BC830480	85,24	BC841040	10,4	12	102	55	97,42	BC831040	162,10
BC840500	5,0	6	66	28	48,13	BC830500	85,24	BC841050	10,5	12	102	55	97,42	BC831050	162,10
BC840520	5,2	6	66	28	48,13	BC830520	85,24	BC841060	10,6	12	102	55	97,42	BC831060	162,10
BC840550	5,5	6	66	28	48,13	BC830550	85,24	BC841080	10,8	12	102	55	97,42	BC831080	162,10
BC840560	5,6	6	66	28	48,13	BC830560	85,24	BC841100	11,0	12	102	55	97,42	BC831100	162,10
BC840570	5,7	6	66	28	48,13	BC830570	85,24	BC841120	11,2	12	102	55	97,42	BC831120	162,10
BC840580	5,8	6	66	28	48,13	BC830580	85,24	BC841150	11,5	12	102	55	97,42	BC831150	162,10
BC840590	5,9	6	66	28	48,13	BC830590	85,24	BC841180	11,8	12	102	55	97,42	BC831180	162,10
BC840600	6,0	6	66	28	48,13	BC830600	85,24	BC841200	12,0	12	102	55	97,42	BC831200	162,10
BC840610	6,1	8	79	34	56,36	BC830610	101,26	BC841250	12,5	14	107	60	129,90	BC831250	225,54
BC840620	6,2	8	79	34	56,36	BC830620	101,26	BC841280	12,8	14	107	60	129,90	BC831280	225,54
BC840630	6,3	8	79	34	56,36	BC830630	101,26	BC841300	13,0	14	107	60	129,90	BC831300	225,54
BC840650	6,5	8	79	34	56,36	BC830650	101,26	BC841350	13,5	14	107	60	129,90	BC831350	225,54
BC840660	6,6	8	79	34	56,36	BC830660	101,26	BC841380	13,8	14	107	60	129,90	BC831380	225,54
BC840680	6,8	8	79	34	56,36	BC830680	101,26	BC841400	14,0	14	107	60	129,90	BC831400	225,54
BC840690	6,9	8	79	34	56,36	BC830690	101,26	BC841450	14,5	16	115	65	162,65	BC831450	279,12
BC840700	7,0	8	79	34	56,36	BC830700	101,26	BC841480	14,8	16	115	65	162,65	BC831480	279,12
BC840710	7,1	8	79	41	56,36	BC830710	101,26	BC841500	15,0	16	115	65	162,65	BC831500	279,12
BC840740	7,4	8	79	41	56,36	BC830740	101,26	BC841550	15,5	16	115	65	162,65	BC831550	279,12
BC840750	7,5	8	79	41	56,36	BC830750	101,26	BC841600	16,0	16	115	65	162,65	BC831600	279,12
BC840780	7,8	8	79	41	56,36	BC830780	101,26	BC841650	16,5	18	123	73	248,63	BC831650	440,10
BC840800	8,0	8	79	41	56,36	BC830800	101,26	BC841700	17,0	18	123	73	248,63	BC831700	440,10
BC840810	8,1	10	89	47	64,95	BC830810	113,43	BC841750	17,5	18	123	73	248,63	BC831750	440,10
BC840820	8,2	10	89	47	64,95	BC830820	113,43	BC841800	18,0	18	123	73	248,63	BC831800	440,10
BC840840	8,4	10	89	47	64,95	BC830840	113,43	BC841850	18,5	20	131	79	303,57	BC831850	483,63
BC840850	8,5	10	89	47	64,95	BC830850	113,43	BC841900	19,0	20	131	79	303,57	BC831900	483,63
BC840860	8,6	10	89	47	64,95	BC830860	113,43	BC841950	19,5	20	131	79	303,57	BC831950	483,63
BC840870	8,7	10	89	47	64,95	BC830870	113,43	BC842000	20,0	20	131	79	303,57	BC832000	483,63
BC840880	8,8	10	89	47	64,95	BC830880	113,43								

SOLID CARBIDE REINFORCED SHANK DRILLS WITH & WITHOUT INTERNAL COOLING

Ref. BC97

Ref. BC89

5xD

DIN 6537L

SOLID CARBIDE

TOL D1 m7

TOL D2 h6



TiAIN

HARDOX 450

HIGH PERFORMANCE



Recommended for HARDOX 450

BC97						BC89	
	D1 mm	D2 mm	L1 mm	L2 mm	€		€
BC970300	3,0	6	66	28	55,89	BC890300	96,36
BC970310	3,1	6	66	28	55,89	BC890310	
BC970320	3,2	6	66	28	55,89	BC890320	96,36
BC970340	3,4	6	66	28	55,89	BC890340	
BC970350	3,5	6	66	28	55,89	BC890350	96,36
BC970360	3,6	6	66	28	55,89	BC890360	
BC970380	3,8	6	74	36	55,89	BC890380	96,36
BC970390	3,9	6	74	36	55,89	BC890390	
BC970400	4,0	6	74	36	55,89	BC890400	96,36
BC970420	4,2	6	74	36	55,89	BC890420	96,36
BC970440	4,4	6	74	36	55,89	BC890440	
BC970450	4,5	6	74	36	55,89	BC890450	96,36
BC970460	4,6	6	74	36	55,89	BC890460	
BC970480	4,8	6	82	44	55,89	BC890480	96,36
BC970490	4,9	6	82	44	55,89	BC890490	
BC970500	5,0	6	82	44	55,89	BC890500	96,36
BC970520	5,2	6	82	44	55,89	BC890520	96,36
BC970530	5,3	6	82	44	55,89	BC890530	
BC970540	5,4	6	82	44	55,89	BC890540	
BC970550	5,5	6	82	44	55,89	BC890550	96,36
BC970560	5,6	6	82	44	55,89	BC890560	96,36
BC970570	5,7	6	82	44	55,89	BC890570	96,36
BC970580	5,8	6	82	44	55,89	BC890580	96,36
BC970590	5,9	6	82	44	55,89	BC890590	96,36
BC970600	6,0	6	82	44	55,89	BC890600	96,36
BC970610	6,1	8	91	53	61,22	BC890610	107,96
BC970620	6,2	8	91	53	61,22	BC890620	107,96
BC970630	6,3	8	91	53	61,22	BC890630	107,96
BC970650	6,5	8	91	53	61,22	BC890650	107,96
BC970660	6,6	8	91	53	61,22	BC890660	107,96
BC970670	6,7	8	91	53	61,22	BC890670	
BC970680	6,8	8	91	53	61,22	BC890680	107,96
BC970690	6,9	8	91	53	61,22	BC890690	107,96
BC970700	7,0	8	91	53	61,22	BC890700	107,96
BC970710	7,1	8	91	53	61,22	BC890710	107,96
BC970720	7,2	8	91	53	61,22	BC890720	
BC970730	7,3	8	91	53	61,22	BC890730	
BC970740	7,4	8	91	53	61,22	BC890740	107,96
BC970750	7,5	8	91	53	61,22	BC890750	107,96
BC970760	7,6	8	91	53	61,22	BC890760	
BC970770	7,7	8	91	53	61,22	BC890770	
BC970780	7,8	8	91	53	61,22	BC890780	107,96
BC970790	7,9	8	91	53	61,22	BC890790	
BC970800	8,0	8	91	53	61,22	BC890800	107,96
BC970810	8,1	10	103	61	79,55	BC890810	125,49
BC970830	8,3	10	103	61	79,55	BC890830	
BC970840	8,4	10	103	61	79,55	BC890840	125,49
BC970850	8,5	10	103	61	79,55	BC890850	125,49
BC970860	8,6	10	103	61	79,55	BC890860	125,49
BC970870	8,7	10	103	61	79,55	BC890870	125,49
BC970880	8,8	10	103	61	79,55	BC890880	125,49
BC970890	8,9	10	103	61	79,55	BC890890	
BC970900	9,0	10	103	61	79,55	BC890900	125,49
BC970920	9,2	10	103	61	79,55	BC890920	
BC970930	9,3	10	103	61	79,55	BC890930	125,49
BC970940	9,4	10	103	61	79,55	BC890940	
BC970950	9,5	10	103	61	79,55	BC890950	125,49
BC970960	9,6	10	103	61	79,55	BC890960	125,49
BC970970	9,7	10	103	61	79,55	BC890970	
BC970980	9,8	10	103	61	79,55	BC890980	125,49
BC970990	9,9	10	103	61	79,55	BC890990	
BC971000	10,0	10	103	61	79,55	BC891000	125,49
BC971010	10,1	12	118	71	114,52	BC891010	
BC971020	10,2	12	118	71	114,52	BC891020	178,68
BC971040	10,4	12	118	71	114,52	BC891040	178,68
BC971050	10,5	12	118	71	114,52	BC891050	178,68
BC971060	10,6	12	118	71	114,52	BC891060	178,68
BC971080	10,8	12	118	71	114,52	BC891080	178,68
BC971100	11,0	12	118	71	114,52	BC891100	178,68
BC971110	11,1	12	118	71	114,52	BC891110	
BC971120	11,2	12	118	71	114,52	BC891120	178,68
BC971140	11,4	12	118	71	114,52	BC891140	
BC971150	11,5	12	118	71	114,52	BC891150	178,68
BC971160	11,5	12	118	71	114,52	BC891160	178,68
BC971170	11,5	12	118	71	114,52	BC891170	178,68
BC971180	11,8	12	118	71	114,52	BC891180	178,68
BC971200	12,0	12	118	71	114,52	BC891200	178,68
BC971250	12,5	14	124	77	150,54	BC891250	242,69
BC971300	13,0	14	124	77	150,54	BC891300	242,69
BC971350	13,5	14	124	77	150,54	BC891350	242,69
BC971400	14,0	14	124	77	150,54	BC891400	242,69
BC971450	14,5	16	133	83	188,72	BC891450	304,35
BC971480	14,8	16	133	83	188,71	BC891480	
BC971500	15,0	16	133	83	188,72	BC891500	304,35
BC971550	15,5	16	133	83	188,72	BC891550	304,35
BC971580	15,8	16	133	83	188,71	BC891580	
BC971600	16,0	16	133	83	188,72	BC891600	304,35
BC971650	16,5	18	143	93	314,36	BC891650	480,51
BC971700	17,0	18	143	93	314,36	BC891700	480,51
BC971750	17,5	18	143	93	314,36	BC891750	480,51
BC971800	18,0	18	143	93	314,36	BC891800	480,51
BC971850	18,5	20	153	101	343,60	BC891850	525,23
BC971900	19,0	20	153	101	343,60	BC891900	525,23
BC971950	19,5	20	153	101	343,60	BC891950	525,23
BC972000	20,0	20	153	101	343,60	BC892000	525,23

Check availability range for Ø < 3

Twist drills for Metal

Pink

SOLID CARBIDE REINFORCED SHANK DRILLS WITH INTERNAL COOLING
8xD

Ref. BC96

**DIN
6537L**
**SOLID
CARBIDE**
**TOL D1
m7**
**TOL D2
h6**

TiAlN
**HARDOX
450**


Recommended for HARDOX 450





	BC96				
	D1 mm	D2 mm	L1 mm	L2 mm	€
BC960300	3,00	6	72	34	182,27
BC960320	3,20	6	72	34	182,27
BC960350	3,50	6	72	34	182,27
BC960380	3,80	6	81	43	182,27
BC960400	4,00	6	81	43	182,27
BC960420	4,20	6	81	43	182,27
BC960450	4,50	6	81	43	182,27
BC960480	4,80	6	95	57	182,27
BC960500	5,00	6	95	57	182,27
BC960520	5,20	6	95	57	182,27
BC960550	5,50	6	95	57	182,27
BC960560	5,60	6	95	57	182,27
BC960570	5,70	6	95	57	182,27
BC960580	5,80	6	95	57	182,27
BC960590	5,90	6	95	57	182,27
BC960600	6,00	6	95	57	182,27
BC960610	6,10	8	114	76	198,56
BC960620	6,20	8	114	76	198,56
BC960630	6,30	8	114	76	198,56
BC960650	6,50	8	114	76	198,56
BC960660	6,60	8	114	76	198,56
BC960680	6,80	8	114	76	198,56
BC960690	6,90	8	114	76	198,56
BC960700	7,00	8	114	76	198,56
BC960710	7,10	8	114	76	198,56
BC960740	7,40	8	114	76	198,56
BC960750	7,50	8	114	76	198,56
BC960780	7,80	8	114	76	198,56
BC960800	8,00	8	114	76	198,56
BC960810	8,10	10	142	95	268,86
BC960840	8,40	10	142	95	268,86
BC960850	8,50	10	142	95	268,86
BC960860	8,60	10	142	95	268,86
BC960870	8,70	10	142	95	268,86
BC960880	8,80	10	142	95	268,86
BC960900	9,00	10	142	95	268,86
BC960930	9,30	10	142	95	268,86
BC960950	9,50	10	142	95	268,86
BC960960	9,60	10	142	95	268,86
BC960980	9,80	10	142	95	268,86
BC961000	10,00	10	142	95	268,86
BC961020	10,20	12	162	114	354,45
BC961040	10,40	12	162	114	354,45
BC961050	10,50	12	162	114	354,45
BC961060	10,60	12	162	114	354,45
BC961080	10,80	12	162	114	354,45
BC961100	11,00	12	162	114	354,45
BC961120	11,20	12	162	114	354,45
BC961150	11,50	12	162	114	354,45
BC961180	11,80	12	162	114	354,45
BC961200	12,00	12	162	114	354,45

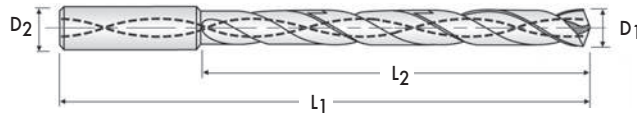
SOLID CARBIDE REINFORCED SHANK DRILLS WITH INTERNAL COOLING

Ref. BXX

12xD

DIN 6537L **SOLID CARBIDE** **TOL D1 m7** **TOL D2 h6**    **30° "N"** **TiAIN** **HARDOX 450** 

Recommended for HARDOX 450



BXX					
	D1 mm	D2 mm	L1 mm	L2 mm	€
BXX0300	3,0	6	92	54	200,08
BXX0320	3,2	6	92	54	200,08
BXX0330	3,3	6	92	54	200,08
BXX0350	3,5	6	92	54	200,08
BXX0370	3,7	6	92	54	200,08
BXX0380	3,8	6	102	64	200,08
BXX0390	3,9	6	102	64	200,08
BXX0400	4,0	6	102	64	200,08
BXX0420	4,2	6	102	64	200,08
BXX0430	4,3	6	102	64	200,08
BXX0440	4,4	6	102	64	213,44
BXX0450	4,5	6	102	64	213,44
BXX0460	4,6	6	102	64	213,44
BXX0470	4,7	6	102	64	213,44
BXX0480	4,8	6	116	78	213,44
BXX0490	4,9	6	116	78	213,44
BXX0500	5,0	6	116	78	213,44
BXX0510	5,1	6	116	78	213,44
BXX0520	5,2	6	116	78	213,44
BXX0530	5,3	6	116	78	213,44
BXX0540	5,4	6	116	78	213,44
BXX0550	5,5	6	116	78	213,44
BXX0560	5,6	6	116	78	213,44
BXX0570	5,7	6	116	78	213,44
BXX0580	5,8	6	116	78	213,44
BXX0590	5,9	6	116	78	213,44
BXX0600	6,0	6	116	78	213,44
BXX0610	6,1	8	146	108	261,47
BXX0620	6,2	8	146	108	261,47
BXX0650	6,5	8	146	108	261,47
BXX0660	6,6	8	146	108	261,47
BXX0670	6,7	8	146	108	261,47
BXX0680	6,8	8	146	108	277,45
BXX0690	6,9	8	146	108	277,45
BXX0700	7,0	8	146	108	277,45

BXX					
	D1 mm	D2 mm	L1 mm	L2 mm	€
BXX0740	7,4	8	146	108	277,45
BXX0750	7,5	8	146	108	277,45
BXX0770	7,7	8	146	108	277,45
BXX0780	7,8	8	146	108	306,23
BXX0800	8,0	8	146	108	310,27
BXX0820	8,2	10	162	120	346,86
BXX0850	8,5	10	162	120	346,86
BXX0880	8,8	10	162	120	346,86
BXX0900	9,0	10	162	120	346,86
BXX0950	9,5	10	162	120	346,86
BXX0980	9,8	10	162	120	346,86
BXX0990	9,9	10	162	120	346,86
BXX1000	10,0	10	162	120	346,86
BXX1010	10,1	12	204	156	485,58
BXX1020	10,2	12	204	156	485,58
BXX1030	10,3	12	204	156	485,58
BXX1050	10,5	12	204	156	485,58
BXX1080	10,8	12	204	156	485,58
BXX1100	11,0	12	204	156	485,58
BXX1120	11,2	12	204	156	485,58
BXX1140	11,4	12	204	156	485,58
BXX1150	11,5	12	204	156	485,58
BXX1180	11,8	12	204	156	485,58
BXX1200	12,0	12	204	156	485,58
BXX1250	12,5	14	230	182	634,99
BXX1280	12,8	14	230	182	634,99
BXX1300	13,0	14	230	182	634,99
BXX1350	13,5	14	230	182	634,99
BXX1380	13,8	14	230	182	634,99
BXX1400	14,0	14	230	182	634,99
BXX1450	14,5	16	260	208	827,04
BXX1500	15,0	16	260	208	827,04
BXX1550	15,5	16	260	208	827,04
BXX1600	16,0	16	260	208	827,04



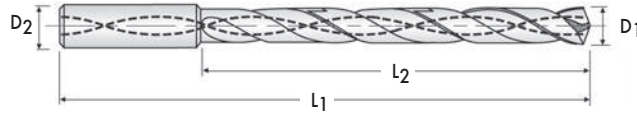
SOLID CARBIDE REINFORCED SHANK DRILLS WITH INTERNAL COOLING
15xD

Ref. BXL

**DIN
6537L**
**SOLID
CARBIDE**
**TOL D1
m7**
**TOL D2
h6**

TiAlN
**HARDOX
450**

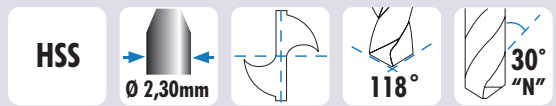

Recommended for HARDOX 450



	BXL				
	D1 mm	D2 mm	L1 mm	L2 mm	€
BXL0300	3,0	6	100	60	466,00
BXL0320	3,2	6	100	60	466,00
BXL0330	3,3	6	100	60	466,00
BXL0350	3,5	6	100	60	466,00
BXL0380	3,8	6	108	68	466,00
BXL0390	3,9	6	108	68	466,00
BXL0400	4,0	6	108	68	466,00
BXL0420	4,2	6	115	78	518,90
BXL0450	4,5	6	115	78	518,90
BXL0500	5,0	6	125	84	533,36
BXL0550	5,5	6	130	92	542,71
BXL0590	5,9	6	140	100	542,71
BXL0600	6,0	6	140	100	542,71
BXL0650	6,5	8	145	108	713,02
BXL0680	6,8	8	170	130	810,86
BXL0700	7,0	8	170	130	810,86
BXL0750	7,5	8	170	130	810,86
BXL0780	7,8	8	170	130	810,86
BXL0800	8,0	8	170	130	810,86
BXL0850	8,5	10	208	163	1.099,47
BXL0900	9,0	10	208	163	1.099,47
BXL0950	9,5	10	208	163	1.099,47
BXL0980	9,8	10	208	163	1.099,47
BXL1000	10,0	10	208	163	1.099,47
BXL1050	10,5	12	245	195	1.412,94
BXL1100	11,0	12	245	195	1.412,94
BXL1150	11,5	12	245	195	1.412,94
BXL1180	11,8	12	245	195	1.412,94
BXL1200	12,0	12	245	195	1.412,94
BXL1250	12,5	14	280	230	1.935,56
BXL1300	13,0	14	280	230	1.935,56
BXL1400	14,0	14	280	230	1.935,56
BXL1500	15,0	16	310	260	2.357,05

MICRO DRILLS WITH REINFORCED SHANK

Ref. BC30



BC30				
	D1 mm	L1 mm	L2 mm	€
BC300050	0,50	43	5	3,27
BC300060	0,60	43	7	3,27
BC300070	0,70	43	7	3,27
BC300075	0,75	43	7	3,27
BC300080	0,80	43	7	3,27
BC300090	0,90	43	7	3,27
BC300095	0,95	43	7	3,27
BC300100	1,00	43	7	3,27
BC300110	1,10	43	7	3,27
BC300120	1,20	43	10	3,27
BC300125	1,25	43	10	3,27
BC300130	1,30	43	10	3,27

BC30				
	D1 mm	L1 mm	L2 mm	€
BC300140	1,40	43	10	3,27
BC300150	1,50	43	10	3,27
BC300160	1,60	43	10	3,27
BC300170	1,70	43	10	3,27
BC300175	1,75	43	10	3,27
BC300180	1,80	43	10	3,27
BC300190	1,90	43	10	3,27
BC300200	2,00	43	10	3,27
BC300210	2,10	43	10	3,27
BC300220	2,20	43	10	3,27
BC300225	2,25	43	10	3,27
BC300235	2,35	43	10	3,27
BC300240	2,40	43	10	3,27



Twist drills for Metal
Pink

Ref. BC79



APPLICATIONS:
For printed circuit boards

BC79				
	D1 mm	L1 mm	L2 mm	€
BC790025	0,25	38	5	67,58
BC790030	0,30	38	5	49,89
BC790035	0,35	38	5	23,43
BC790040	0,40	38	5	20,96
BC790045	0,45	38	5	21,20
BC790050	0,50	38	5	14,84
BC790055	0,55	38	5	14,84
BC790060	0,60	38	5	14,84
BC790065	0,65	38	5	13,40
BC790070	0,70	38	10	13,40
BC790075	0,75	38	10	13,40
BC790080	0,80	38	10	13,40
BC790085	0,85	38	10	13,40
BC790090	0,90	38	10	13,40
BC790095	0,95	38	10	13,40
BC790100	1,00	38	10	13,40
BC790105	1,05	38	10	13,40
BC790110	1,10	38	10	13,40
BC790115	1,15	38	10	13,40
BC790120	1,20	38	10	13,40
BC790125	1,25	38	10	13,40
BC790130	1,30	38	10	13,40
BC790135	1,35	38	10	13,40
BC790140	1,40	38	10	13,40
BC790145	1,45	38	10	13,40
BC790150	1,50	38	10	13,40
BC790155	1,55	38	10	13,40
BC790160	1,60	38	10	13,40
BC790165	1,65	38	10	16,83
BC790170	1,70	38	10	16,83

BC79				
	D1 mm	L1 mm	L2 mm	€
BC790175	1,75	38	10	16,83
BC790180	1,80	38	10	16,83
BC790185	1,85	38	10	16,83
BC790190	1,90	38	10	16,83
BC790195	1,95	38	10	16,83
BC790200	2,00	38	10	16,83
BC790205	2,05	38	10	16,83
BC790210	2,10	38	10	16,83
BC790215	2,15	38	10	16,83
BC790220	2,20	38	10	16,83
BC790225	2,25	38	10	16,83
BC790230	2,30	38	10	16,83
BC790235	2,35	38	10	16,83
BC790240	2,40	38	10	16,83
BC790245	2,45	38	10	16,83
BC790250	2,50	38	10	16,83
BC790255	2,55	38	10	16,83
BC790260	2,60	38	10	16,83
BC790265	2,65	38	10	16,83
BC790270	2,70	38	10	16,83
BC790275	2,75	38	10	16,83
BC790280	2,80	38	10	16,83
BC790285	2,85	38	10	16,83
BC790290	2,90	38	10	16,83
BC790295	2,95	38	10	16,83
BC790300	3,00	38	10	16,83
BC790305	3,05	38	10	16,83
BC790310	3,10	38	10	16,83
BC790315	3,15	38	10	16,83



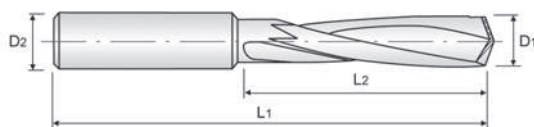
SOLID CARBIDE DRILLS FOR HARDENED AND HIGH RESISTANCE STEEL

Ref. BC85

**70
HRC**
**SOLID
CARBIDE**
**TOL D1
h7**
**TOL D2
h6**

TiAIN
**HARDOX
600**
**HIGH
PERFORMANCE**

Recommended for HARDOX 600

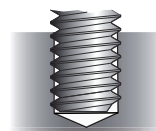
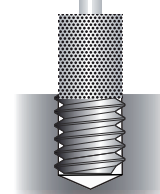


	BC85				
	D1 mm	D2 mm	L1 mm	L2 mm	€
BC850300	3,0	3	46	16	48,34
BC850330	3,3	4	48	18	55,48
BC850340	3,4	4	50	20	55,48
BC850350	3,5	4	50	20	55,48
BC850370	3,7	4	52	22	55,48 *
BC850400	4,0	4	52	22	56,60
BC850420	4,2	6	65	25	80,37
BC850430	4,3	6	68	28	80,37
BC850440	4,4	6	68	28	80,37
BC850450	4,5	6	68	28	80,37
BC850500	5,0	6	72	32	80,37
BC850510	5,1	6	72	32	80,37
BC850520	5,2	6	72	32	80,37
BC850550	5,5	6	75	35	80,37
BC850600	6,0	6	75	35	80,37
BC850630	6,3	8	80	40	93,35 *
BC850650	6,5	8	80	40	93,35
BC850680	6,8	8	85	45	93,35
BC850690	6,9	8	85	45	93,35
BC850700	7,0	8	85	45	93,35
BC850750	7,5	8	85	45	93,35
BC850800	8,0	8	98	50	93,35
BC850830	8,3	10	98	50	142,67 *
BC850850	8,5	10	98	50	142,67
BC850860	8,6	10	105	57	142,67
BC850880	8,8	10	105	57	142,67
BC850900	9,0	10	105	57	142,67
BC850950	9,5	10	105	57	142,67
BC851000	10,0	10	111	63	142,67
BC851020	10,2	12	111	63	184,78
BC851030	10,3	12	111	63	216,81
BC851040	10,4	12	111	63	216,81
BC851050	10,5	12	111	63	216,81
BC851080	10,8	12	119	71	216,81
BC851100	11,0	12	119	71	216,81
BC851150	11,5	12	119	71	216,81
BC851200	12,0	12	119	71	216,81
BC851400	14,0	14	125	77	246,37

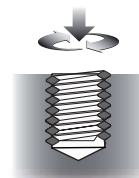
* Till end of stock

DRILLING THROUGH BROKEN SCREWS

Broken screw


1st Step
 Clean up the surface

2nd Step
 Drilling with BC85 drill

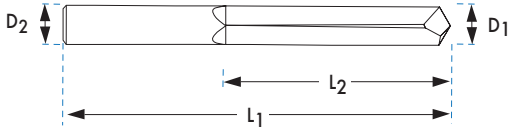
3rd Step
 Remove the chip

4th Step (Optional)
 Repair the thread
 with inserts


CARBIDE DRILLS FOR CYLINDER

Ref. BCC06

SOLID CARBIDE



* Suitable to drill cylinder with Anti-drilling pins

BCC06					
	D1 mm	D2 mm	L2 mm	L1 mm	€
BCC06X60MD	6	6	33	60	60,13

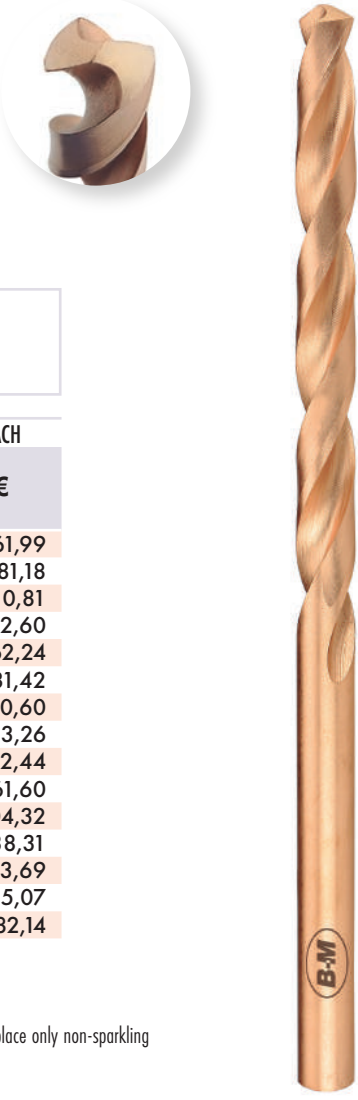
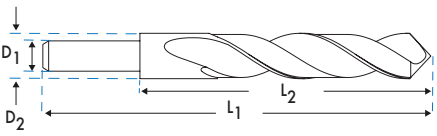
* for antidrilling pins cylinder we recommend to drill at 300 RPM.

NON SPARKING DRILL BIT (ATEX)

Ref. BACH

22 HRC

Cu-Be



* Made of Copper-Beryllium according to Q/ZBF-312 Standard.
 * Certificates and security sheets available.
 * Suitable for machining in explosive atmospheres.

BACH					
	D1 mm	D2 mm	L1 mm	L2 mm	€
BACH0600	6,0	6,0	100	60	461,99
BACH0700	7,0	7,0	120	80	481,18
BACH0800	8,0	8,0	140	80	510,81
BACH0900	9,0	9,0	160	86	532,60
BACH1000	10,0	10,0	180	108	562,24
BACH1100	11,0	11,0	200	125	581,42
BACH1200	12,0	12,0	220	135	600,60
BACH1300	13,0	12,0	240	150	623,26
BACH1400	14,0	12,0	260	160	642,44
BACH1500	15,0	12,0	280	190	661,60
BACH1600	16,0	12,0	300	195	704,32
BACH1700	17,0	12,0	300	195	738,31
BACH1800	18,0	12,0	320	195	803,69
BACH1900	19,0	12,0	320	205	835,07
BACH2000	20,0	12,0	330	205	882,14

* Special lengths available on request

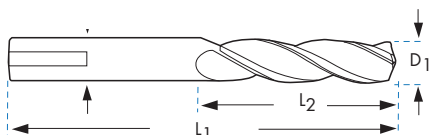
Due to its hardness (inferior compared with HSS Tools), non-sparking drill bits can not be guaranteed against deformation or breaking. We'll accept to replace only non-sparking drill bits with hardness less than 35 HRC.

3 FLUTE DELTABIT DRILL BIT
3Z

Ref. BTT33

**DIN
338**
**HSSCo
5%**


135°

30°
"N"
**TOL
H8**
 $\varnothing \geq 3$ HIGH
PERFORMANCE

- Greater accuracy of the holes.
- Holes better rounded and aligned.
- Anti-slip triangle shank, better clamping to the drill-chuck.

BTT33

	D1 mm	L1 mm	L2 mm	€
BTT330300	3,0	61	33	2,55
BTT330330	3,3	65	36	3,30
BTT330350	3,5	70	39	3,30
BTT330400	4,0	75	43	3,87
BTT330420	4,2	75	43	4,78
BTT330450	4,5	80	47	4,78
BTT330500	5,0	86	52	5,46
BTT330550	5,5	93	57	6,78
BTT330600	6,0	93	57	7,83
BTT330650	6,5	101	63	9,00
BTT330680	6,8	109	69	10,36
BTT330700	7,0	109	69	10,36
BTT330750	7,5	109	69	11,82
BTT330800	8,0	117	75	14,13
BTT330850	8,5	117	75	15,72
BTT330900	9,0	125	81	18,23
BTT330950	9,5	125	81	19,85
BTT331000	10,0	133	87	22,37
BTT331020	10,2	133	87	24,91
BTT331050	10,5	133	87	24,91
BTT331100	11,0	142	94	28,68
BTT331150	11,5	142	94	31,02
BTT331200	12,0	151	101	35,88
BTT331250	12,5	151	101	38,40
BTT331300	13,0	151	101	40,91

SPECIAL DRILL FOR HARDOX AND WEAR RESISTANCE SHEETS

Ref. BHA

3xD

DIN 338

HSSCo 8%

135°

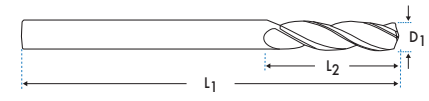
HARDTOP

HARDOX 400

HARDOX 450

HARDOX 600

Special point geometry, with Split point and double facet sharpening.
 HARDTOP coating that improves the slip of the chips and avoids their adherence to the cutting edge.
 Improves the mechanical resistance and protects the drill reducing the friction coefficient.
 Its low depth flute generates a reinforced core that facilitates the tooling stability.
 Maximum performance in high resistance materials.



	BHA			
	D ₁ mm	L ₁ mm	L ₂ mm	€
BHA0100	1,0	34	6	11,67
BHA0150	1,5	40	9	11,67
BHA0200	2,0	49	12	12,13
BHA0250	2,5	57	14	12,36
BHA0300	3,0	61	16	12,47
BHA0320	3,2	65	18	13,27
BHA0330	3,3	65	18	13,27
BHA0350	3,5	70	20	13,27
BHA0400	4,0	75	22	14,10
BHA0420	4,2	75	22	18,38
BHA0450	4,5	80	24	18,38
BHA0500	5,0	86	26	17,42
BHA0550	5,5	93	28	23,53
BHA0600	6,0	93	28	22,05
BHA0650	6,5	101	31	25,42
BHA0680	6,8	109	34	29,52
BHA0700	7,0	109	34	27,21
BHA0750	7,5	109	34	32,59
BHA0800	8,0	117	37	35,44
BHA0850	8,5	117	37	35,44
BHA0900	9,0	125	40	42,43
BHA0950	9,5	125	40	47,89
BHA1000	10,0	133	43	46,46
BHA1020	10,2	133	43	54,05
BHA1050	10,5	133	43	58,38
BHA1100	11,0	142	47	60,75
BHA1150	11,5	142	47	68,40
BHA1200	12,0	151	51	63,71
BHA1250	12,5	151	51	83,69
BHA1300	13,0	151	51	91,20



135° Point Angle to provide an excellent centering.



NARROW GUIDE for a total reduction of the friction out of the cutting area.

HARDTOP

Increases the chip slipping over the cutting area avoiding the adherence and improving a fast slip along the flute.

HSSCo 8%

M42 Quality Steel HSSCo 8%
 Allows the tooling of high resistance and hardened materials at high temperature.

DIN 338 Norm

Cutting speed (m/min)	BHA			
	Hardox® HiTuf	Hardox® 400	Hardox® 450	Hardox® 600
	11	8	6	4
Ø	f(mm/rev.)	f(mm/rev.)	f(mm/rev.)	f(mm/rev.)
2,5	0,035/1400	0,025/1000	0,015/770	0,005/500
3	0,04/1200	0,03/850	0,02/640	0,01/430
4	0,05/900	0,04/650	0,03/480	0,02/320
5	0,06/700	0,05/510	0,04/400	0,03/255
6	0,07/590	0,06/430	0,05/320	0,04/220
7	0,08/500	0,07/370	0,06/280	0,05/190
8	0,09/440	0,08/320	0,07/240	0,06/160
10	0,11/350	0,10/260	0,09/200	0,08/130
13	0,14/270	0,13/200	0,12/150	0,1/100

STEP CUT DRILL FOR EASY DRILLING IN CURVED AND UNSTABLE SURFACES

Ref. TK02

**DIN
338**
HSS

STEP CUT

HSS Helical drill with STEP CUT point geometry, cut in steps.

NEW STEP CUT: its step geometry allows an easy penetration.

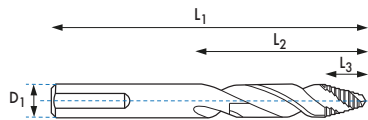
Work in a comfortable, fast and accurate way in curved, unstable or sloping surfaces.

Higher accuracy due to the centering point that avoids the slipping at the start of the drilling.

STEP CUT Geometry: With the Step Cut the holes are more rounded, accurate and centered.

Triple Flat ANTISLIP shank to transmit the power to the drill in a properly way.

Enables to make through holes in steel, aluminium, copper, nickel, zinc, PVC, fiberglass, wood...



	D ₁ mm	L ₁ mm	L ₂ mm	L ₃ mm		TK02
						€
TK020100	1,0	34	12	-	10	3,32
TK020150	1,5	40	18	-	10	3,42
TK020200	2,0	49	24	-	10	3,56
TK020250	2,5	57	30	1,6	10	4,15
TK020300	3,0	61	33	1,9	10	4,35
TK020350	3,5	70	39	2,1	10	5,20
TK020400	4,0	75	43	2,9	10	6,16
TK020450	4,5	80	47	3,3	10	6,77
TK020500	5,0	76	52	3,9	10	7,64
TK020550	5,5	93	57	4,6	10	8,09
TK020600	6,0	93	57	5,3	10	8,82
TK020650	6,5	101	63	5,8	10	10,28
TK020700	7,0	109	69	6,4	10	11,76
TK020750	7,5	109	69	6,9	10	13,75
TK020800	8,0	117	75	7,6	10	14,20
TK020850	8,5	117	75	8,2	10	16,85
TK020900	9,0	125	81	8,8	10	18,61
TK020950	9,5	125	81	9,3	10	20,08
TK021000	10,0	133	87	10,0	10	21,41
TK021050	10,5	133	87	10,7	10	23,32
TK021100	11,0	142	94	11,3	6	25,75
TK021150	11,5	142	94	12,0	6	28,01
TK021200	12,0	151	101	12,6	6	30,56
TK021250	12,5	151	101	13,8	6	32,52
TK021300	13,0	151	101	14,7	6	35,06



(Ref. TK02 drills)

REFERENCE	PTK029314
QUANTITY	6
QUALITY	HSS
CONTENT	Ø 2 - 3 - 4 - 5 - 6 - 8 mm.
PRICE €	47,41



TK02010	TK02011
19	25
HSS	HSS
Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm
192,60	343,60

STEP CUT DRILL FOR EASY DRILLING IN CURVED AND UNSTABLE SURFACES

NEW
Ref. TK05

DIN 338

HSSCo 5%



INOX



CAST IRON



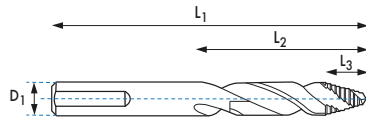
PVC



STEP CUT



High Performance Helical Drill HSSCo 5% .
NEW STEP CUT: its step geometry allows an easy penetration.
 Work in a comfortable, fast and accurate way in curved, unstable or sloping surfaces.
 Higher accuracy due to the centering point that avoids the slipping at the start of the drilling.
STEP CUT Geometry: With the Step Cut the holes are more rounded, accurate and centered .
 Triple Flat **ANTISLIP** shank to transmit the power to the drill in a properly way.
 Enables to make through holes in stainless steel, cast iron, copper, nickel, zinc, PVC, fiberglass, ...



	D ₁ mm	L ₁ mm	L ₂ mm	L ₃ mm		TK05 €
TK050100	1,0	34	12	-	10	4,48
TK050150	1,5	40	18	-	10	4,62
TK050200	2,0	49	24	-	10	4,81
TK050250	2,5	57	30	1,6	10	5,60
TK050300	3,0	61	33	1,9	10	5,88
TK050350	3,5	70	39	2,1	10	7,02
TK050400	4,0	75	43	2,9	10	8,32
TK050450	4,5	80	47	3,3	10	9,14
TK050500	5,0	76	52	3,9	10	10,31
TK050550	5,5	93	57	4,6	10	10,92
TK050600	6,0	93	57	5,3	10	11,02
TK050650	6,5	101	63	5,8	10	12,85
TK050700	7,0	109	69	6,4	10	14,70
TK050750	7,5	109	69	6,9	10	17,19
TK050800	8,0	117	75	7,6	10	17,75
TK050850	8,5	117	75	8,2	10	21,07
TK050900	9,0	125	81	8,8	10	23,26
TK050950	9,5	125	81	9,3	10	25,10
TK051000	10,0	133	87	10,0	10	24,62
TK051050	10,5	133	87	10,7	10	26,81
TK051100	11,0	142	94	11,3	6	29,62
TK051150	11,5	142	94	12,0	6	32,21
TK051200	12,0	151	101	12,6	6	35,14
TK051250	12,5	151	101	13,8	6	37,39
TK051300	13,0	151	101	14,7	6	40,32



(Ref. TK05 drills)

REFERENCE	PTK059314
QUANTITY	6
QUALITY	HSSCo 5%
CONTENT	Ø 2 - 3 - 4 - 5 - 6 - 8 mm.
PRICE €	59,26



TK05010
19
HSSCo 5%
Ø 1-10 x 0,50 mm
240,75

TK05011
25
HSSCo 5%
Ø 1-13 x 0,50 mm
429,50

TWIST DRILLS, LONG AND EXTRA SHORT SERIES

Twist drills for Metal

Pink

**DIN
340**

**DIN
1897**


		BC4	BC47	BC40	BC44	BC48	BC78										
MATERIAL		HSS	HSSCo 5%	HSS	HSSCo 5%	HSSCo 5%	CARBIDE TIPPED		BC3	BC31	BC37	BC33	BC35	BC77	BC43	BC17	BC38
SHARPENING																	
POINT ANGLE		118°	135°	118°	135°	135°	118°		135°	135°	135°	135°	118°	118°	135°	135°	135°
HELIX ANGLE		30° "N"	30° "N"	30° "N"	38° "S"	38° "S"	30° "N"		30° "N"	30° "N"	30° "N"	38° "S"	38° "S"	30° "N"	35° "N"	30° "N"	30° "N"
COATING		OX	GOLD	TIN	BRIGHT	TiAIN	BRIGHT		OX	GOLD	TIN	BRIGHT	TiAIN	BRIGHT	BRIGHT	OX	GOLD
APPLICATION																	
Ø mm	L1 x L2	€	€	€	€	€	€	L1 x L2	€	€	€	€	€	€	€	€	€
0,50	32x13	6,74						23x5									
0,60	37x17	5,48						23x5									14,43
0,70	42x21	5,48						23x5									14,43
0,80	47x23	5,46						23x5									14,43
0,90	51x25	5,46						23x5									14,43
1,00	56x33	5,51						26x6	1,40	2,40	2,91	4,06			10,09		
1,10	56x33	5,36						26x6	1,64								
1,20	60x37	5,36						26x6	1,64								
1,25	65x41	5,54						30x8	1,22	2,80	2,73						
1,30	65x41	5,36						30x8	1,64								
1,40	70x45	5,36						30x9	1,64								
1,50	70x45	3,94		5,15				30x9	1,22	2,27	2,73	4,95			11,55		
1,60	76x50	5,36			10,17			34x10	1,40	2,94	2,91						
1,70	76x50	5,35			10,21			36x11	1,62								
1,75	80x53	4,43						36x11	1,40	2,80	2,91						
1,80	80x53	4,27			9,67			36x11	1,40	2,94	2,91						
1,90	80x53	4,27			10,21			38x12	1,46								
2,00	85x56	2,82	5,67	4,19	9,00	11,35	35,30	38x12	1,20	2,27	2,71	4,35	5,22	20,48	9,27	2,28	
2,10	85x56	4,00			8,69			38x12	1,31	2,78	2,81				10,90		
2,20	90x59	4,00			9,29			40x13	1,31	2,78	2,81				10,90		
2,25	90x59	3,20						40x13	1,12	2,74	2,63						
2,30	90x59	3,86			8,98			40x13	1,31	2,78	2,81				10,90		
2,40	95x62	3,86			11,45			43x14	1,31	2,78	2,81				10,90		
2,50	95x62	2,92	5,29	4,15	8,44	10,54	34,96	43x14	1,02	1,92	2,53	3,81	4,89	20,48	10,28	2,27	
2,60	95x62	3,87			10,50			43x14	1,24	2,24	2,75			20,97	10,90		
2,70	100x66	3,87			9,45			46x16	1,24	2,25	2,75				14,32		

DIN 340								DIN 1897										
		BC4	BC47	BC40	BC44	BC48	BC78			BC3	BC31	BC37	BC33	BC35	BC77	BC43	BC17	BC38
MATERIAL		HSS	HSSCo 5%	HSS	HSSCo 5%	HSSCo 5%	CARBIDE TIPPED			HSS	HSSCo 5%	HSS	HSSCo 5%	HSSCo 5%	CARBIDE TIPPED	SOLID CARBIDE	HSS	HSSCo 5%
SHARPENING																		
POINT ANGLE		118°	135°	118°	135°	135°	118°			135°	135°	135°	135°	118°	118°	135°	135°	135°
HELIX ANGLE		30° "N"	30° "N"	30° "N"	38° "G"	38° "G"	30° "N"			30° "N"	30° "N"	30° "N"	38° "G"	38° "N"	30° "N"	35° "N"	30° "N"	30° "N"
COATING		OX	GOLD	TiN	BRIGHT	TiAlN	BRIGHT			OX	GOLD	TiN	BRIGHT	TiAlN	BRIGHT	BRIGHT	OX	GOLD
APPLICATION																		
Ø mm	L1 x L2	€	€	€	€	€	€	L1 x L2	€	€	€	€	€	€	€	€	€	€
9,10	175x115	13,89						84x40							44,61	86,94		
9,20	175x115	13,89			42,05			84x40		10,54						88,63		
9,25	175x115	14,43						84x40	5,35	10,54	10,97							
9,30	175x115	14,93						84x40		10,54						88,63		
9,40	175x115	14,93						84x40		10,54						88,63		
9,50	175x115	10,46	21,05	15,39	33,65	42,81	50,30	84x40	5,35	9,61	10,97	17,94	22,84	46,52	81,08			
9,60	184x121	14,94						89x43							91,47			
9,70	184x121	14,93						89x43							91,47			
9,75	184x121	15,54						89x43	5,97	11,72	11,59							
9,80	184x121	14,95			56,71			89x43							91,47			
9,90	184x121	14,93						89x43							89,74			
10,00	184x121	11,26	22,79	16,39	36,23	45,53	49,95	89x43	5,97	10,63	12,39	19,92	24,77	50,28	80,01			
10,10	184x121	16,41												51,45				
10,20	184x121	15,30						89x43	6,77	11,87	13,19	20,98	35,20		99,50			
10,25	184x121	14,16	33,48	24,74				89x43	7,50									
10,30	184x121	21,74												51,45				
10,40	184x121	18,86																
10,50	184x121	15,27	30,56	25,87	48,45	67,09	67,76	89x43	6,76	11,88	16,39	22,43		54,77	98,57			
10,60	195x128	21,35																
10,70	195x128	21,35																
10,75	195x128	15,54						95x47	8,32									
10,80	195x128	19,45																
10,90	195x128	21,35																
11,00	195x128	16,95	34,29	27,35	53,46	73,26	67,76	95x47	7,50	13,28	17,13	24,71	38,76	58,74	102,23			
11,10	195x128	20,99												62,23				
11,20	195x128	20,39																
11,25	195x128	20,19																
11,30	195x128	24,35																
11,40	195x128	24,35																
11,50	195x128	17,30	36,02	27,95	57,57	74,99	84,03	95x47	8,36	15,68	17,99	26,28		63,37	123,22			
11,60	195x128	24,35																
11,70	195x128	24,35																
11,75	195x128	22,72																
11,80	195x128	22,72																
11,90	195x128	22,72																
12,00	205x134	19,32	38,97	29,95	62,45	80,06	78,16	102x51	8,81	16,77	18,44	29,53	46,29	68,95	119,70			
12,10	205x134	23,38												72,56				
12,20	205x134	21,86																
12,25	205x134	21,91																
12,30	205x134	25,83																
12,40	205x134	28,91																
12,50	205x134	20,39	46,81	33,75	61,59	97,92	84,88	102x51	9,90	20,40	22,74	34,84		73,03	160,48			
12,60	205x134	28,91																
12,70	205x134	28,91						102x51	10,43	23,34	23,27							
12,75	205x134	26,84																
12,80	205x134	28,91																
12,90	205x134	28,78																
13,00	205x134	23,10	47,68	36,37	76,67	99,51	84,88	102x51	10,84	20,81	23,68	36,41	57,74	78,87	160,48			
13,25	214x140	26,84																
13,50	214x140	25,80						107x54	13,76	24,42	28,21	41,09						
13,75	214x140	26,93																

TWIST DRILLS, LONG AND EXTRA SHORT SERIES

Twist drills for Metal

Pink

**DIN
340**

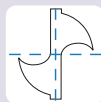
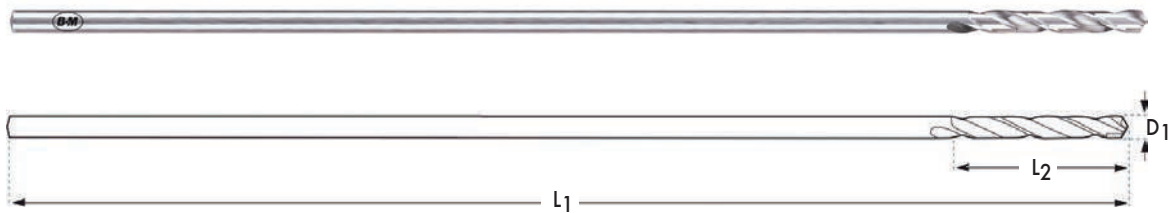
**DIN
1897**


		BC4	BC47	BC40	BC44	BC48	BC78										
		BC3	BC31	BC37	BC33	BC35	BC77	BC43	BC17	BC38							
MATERIAL		HSS	HSSCo 5%	HSS	HSSCo 5%	HSSCo 5%	CARBIDE TIPPED	HSS	HSSCo 5%	HSS	HSSCo 5%	HSSCo 5%	CARBIDE TIPPED	SOLID CARBIDE	HSS	HSSCo 5%	
SHARPENING																	
POINT ANGLE		118°	135°	118°	135°	135°	118°	135°	135°	135°	135°	118°	118°	135°	135°	135°	
HELIX ANGLE		30° "N"	30° "N"	30° "N"	38° "S"	38° "S"	30° "N"	30° "N"	30° "N"	30° "N"	38° "S"	38° "N"	30° "N"	35° "N"	30° "N"	30° "N"	
COATING		OX	GOLD	TiN	BRIGHT	TiAlN	BRIGHT	OX	GOLD	TiN	BRIGHT	TiAlN	BRIGHT	BRIGHT	BRIGHT	OX	GOLD
APPLICATION				PRODUCTION	INOX	INOX	CAST IRON			PRODUCTION	INOX	INOX Plus	CAST IRON	HIGH PERFORMANCE			
Ø mm	L1 x L2	€	€	€	€	€	€	L1 x L2	€	€	€	€	€	€	€	€	€
14,00	214x140	27,85					98,05	107x54	14,79	26,27	29,23	44,70		92,89	188,97		
14,25	220x144	50,19															
14,50	220x144	32,58						111x56	17,02	36,45	31,47	56,56			309,33		
14,75	220x144	50,19															
15,00	220x144	31,54					106,59	111x56	19,47	37,01	33,92	53,54		114,78	203,01		
15,25	227x149	56,62															
15,50	227x149	46,80						115x58	23,45	42,80	37,90	61,88			372,35		
15,75	227x149	56,65															
16,00	227x149	36,71					131,89	115x58	23,45	44,38	37,90	62,99		133,14	252,33		
16,25	235x154	62,50															
16,50	235x154	43,44						119x60	27,58	50,76	46,84						
16,75	235x154	62,50															
17,00	235x154	43,63					168,09	119x60	27,58	50,76	46,84						
17,25	241x158	71,86															
17,50	241x158	64,47						123x62	30,72	56,22	49,98						
17,75	241x158	83,95															
18,00	241x158	45,48					175,87	123x62	30,72	61,25	53,19						
18,25	247x162	87,78															
18,50	247x162	70,43						127x64	34,23	67,63	56,70						
18,75	247x162	122,24															
19,00	247x162	57,03						127x64	34,23	67,63	56,70						
19,25	254x166	127,15															
19,50	254x166	109,66						131x66	41,03	75,01	66,71						
19,75	254x166	123,84															
20,00	254x166	63,99					243,97	131x66	41,03	80,38	66,71			634,18			

SPECIAL TWIST DRILLS FOR AIRCRAFT INDUSTRY

Ref. BC08

HSS


AIRCRAFT

150 mm

				BC08
	D ₁ mm	L ₁ mm	L ₂ mm	€
BC080225150	2,25	150	25	14,39
BC080250150	2,50	150	25	13,89
BC080320150	3,20	150	26	13,86
BC080325150	3,25	150	36	13,66
BC080400150	4,00	150	43	14,13

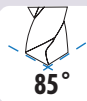
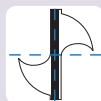
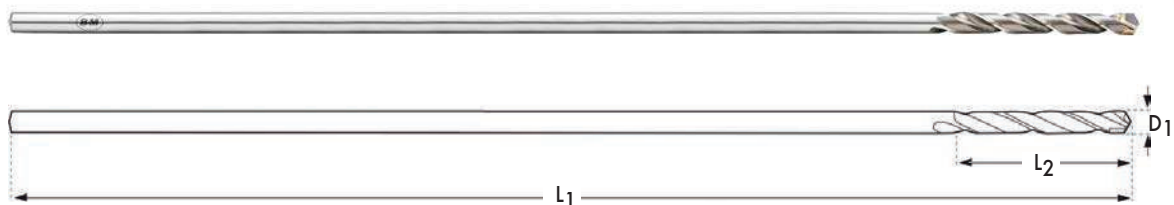
300 mm

				BC08
	D ₁ mm	L ₁ mm	L ₂ mm	€
BC080225300	2,25	300	25	15,28
BC080250300	2,50	300	25	14,45
BC080320300	3,20	300	26	14,48
BC080325300	3,25	300	36	14,43
BC080400300	4,00	300	43	16,15

* Others diameters available on request

EXTRALONG SERIES CARBIDE TIPPED DRILL FOR AIRCRAFT INDUSTRY

Ref. BC08PMD

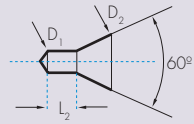
**CARBIDE
TIPPED**

**AIRCRAFT
MD**


* MD AirCraft series available. Special sizes available on request

HSS & SOLID CARBIDE CENTRE DRILLS

Ref. BC10
Ref. BC10Co

Ref. BC65
Ref. BC10I
Ref. BC10MD

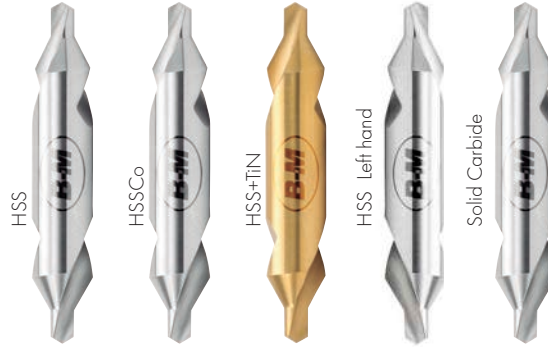
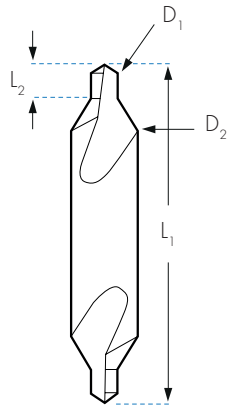


**DIN
333A**



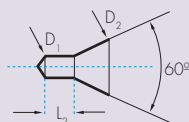
Twist drills for Metal

Pink

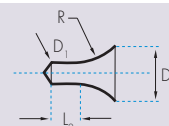


D1 x D2 mm	L1 x L2 mm	BC10	BC10Co	BC65	BC10I	BC10MD
		HSS	HSSCo 5%	TiN	HSS	SOLID CARBIDE
		€	€	€	€	€
0,50 x 3,00	31 x 1	14,00				
0,50 x 3,15	25 x 1	8,22	8,94	14,10		
0,63 x 3,15	25 x 1	8,22				63,91
0,80 x 3,15	25 x 1	8,08	8,94	13,97		
1,00 x 3,15	31 x 1	5,98	8,94	11,88		60,87
1,25 x 3,15	33 x 1	5,98	8,94	11,88		60,87
0,75 x 3,50	35 x 1	8,73	8,94	14,63		
1,00 x 4,00	35 x 1	7,51	8,94	13,41		68,24
1,25 x 4,00	35 x 1	6,35		12,69		
1,50 x 5,00	40 x 2	7,23	9,62	14,32		69,62
1,60 x 4,00	37 x 2	5,98	8,94	12,34	9,27	65,01
1,60 x 5,00	40 x 2	6,32		13,40		
2,00 x 5,00	42 x 2	6,43	9,62	13,51	9,96	74,08
2,00 x 6,00	45 x 2	7,23	10,14	14,79		78,98
2,00 x 6,30	45 x 2	6,49		14,54	10,57	
2,50 x 6,30	47 x 3	7,15	10,69	14,72	11,07	84,41
2,50 x 8,00	50 x 3	7,88	10,69	15,43	12,22	99,44
3,00 x 8,00	50 x 3	7,89	11,27	15,46		99,44
3,15 x 8,00	52 x 4	7,86	11,75	15,43	12,19	94,71
3,00 x 10,00	55 x 4	10,26	15,58	18,34		118,00
3,15 x 10,00	56 x 4	9,30			14,40	
4,00 x 10,00	59 x 5	10,91	15,58	20,82	16,91	118,00
4,00 x 12,00	63 x 5	17,63	24,56	26,87		
4,00 x 12,50	63 x 5	12,70			19,69	
5,00 x 12,00	63 x 5	17,63	24,56	26,87		191,15
5,00 x 12,50	66 x 6	19,13	25,67	28,49	29,66	197,08
5,00 x 14,00	69 x 6	30,30	33,92	40,82		
5,00 x 16,00	71 x 6	30,30			46,97	
6,30 x 16,00	74 x 8	26,17	36,74	37,15		314,82
6,30 x 18,00	77 x 8	46,13				
6,30 x 20,00	80 x 8	46,13		60,50		
8,00 x 20,00	81 x 27	50,52	100,53	75,17		
8,00 x 25,00	100 x 10	110,18				
10,00 x 25,00	100 x 31	78,39	110,65	112,55		
10,00 x 31,50	125 x 12	232,53				
12,50 x 31,50	125 x 33	186,47	242,34	243,72		

HSS & SOLID CARBIDE CENTRE DRILLS

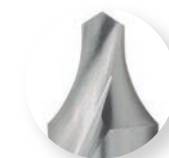
 Ref. BC64
 Ref. BC68

**DIN
333A**
**DIN
333R**
HSS

Ref. BC62

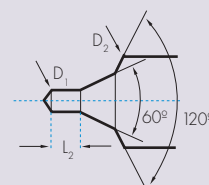

LONG SERIES


D1 x D2 mm	L1 x L2 mm	BC64	BC68
		HSS €	TiN €
1,00 x 4,00	60 x 1	20,49	31,07
1,00 x 4,00	120 x 1	41,38	79,03
1,50 x 5,00	60 x 2	20,90	31,47
1,50 x 5,00	120 x 2	42,18	69,92
2,00 x 5,00	200 x 2	86,27	154,44
2,00 x 6,00	80 x 2	21,77	34,17
2,00 x 6,00	120 x 2	32,97	69,11
2,50 x 6,30	200 x 2	84,73	152,89
2,50 x 8,00	80 x 3	26,49	44,44
2,50 x 8,00	120 x 3	40,11	81,91
3,00 x 8,00	80 x 4	26,49	44,44
3,00 x 8,00	120 x 4	40,11	81,91
3,15 x 8,00	200 x 4	80,10	148,27
3,00 x 10,00	100 x 4	34,20	55,90
3,00 x 10,00	120 x 4	41,43	92,72
4,00 x 10,00	100 x 5	34,24	55,90
4,00 x 10,00	120 x 5	41,49	92,72
4,00 x 10,00	200 x 5	87,81	155,98
4,00 x 12,00	100 x 5	46,12	83,46
4,00 x 12,00	120 x 5	55,86	118,04
5,00 x 14,00	120 x 6	78,22	142,27

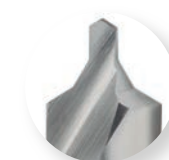
D1 x D2 mm	L1 x L2 mm	BC62
		€
1,00 x 3,15	31 x 3	6,53
1,25 x 3,15	31 x 3	6,53
1,25 x 4,00	35 x 3	6,53
1,60 x 4,00	37 x 4	6,53
1,60 x 5,00	40 x 4	7,37
2,00 x 5,00	42 x 5	7,11
2,00 x 6,30	45 x 6	8,24
2,50 x 6,30	47 x 6	7,90
2,50 x 8,00	50 x 7	8,68
3,15 x 8,00	52 x 8	8,68
3,15 x 10,00	56 x 9	11,30
4,00 x 10,00	56 x 10	11,30
4,00 x 12,50	63 x 11	18,84
5,00 x 12,50	66 x 13	18,89
5,00 x 16,00	71 x 15	26,81
6,30 x 16,00	74 x 17	27,14
6,30 x 20,00	80 x 19	48,11
8,00 x 20,00	80 x 21	51,56
10,00 x 25,00	100 x 31	85,42
12,50 x 31,50	125 x 33	194,85



Ref. BC63

**DIN
333B**
HSS


D1 x D2 mm	L1 x L2 mm	BC63
		€
1,00 x 4,00	37,50 x 1,60	10,95
1,25 x 5,00	42,00 x 1,90	10,95
1,60 x 6,30	47,00 x 2,40	10,95
2,00 x 8,00	52,00 x 2,90	11,49
2,50 x 10,00	59,00 x 3,60	13,29
3,15 x 11,20	63,00 x 4,40	15,36
4,00 x 14,00	70,00 x 5,60	23,62
5,00 x 18,00	78,00 x 6,90	32,65
6,30 x 20,00	83,00 x 8,60	47,63
8,00 x 25,00	100,00 x 26,00	105,20
10,00 x 31,50	125,00 x 30,00	208,46



HSSCo & SOLID CARBIDE POINTING DRILLS FOR CNC

Used for the previous centering in drilling works. Guides the drill when it starts to plunge.
Increases the drilling speed attack.

DIN 1412A

D₂

TOL h6

Ref. BC75
Ref. BI75
Ref. BC76

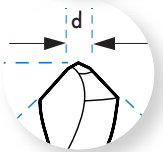
HSSCo 5% **TiAIN**



DOUBLE POINTING DRILL

Ref. DP75

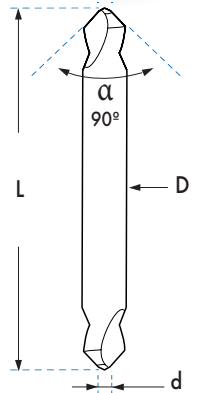
HSSCo 5% **TiAIN**



D mm	L1 x L2 mm	BC75			BI75			BC76		
		90°	90°	120°	90°	90°	120°	90°	90°	120°
		€	€	€	€	€	€	€	€	€
2	49 x 8	18,55								18,55
3	50 x 10	21,46								21,46
4	52 x 12	21,46								21,46
5	60 x 15	24,20								24,20
6	66 x 20	24,20								24,20
8	79 x 25	27,33								27,33
10	89 x 25	27,33								27,33
12	102 x 30	37,70								37,70
16	115 x 35	51,85								51,85
20	131 x 40	102,04								102,04



D x d mm	L mm	DP75	
		90°	€
3,0 x 0,5	40		26,78
4,0 x 1,0	45		26,89
6,0 x 2,0	55		30,50
8,0 x 2,5	65		35,22
10,0 x 3,0	75		37,80
12,0 x 3,5	85		46,63
16,0 x 4,0	90		71,83
20,0 x 5,0	100		117,83



SOLID CARBIDE POINTING DRILL

Ref. BC92
Ref. BC93

SOLID CARBIDE **DIN 1412A** **TOL h6** **DIN 6535HB**

D₂

D₂



HSSCo 5% **120 Kg/mm²**

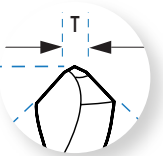
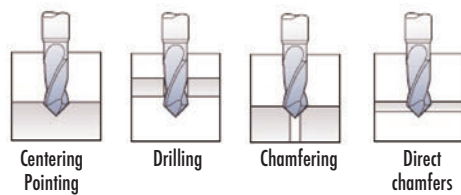
Ti

INC

Ni

INOX

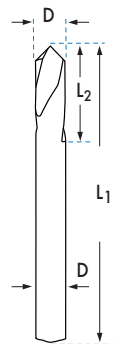
PVC



D mm	L1 x L2 mm	BC92		BC93	
		90°	120°	90°	120°
		€	€	€	€
1,0	26 x 6	28,44			
1,5	32 x 9	28,86			
2,0	38 x 12	29,16			
3,0	45 x 12	29,57		30,42	
4,0	50 x 15	29,87		30,73	
5,0	50 x 18	35,59		36,60	
6,0	50 x 13	46,16		47,48	
8,0	60 x 23	64,98		66,83	
10,0	70 x 24	92,12		94,75	
12,0	70 x 24	118,93		122,33	
14,0	70 x 27	179,11		184,22	
16,0	75 x 29	218,87		212,62	
18,0	100 x 33	326,17		335,49	
20,0	100 x 35	386,24		377,00	



D mm	L1 x L2 mm	T*	BN75	
			90°	€
BN750300	3,0	50 x 6	0,3	31,69
BN750400	4,0	52 x 8	0,4	34,36
BN750500	5,0	60 x 10	0,5	37,31
BN750600	6,0	66 x 12	0,6	39,99
BN750800	8,0	79 x 14	0,8	48,27
BN751000	10,0	89 x 16	1,0	57,75
BN751200	12,0	102 x 18	1,2	75,52
BN751400	14,0	115 x 21	1,4	106,61
BN751600	16,0	115 x 24	1,6	118,46



T*: Core Thickness

POINTING DRILLS

Used for the previous centering in drilling works. Guides the drill when it starts to plunge.
Increases the drilling speed attack.

DIN
1412A
D₂
TOL
h6

Ref. BL75

HSSCo
5%
TiAlN


BL75		
HSSCo 5%	TiAlN	90°
D1 mm	L1 x L2 mm	€
3	80 x 10	44,11
4	100 x 12	48,51
5	120 x 15	52,93
6	140 x 20	57,34
8	140 x 25	63,95
10	170 x 25	79,39
12	170 x 30	97,04
16	200 x 35	130,12
20	200 x 40	165,40

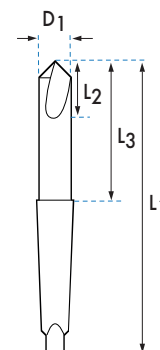


MORSE TAPER SHANK POINTING DRILLS

Ref. BP11

HSSCo
5%
120
Kg/mm²


BP11					
D1 mm	L1 mm	L2 mm	L3 mm	MT	90° €
10	130	25	64	1	132,33
12	130	30	64	1	143,35
16	148	35	68	2	176,43
20	148	40	68	2	220,54
25	171	45	72	3	297,73

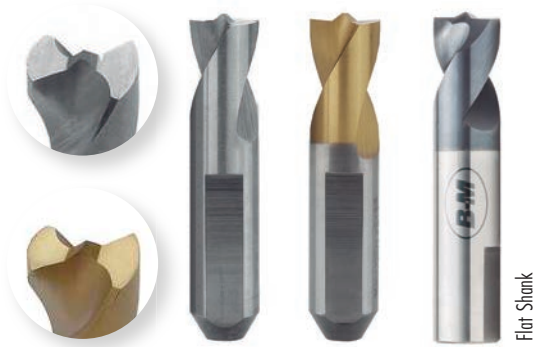


HSSCo & SOLID CARBIDE DRILLS TO REMOVE WELDING SPOTS

SHORT DRILLS FOR PNEUMATIC DRILLING MACHINES

* SOLID CARBIDE SPECIAL DRILL BC70MD COATED WITH TiAlN

- Special drill for boron weldings.
- Use with electric drilling machines.
- 1200 RPM.
- Important pushing strength.
- Use always "CUT-MAGIC" lubricant.



Flat Shank

D1 mm	D2 mm	L1 x L2 mm	BC70	BC71	BC70MD*
			HSSCo 5%	HSSCo 5% TiN	SOLID CARBIDE TiAlN
			€	€	€
6,0	8,0	45 x 18	25,56	34,66	
6,5	6,5	40 x 18	26,65	39,69	65,02
8,0	8,0	38 x 18	20,95	34,66	
8,0	8,0	45 x 18	23,37	39,69	79,33
9,0	8,0	45 x 18	25,24	41,24	
10,0	8,0	45 x 18	27,66	46,79	

TO BE USED WITH STANDARD DRILLING MACHINES



Ø mm	L1 x L2 mm	BC60	BC69
		HSSCo 5%	HSSCo 5% TiN
		€	€
6,0	66 x 26	12,64	22,17
7,0	74 x 34	18,13	28,86
8,0	79 x 36	16,76	31,27
10,0	89 x 44	20,69	33,03

CUTTING SET: ARBOR, HOLE SAW & PILOT DRILL



EBC70-1
24,08 €

HOLE SAW: 9,5 mm



EBC70-2
17,41 €

PILOT DRILL



EBC70-3
1,06 €



EBC70

Composition:

- 1 Cutting set Ref. EBC70-1
- 5x9,5 mm Hole saws Ref. EBC70-2
- 2 Pilot drills Ref. EBC70-3
- 1 Drill bit Ref. BC60 Ø 8 mm

109,18 €

DRILL MILLS

FOR METAL, WOOD AND PLASTIC WORKING



* For bodywork

Ø mm	L1 x L2 mm	BC80	BC81
		HSS	TiN
		€	€
6,0	90 x 60	17,63	27,68
8,0	90 x 60	22,68	35,43

SOLID CARBIDE DRILL MILLS

Ref. BC91

**SOLID
CARBIDE**

CHARACTERISTICS:
Can be used successfully to complete different operations:
Drilling, Pointing and chamfering.



Ti

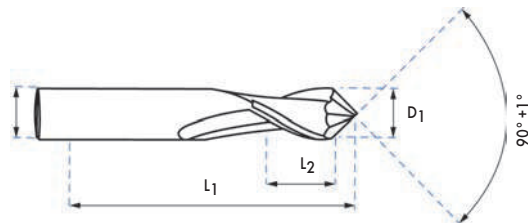
INC

Ni

INOX

PVC

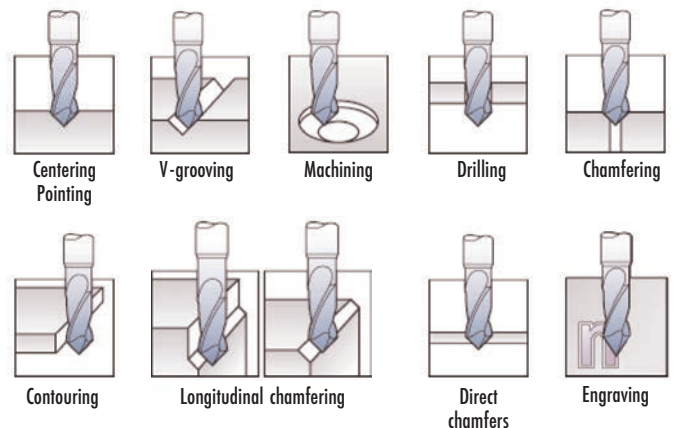
**D2
TOL h6**



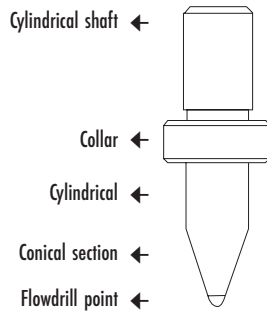
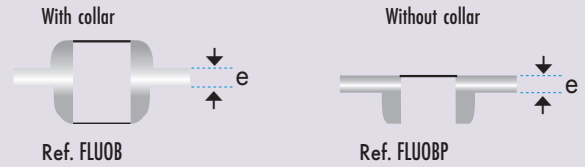
**D1
TOL h9**



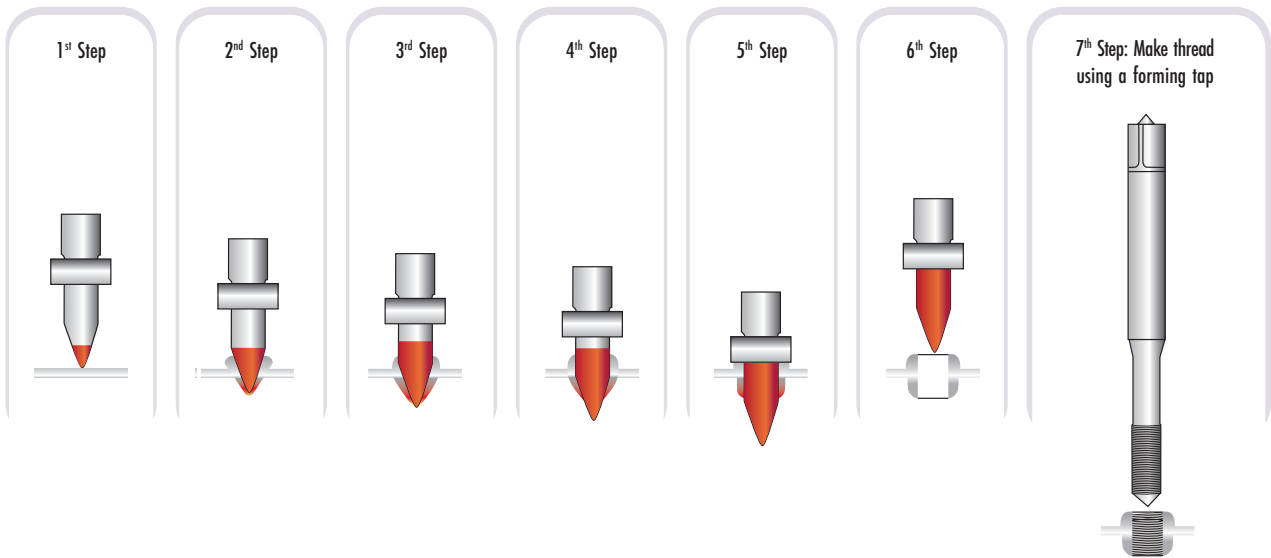
D1 mm	D2 mm	L1 x L2 mm	BC91 €
3,0	3,0	50 x 6	60,14
4,0	4,0	50 x 8	68,37
5,0	5,0	50 x 10	78,14
6,0	6,0	60 x 12	84,60
8,0	8,0	70 x 16	117,50
10,0	10,0	70 x 18	163,45
12,0	12,0	70 x 20	163,45
14,0	14,0	88 x 30	194,98
16,0	16,0	80 x 26	233,47
20,0	20,0	100 x 32	412,46



FLOWDRILL FOR THREADING METAL SHEET



	e max. mm	D1 mm	D2 mm	R.P.M.	FLUOB		FLUOBP	
						€		€
M3x0,50	1,7	6	2,7	3000	FLUOBM03	134,49	FLUOBPM03	188,29
M4x0,70	1,7	6	3,7	2600	FLUOBM04	139,38	FLUOBPM04	195,14
M5x0,80	2,0	8	4,5	2500	FLUOBM05	145,57	FLUOBPM05	211,51
M6x1,00	2,0	8	5,3	2400	FLUOBM06	155,17	FLUOBPM06	225,43
M8x1,25	2,4	8	7,3	2200	FLUOBM08	191,44	FLUOBPM08	278,15
M10x1,50	2,6	10	9,2	2000	FLUOBM10	216,95	FLUOBPM10	315,21
M12x1,75	3,0	12	10,9	1800	FLUOBM12	232,62	FLUOBPM12	319,64
M16x2,00	3,4	16	14,8	1200	FLUOBM16	320,85	FLUOBPM16	409,81
M20x2,50	3,8	18	18,7	800	FLUOBM20	452,90	FLUOBPM20	577,71



FLOW-DRILLING LUBRICANT (250ml. & 750ml.)

		PACKAGING UNIT	PASTY €
ACPU00250	0,250 l.	1 Can	28,92
ACPU00750	0,750 l.	1 Can	43,76



HSS SUBLAND TWIST DRILLS STRAIGHT AND TAPER SHANK

Ref. BC26 **HSS** **DIN 8376** **180°**

ALLEN SCREW HEAD SEATS

BC26

	D2 mm	D1 mm	L1 x L2 mm	L3 mm	€
M3	3,4	6	93 x 57	9	60,06
M4	4,5	8	117 x 75	11	62,99
M5	5,5	10	133 x 87	13	74,86
M6	6,6	11	142 x 94	15	84,59
M8	9,0	15	169 x 114	19	103,93
M10	11,0	18	191 x 130	23	206,53

Ref. BC24 **HSS** **DIN 8374** **90°**

TAPER SEAT
for DIN 7991 screws

BC24

	D2 mm	D1 mm	L1 x L2 mm	L3 mm	€
M3	3,2	6,0	93 x 57	9	70,07
M4	4,3	8,0	117 x 75	11	73,49
M5	5,3	10,0	133 x 87	13	87,34
M6	6,4	11,5	142 x 94	15	99,78
M8	8,4	15,0	169 x 114	19	136,47
M10	10,5	19,0	198 x 135	23	210,72

Ref. BC28 **HSS** **DIN 8378** **90°**

TAPER SEAT
Prior to thread cutting

BC28

	D2 mm	D1 mm	L1 x L2 mm	L3 mm	€
M3	2,5	3,4	70 x 39	8,8	53,87
M4	3,3	4,5	80 x 47	11,8	57,96
M5	4,2	5,5	93 x 57	13,6	62,43
M6	5,0	6,6	101 x 63	16,5	71,04
M8	6,8	9,0	125 x 81	21,0	84,65
M10	8,5	11,0	142 x 94	25,5	98,74
M12	10,2	13,5	160 x 108	30,0	122,93

Ref. BC27 **HSS** **DIN 8377** **180°**

ALLEN SCREW HEAD SEATS

BC27

	D2 mm	D1 mm	L1 x L2 mm	L3 mm	MT	€
M6	6,6	11	175 x 94	15	1	150,50
M8	9,0	15	212 x 114	19	2	155,42
M10	11,0	18	228 x 130	23	2	175,23
M12	13,5	20	238 x 140	27	2	196,01
M14	15,5	24	281 x 160	31	3	277,95
M16	17,5	26	286 x 165	35	3	396,33
M18	20,0	30	296 x 175	39	3	443,18
M20	22,0	33	334 x 185	43	4	501,12

Ref. BC25 **HSS** **DIN 8375** **90°**

TAPER SEAT
for DIN 7991 screws

BC25

	D2 mm	D1 mm	L1 x L2 mm	L3 mm	MT	€
M5	5,5	11,0	175 x 94	13	1	150,35
M6	6,6	13,0	182 x 101	15	1	153,37
M8	9,0	17,2	228 x 130	19	2	182,79
M10	11,0	21,5	248 x 150	23	2	216,41

Ref. BC29 **HSS** **DIN 8379** **90°**

TAPER SEAT
Prior to thread cutting

BC29

	D2 mm	D1 mm	L1 x L2 mm	L3 mm	MT	€
M8	6,8	9,0	162 x 81	21,0	1	137,89
M10	8,5	11,0	175 x 94	25,5	1	150,25
M12	10,2	13,5	189 x 108	30,0	1	177,47
M14	12,0	15,5	218 x 120	34,5	2	189,38
M16	14,0	17,5	228 x 130	38,5	2	204,38
M18	15,5	20,0	238 x 140	43,5	2	228,59
M20	17,5	22,0	248 x 150	47,5	2	276,40

EXTRA SHORT SERIES SUBLAND TWIST DRILLS

Ref. BC36

HSSCo 5% **90°**

BC36

	D1 mm	D2 mm	D3 mm	L1 x L2 mm	L3 mm	€
M3	3,4	2,5	3,4	52 x 20	8	29,17
M4	4,5	3,3	4,5	58 x 24	11	30,55
M5	5,5	4,2	5,5	66 x 28	13	31,94
M6	6,6	5,0	6,6	70 x 31	16	34,71
M8	9,0	6,8	9,0	84 x 40	20	41,66
M10	11,0	8,5	11,0	95 x 47	24	54,85
M12	14,0	10,2	14,0	107 x 54	29	73,59
M14	16,0	12,0	16,0	115 x 56	32	187,46
M16	18,0	14,0	18,0	135 x 60	34	236,06

Ref. BCMD36

SOLID CARBIDE **90°** **TiAlN**

BCMD36

	D1 mm	D2 mm	D3 mm	L1 x L2 mm	L3 mm	€
M3	6,0	2,5	6,0	66 x 20	8,8	55,54
M4	6,0	3,3	6,0	66 x 24	11,4	64,80
M5	6,0	4,2	6,0	66 x 28	13,6	69,43
M6	8,0	5,0	8,0	79 x 31	16,5	81,01
M8	10,0	6,8	10,0	89 x 40	21,0	111,09
M10	12,0	8,5	12,0	102 x 47	25,5	150,43
M12	14,0	10,2	14,0	107 x 54	30,0	208,29

Ref. BC74

HSSCo 5% **180°**

BC74

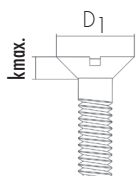
	D1 mm	D2 mm	D3 mm	L1 x L2 mm	L3 mm	€
M2	4,3	2,4	4,3	45 x 12	6	20,14
M3	6,0	3,4	6,0	45 x 18	9	20,48
M4	8,0	4,5	8,0	50 x 22	11	24,31
M5	10,0	5,5	10,0	55 x 26	13	27,08
M6	11,0	6,6	11,0	63 x 30	15	34,03
M8	15,0	9,0	12,5	100 x 34	19	63,88
M10	18,0	11,0	12,5	110 x 42	23	93,04
M12	20,0	14,0	12,5	110 x 34	28	122,19
M14	24,0	16,0	12,5	120 x 42	34	247,17

Ref. BC34

HSSCo 5% **90°**

BC34

	D1 mm	D2 mm	D3 mm	L1 x L2 mm	L3 mm	€
M2	4,6	2,2	4,6	45 x 12	6	20,14
M3	6,5	3,2	6,5	45 x 18	9	20,48
M4	8,6	4,3	8,6	50 x 26	11	24,31
M5	10,4	5,3	10,4	55 x 30	13	27,08
M6	12,4	6,4	12,4	63 x 34	15	34,03
M8	16,4	8,4	12,5	100 x 42	19	63,88
M10	20,4	10,5	12,5	110 x 34	23	93,04
M12	25,0	13,0	12,5	120 x 42	28	247,17



DIN 7991

	M2	M2.5	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20
Kmax.	1,2	1,5	1,7	2,3	2,8	3,3	4,4	5,5	6,5	7	7,5	8	8,5
D1	4	5	6	8	10	12	16	20	24	27	30	33	36

MORSE TAPER SHANK DRILLS DIN 345

DIN
345

For drilling holes over 25mm we recommend to drill a previous hole of about a third part of the final diameter. For example: if you are going to use a 30mm drill, you should drill a previous hole of 10mm.

Ø mm	L1 x L2 mm	MT	BC11	BC22	BC32	BC21	BC13
			€	€	€	€	€
10,75	175 x 94	1	38,56				
11,00	175 x 94	1	33,31	100,87		49,03	91,56
11,25	175 x 94	1	40,25				
11,50	175 x 94	1	35,02	105,04		50,31	91,56
11,75	175 x 94	1	40,26				
12,00	182 x 101	1	35,20	108,34		37,20	95,59
12,25	182 x 101	1	44,83				
12,50	182 x 101	1	37,67	113,41		51,90	95,79
12,75	182 x 101	1	44,84				
13,00	182 x 101	1	39,28	110,98	84,18	53,00	109,03
13,25	189 x 101	1	49,63				
13,50	189 x 101	1	41,45	145,37	101,73	54,69	108,73
13,75	189 x 101	1	49,63				
14,00	189 x 108	1	41,48	142,70	96,71	43,92	118,47
14,25	212 x 114	2	53,75				
14,50	212 x 114	2	46,69	157,91	118,68	73,36	118,45
14,75	212 x 114	2	53,74				
15,00	212 x 114	2	46,69	145,54	112,81	73,36	134,04
15,25	218 x 120	2	55,28				
15,50	218 x 120	2	48,06	160,92	116,43	75,51	142,74
15,75	218 x 120	2	55,28	198,47	145,52		
16,00	218 x 120	2	48,33	153,13	116,43	49,81	142,67
16,25	223 x 125	2	62,50				
16,50	223 x 125	2	54,62	162,59	123,56	77,04	143,12
16,75	223 x 125	2	62,50				
17,00	223 x 125	2	54,61	160,15	123,56	76,64	151,62
17,25	228 x 130	2	69,21				
17,50	228 x 130	2	60,40	169,81	130,71	82,57	151,43
17,75	228 x 130	2	69,21	231,57	174,62		
18,00	228 x 130	2	58,00	166,58	139,70	56,85	163,89
18,25	233 x 135	2	76,09				
18,50	233 x 135	2	66,48	182,80	145,08	84,59	191,55
18,75	233 x 135	2	76,59				
19,00	233 x 135	2	66,70	178,79	145,08	71,20	191,27
19,25	238 x 140	2	82,85				
19,50	238 x 140	2	72,13	206,60	152,22	90,64	214,81
19,75	238 x 140	2	83,42				
20,00	238 x 140	2	72,16	199,70	152,22	74,88	215,33
20,25	243 x 145	2	86,30				
20,50	243 x 145	2	74,79	230,01	177,30	92,01	218,80
20,75	243 x 145	2	86,30				
21,00	243 x 145	2	74,79	232,60	177,30	91,59	218,80
21,25	248 x 150	2	95,23				
21,50	248 x 150	2	82,48	262,04	193,42	96,90	238,57
21,75	248 x 150	2	95,23	338,84	241,78		
22,00	248 x 150	2	82,64	236,32	193,42	87,21	238,57
22,00*	265 x 150	3	112,33				
22,25	248 x 150	2	104,23				
22,50	253 x 155	2	90,43	293,08	204,16	105,51	238,94
22,75	253 x 155	2	104,23				
23,00	253 x 155	2	90,22	275,31	222,06	104,75	259,15
23,25	276 x 155	3	114,95				
23,50	276 x 155	3	100,12	292,50	267,72	126,22	258,98
23,75	281 x 160	3	115,09				
24,00	281 x 160	3	99,91	296,27	247,16	108,06	284,87

* Morse taper

MORSE TAPER SHANK DRILLS DIN 345

DIN
345



For drilling holes over 25mm we recommend to drill a previous hole of about a third part of the final diameter. For example: if you are going to use a 30mm drill, you should drill a previous hole of 10mm.

			BC11	BC22	BC32	BC21	BC13
Ø mm	L1 x L2 mm	MT	€	€	€	€	€
31,00	301x180	3	180,69	436,05		201,87	
31,25	301x180	3	219,87				
31,50	301x180	3	190,01	669,82			
31,75	306x185	3	219,87		586,52		
32,00	334x185	4	190,33	504,44	469,20	211,22	543,25*
32,00	334x185	3	354,43				
32,25	334x185	4	256,62				
32,50	334x185	4	218,63				
32,75	334x185	4	256,62				
33,00	334x185	4	217,33	576,71		229,89	669,50*
33,25	334x185	4	268,06				
33,50	334x185	4	237,09				
33,75	339x190	4	269,52				
34,00	339x190	4	236,37	649,80		326,68	670,63*
34,25	339x190	4	294,54				
34,50	339x190	4	258,17				
34,75	339x190	4	294,54	706,47			
35,00	339x190	4	259,45	682,80	642,87	360,20	
35,25	339x190	4	315,67				
35,50	339x190	4	276,96				
35,75	344x195	4	324,14				
36,00	344x195	4	277,64	733,58		373,86	1.077,03*
36,25	344x195	4	340,68				
36,50	344x195	4	293,64				
36,75	344x195	4	340,63				
37,00	344x195	4	293,25	685,65		384,76	1.163,28*
37,25	344x195	4	363,07				
37,50	344x195	4	307,28				
37,75	344x195	4	363,07				
38,00	349x200	4	307,99	791,28		395,76	
38,25	349x200	4	383,69				
38,50	349x200	4	327,74				
38,75	349x200	4	383,69				
39,00	349x200	4	328,01	809,69		410,57	1.286,35*
39,25	349x200	4	385,93				
39,50	349x200	4	347,39				
39,75	349x200	4	385,93				
40,00	349x200	4	346,93	848,49		423,91	1.326,96*
40,50	354x205	4	363,68				
41,00	354x205	4	364,13	891,93			
41,50	354x205	4	387,05				
42,00	354x205	4	386,25	933,92			
42,50	354x205	4	405,93				
43,00	359x210	4	405,94	979,26			
43,50	359x210	4	425,01				
44,00	359x210	4	425,27	1.016,83			
44,50	359x210	4	444,77				
45,00	359x210	4	445,11	1.063,38			
45,50	364x215	4	462,49				
46,00	364x215	4	460,55				
46,50	364x215	4	481,37				
47,00	364x215	4	481,14	1.148,98			
47,50	364x215	4	497,53				
48,00	369x220	4	497,18	1.197,14			
48,50	369x220	4	517,27				

	BC11	BC22	BC32	BC21	BC13
MATERIAL	HSS	HSSCo 5%	HSSCo 5%	HSS	CARBIDE TIPPED
SHARPENING					
POINT ANGLE	118°	135°	135°	118°	118°
HELIX ANGLE	30° "N"	30° "N"	38° "N"	30° "N"	30° "N"
COATING	OX	OX	OX	TiN	BRIGHT
APPLICATION	70 Kg/mm ²	120 Kg/mm ²	INOX	PRODUCTION	CAST IRON

* Morse taper

* Till end of stock

MORSE TAPER SHANK DRILLS DIN 345

Twist drills for Metal

Grey

Ref. BC11

**DIN
345**
HSS

OX

**70
Kg/mm²**


BC11			
Ø mm	L1 x L2 mm	MT*	€
49,00	369x220	4	515,10
49,50	369x220	4	531,30
50,00	369x220	4	537,00
50,50	369x220	4	768,94
51,00	412x225	5	629,71
51,50	412x225	5	843,99
52,00	412x225	5	672,99
52,50	412x225	5	864,54
53,00	412x225	5	720,76
53,50	412x225	5	904,37
54,00	417x230	5	793,16
54,50	417x230	5	895,31
55,00	417x230	5	785,19
56,00	417x230	5	883,49
57,00	422x235	5	938,58
58,00	422x235	5	946,60
59,00	422x235	5	975,03
60,00	422x235	5	922,98
61,00	427x240	5	1.082,60
62,00	427x240	5	1.127,57
63,00	427x240	5	1.192,45
64,00	432x245	5	1.258,12
65,00	432x245	5	1.204,65
66,00	432x245	5	1.358,19
67,00	432x245	5	1.401,98
68,00	437x250	5	1.438,35
69,00	437x250	5	1.483,07
70,00	437x250	5	1.339,22
71,00	437x250	5	1.546,17
72,00	442x255	5	1.578,20
73,00	442x255	5	1.619,51
74,00	442x255	5	1.666,90
75,00	442x255	5	1.570,17
76,00	447x260	5	1.848,87
77,00	514x260	6	1.984,07
78,00	514x260	6	2.022,84
79,00	514x260	6	2.063,60
80,00	514x260	6	2.597,40
81,00	519x265	6	2.860,65
82,00	519x265	6	2.932,13
83,00	519x265	6	2.988,37
84,00	519x265	6	3.051,81
85,00	519x265	6	3.127,20
86,00	524x270	6	3.195,47
87,00	524x270	6	3.263,34
88,00	524x270	6	3.347,20
89,00	524x270	6	3.411,99
90,00	524x270	6	3.509,64
91,00	529x275	6	3.701,65
92,00	529x275	6	3.722,99
93,00	529x275	6	3.855,75
94,00	529x275	6	3.934,11
95,00	529x275	6	4.014,95
96,00	534x280	6	4.147,20
97,00	534x280	6	4.181,99
98,00	534x280	6	4.275,28
99,00	534x280	6	4.352,59
100,00	534x280	6	4.435,63



Ref. EXPBC11MC

DIN 345 MORSE TAPER SHANK DRILLS DISPLAY, 15 PCS

Morse taper shank n° 1	14	15	16	17	18	DIN 345
n° 2	19	20	21	22	23	
n° 3	24	25	26	28	30	

Dimensions:

Width 280 x depth 212/50 x height 155 mm.

1.261,51 €

ADDITIONAL FEES FOR REDUCING THE MORSE TAPER SHANKS


n° 2-1

n° 2-0

n° 3-2

n° 3-1

n° 4-3

n° 4-2

€ NET

53,30

79,95

* Morse taper

370mm maximum length to reduce taper shank.

M42 (8%) COBALT MORSE TAPER SHANK DRILLS FOR HARDENED AND ARMORED MATERIALS

Ref. BC73

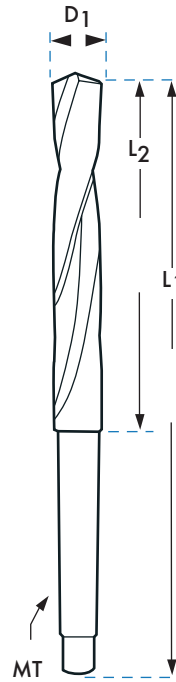
HSSCo
8%



OX

HARDOX
450

BC73					
	D ₁ mm	L ₁ mm	L ₂ mm	MT*	€
BC731000	10,00	175	76	2	57,47
BC731020	10,20	175	76	2	57,47
BC731100	11,00	175	76	2	57,47
BC731200	12,00	179	81	2	62,94
BC731250	12,50	179	81	2	62,94
BC731300	13,00	179	81	2	62,94
BC731400	14,00	184	86	2	67,00
BC731450	14,50	187	89	2	67,88
BC731500	15,00	187	89	2	68,31
BC731550	15,50	187	89	2	77,60
BC731600	16,00	187	89	2	81,29
BC731650	16,50	190	92	2	85,04
BC731700	17,00	190	92	2	86,65
BC731800	18,00	190	92	2	87,95
BC731850	18,50	213	95	3	98,03
BC731900	19,00	213	95	3	99,94
BC732000	20,00	213	95	3	106,24
BC732100	21,00	219	102	3	115,71
BC732200	22,00	222	105	3	133,02
BC732400	24,00	222	105	3	143,31
BC732500	25,00	225	108	3	169,81
BC732600	26,00	270	124	4	201,21
BC732700	27,00	270	124	4	216,40
BC732800	28,00	270	124	4	224,69
BC733000	30,00	270	124	4	249,93
BC733200	32,00	280	133	4	290,88
BC733500	35,00	292	136	4	363,46
BC733600	36,00	292	146	4	382,27
BC734000	40,00	298	152	4	467,22
BC734500	45,00	298	152	4	635,42
BC735000	50,00	356	152	5	746,47
BC735500	55,00	360	156	5	886,85
BC736000	60,00	360	156	5	1.082,34



* Morse taper

Recommended for HARDOX 450



For drilling holes over 25mm we recommend to drill a previous hole of about a third part of the final diameter. For example: if you are going to use a 30mm drill, you should drill a previous hole of 10mm.

Ref. BC22...FT

DIN
345

HSSCo
5%

TiN



DIN 1412D

130°



30°
"N"



120
Kg/mm²

HARDOX
450

BC22...FT					
	D ₁ mm	L ₁ mm	L ₂ mm	MT*	€
BC221600FT	16,00	218	120	2	98,53
BC221800FT	18,00	228	130	2	107,18
BC222000FT	20,00	238	140	2	128,50
BC222200FT	22,00	248	150	2	152,07
BC222400FT	24,00	281	160	3	190,64
BC222500FT	25,00	281	160	3	199,72
BC222600FT	26,00	286	165	3	236,09
BC222800FT	28,00	291	170	3	290,29
BC223000FT	30,00	296	175	3	286,86
BC223200FT	32,00	334	185	4	324,59
BC223400FT	34,00	339	190	4	418,12
BC223600FT	36,00	344	195	4	472,03

* Morse taper

This drill has been used historically to drill railway rails.



- The best solution to drill large diameter holes in hardened metals.
- Special sharpening for very hard materials.

Recommended for HARDOX 450



MORSE TAPER SHANK DRILLS, LONG SERIES DIN 341
**DIN
341**

Ref. BC12



Ref. BC56



			BC12	BC56				BC12	BC56				BC12	BC56
MATERIAL			HSS	HSSCo 5%	Ø mm	L1 x L2	MT*	€	€	Ø mm	L1 x L2	MT*	€	€
SHARPENING														
POINT ANGLE														
	118°	135°												
HELIX ANGLE														
	30° "N"	38° "S"												
COATING			OX	OX										
APPLICATION			70 Kg/mm ²	120 Kg/mm ²										
Ø mm	L1 x L2	MT*	€	€										
5,00	155x74	1	24,92		14,00	223x142	1	47,23	118,76	27,00	343x222	3	158,01	382,70
5,50	161x80	1	33,42		14,25	245x147	2	79,31		27,50	343x222	3	203,62	
6,00	161x80	1	26,50		14,50	245x147	2	59,43		28,00	343x222	3	180,35	393,95
6,50	167x86	1	27,07		14,75	245x147	2	79,31		28,50	351x230	3	241,66	
7,00	174x93	1	28,74		15,00	245x147	2	59,43	137,90	29,00	351x230	3	197,49	427,75
7,50	174x93	1	30,23		15,25	251x153	2	78,53		29,50	351x230	3	241,87	
8,00	181x100	1	30,75		15,50	251x153	2	58,32	143,51	30,00	351x230	3	202,54	450,25
8,50	181x100	1	30,75		15,75	251x153	2	81,43		30,50	360x239	3	276,56	
9,00	188x107	1	33,92		16,00	251x153	2	60,48	143,51	31,00	360x239	3	255,79	506,53
9,50	188x107	1	37,11		16,25	257x159	2	88,57		31,50	360x239	3	296,67	
10,00	197x116	1	38,21	80,19	16,50	257x159	2	65,75	151,98	32,00	397x248	4	256,81	562,82
10,25	197x116	1	45,73		16,75	257x159	2	88,57		32,50	397x248	4	325,11	
10,50	197x116	1	39,75		17,00	257x159	2	65,75	151,98	33,00	397x248	4	273,65	
10,75	197x116	1	58,27		17,25	263x165	2	86,68		33,50	397x248	4	320,99	
11,00	206x125	1	38,21	87,80	17,50	263x165	2	69,87	160,40	34,00	406x257	4	333,09	
11,25	206x125	1	58,27		17,75	263x165	2	98,56		34,50	406x257	4	352,69	
11,50	206x125	1	38,21		18,00	263x165	2	73,17	171,67	35,00	406x257	4	335,10	
11,75	206x125	1	52,60		18,25	269x171	2	98,95		35,50	406x257	4	352,69	
12,00	215x134	1	40,86	98,75	18,50	269x171	2	79,42	178,68	36,00	416x267	4	385,57	
12,25	215x134	1	52,60		18,75	269x171	2	102,13		36,50	416x267	4	487,95	
12,50	215x134	1	41,92		19,00	269x171	2	77,21	178,68	37,00	416x267	4	415,30	
12,75	215x134	1	56,43		19,25	275x177	2	107,17		37,50	416x267	4	483,54	
13,00	215x134	1	41,92	103,29	19,50	275x177	2	86,79	186,29	38,00	426x277	4	434,78	
13,25	223x142	1	58,83		19,75	275x177	2	108,50		38,50	426x277	4	551,17	
13,50	223x142	1	45,69		20,00	275x177	2	82,79	186,29	39,00	426x277	4	451,72	
13,75	223x142	1	63,56		20,50	282x184	2	100,40	216,69	39,50	426x277	4	551,17	
					21,00	282x184	2	94,98	216,69	40,00	426x277	4	488,55	
					21,50	289x191	2	114,59	236,37	41,00	436x287	4	624,69	
					22,00	289x191	2	108,12	236,37	42,00	436x287	4	651,58	
					22,50	296x198	2	118,16	250,44	43,00	447x298	4	693,45	
					23,00	296x198	2	108,18	270,16	44,00	447x298	4	704,01	
					23,50	319x198	3	137,57	278,57	45,00	447x298	4	741,99	
					24,00	327x206	3	138,86	303,92	46,00	459x310	4	780,73	
					24,50	327x206	3	147,50	315,18	47,00	459x310	4	821,69	
					25,00	327x206	3	138,84	295,49	48,00	470x321	4	858,88	
					25,50	335x214	3	167,44		49,00	470x321	4	886,94	
					26,00	335x214	3	146,38	348,95	50,00	470x321	4	918,27	
					26,50	335x214	3	172,72		55,00	505x310	5	1.200,72	

* Morse taper

MORSE TAPER SHANK DRILLS, EXTRA LONG SERIES, DIN 1870 I/II

**DIN
1870
I/II**

Ref. BC14



Ref. BC41



			BC14	BC41										
MATERIAL			HSS	HSSCo 5%	Ø mm	L1 x L2	MT*	€	€	Ø mm	L1 x L2	MT*	€	€
SHARPENING														
POINT ANGLE														
HELIX ANGLE														
COATING			OX	BRIGHT										
APPLICATION														
Ø mm	L1 x L2	MT*	€	€										
8,00	265x165	1	85,77		20,00	385x260	2	260,18	497,95	33,00	635x410	4	854,06	
8,00	330x210	1	106,91		20,00	490x325	2	316,24	648,67	34,00	530x340	4	683,98	
8,50	265x165	1	94,19		20,50	385x260	2	294,65	662,76	34,00	665x430	4	886,22	
8,50	330x210	1	109,30		20,50	490x325	2	353,83	763,13	35,00	530x340	4	704,49	
9,00	275x175	1	96,95		21,00	385x260	2	294,65	608,69	35,00	665x430	4	963,04	
9,00	345x220	1	123,23		21,00	490x325	2	353,83	756,18	36,00	530x340	4	760,03	
9,50	275x175	1	103,75		21,50	405x270	2	314,23	716,92	36,00	665x430	4	1.011,25	
9,50	345x220	1	124,57		21,50	515x345	2	379,72	895,50	37,00	530x340	4	779,25	
10,00	285x185	1	106,59		22,00	405x270	2	314,23	650,08	37,00	665x430	4	1.123,60	
10,00	360x235	1	131,47		22,00	515x345	2	379,72	872,96	38,00	555x360	4	850,03	
10,50	285x185	1	113,21		22,50	405x270	2	358,08	763,13	38,00	695x460	4	1.189,83	
10,50	360x235	1	135,50		22,50	515x345	2	428,66	947,78	39,00	555x360	4	885,91	
11,00	300x195	1	118,18		23,00	405x270	2	358,08	744,26	39,00	695x460	4	1.246,59	
11,00	375x250	1	140,54		23,00	515x345	2	428,66	895,50	40,00	555x360	4	933,91	
11,50	300x195	1	129,42		23,50	425x270	3	393,44	932,67	40,00	695x460	4	1.189,07	
11,50	375x250	1	161,64		23,50	535x345	3	477,06	1.137,56	41,00	555x360	4	1.050,81	
12,00	310x205	1	132,46	294,64	24,00	440x290	3	393,44	851,63	41,00	695x460	4	1.351,51	
12,00	395x260	1	165,05		24,00	555x365	3	477,06	1.042,12	42,00	555x360	4	1.085,43	
12,50	310x205	1	140,96		24,50	440x290	3	407,73	1.006,25	42,00	695x460	4	1.443,01	
12,50	395x260	1	184,20		24,50	555x365	3	502,78	1.196,04	43,00	585x385	4	1.131,92	
13,00	310x205	1	140,96	315,23	25,00	440x290	3	407,73	897,48	43,00	735x490	4	1.472,38	
13,00	395x260	1	184,20		25,00	555x365	3	502,78	1.069,69	44,00	585x385	4	1.185,37	
13,50	325x220	1	154,32		25,50	440x290	3	421,43	1.070,74	44,00	735x490	4	1.524,13	
13,50	410x275	1	189,18		25,50	555x365	3	555,40	1.394,36	45,00	585x385	4	1.221,00	
14,00	325x220	1	154,37	300,89	26,00	440x290	3	421,43	970,35	45,00	735x490	4	1.595,12	
14,00	410x275	1	189,18	421,56	26,00	555x365	3	555,40	1.254,69	46,00	585x385	4	1.258,32	
14,50	340x220	2	169,05	329,15	26,50	440x290	3	431,56	1.087,28	46,00	735x490	4	1.666,43	
14,50	425x275	2	206,03	462,22	26,50	555x365	3	573,04	1.497,06	47,00	585x385	4	1.363,16	
15,00	340x220	2	169,05	316,20	27,00	460x305	3	431,56	1.008,55	47,00	735x490	4	1.748,23	
15,00	425x275	2	206,03	448,94	27,00	580x385	3	573,04	1.328,08	48,00	605x405	4	1.363,75	
15,50	355x230	2	189,51	367,73	27,50	460x305	3	460,37	1.182,91	48,00	765x510	4	1.849,92	
15,50	445x295	2	227,24	495,47	27,50	580x385	3	619,92	1.585,25	49,00	605x405	4	1.405,27	
16,00	355x230	2	189,51	349,23	28,00	460x305	3	460,37	1.068,45	49,00	765x510	4	1.920,34	
16,00	445x295	2	227,24	482,88	28,00	580x385	3	619,92	1.443,25	50,00	605x405	4	1.446,63	
16,50	355x230	2	204,03	367,73	28,50	460x305	3	477,06	1.255,04	50,00	765x510	4	1.970,54	
16,50	445x295	2	245,54	501,15	28,50	580x385	3	684,01	1.650,99					

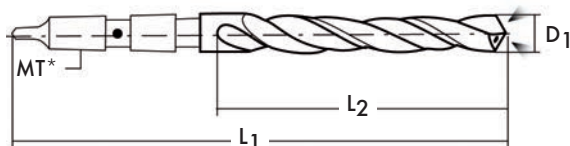
* Morse taper

MORSE TAPER SHANK HSS DRILLS WITH INTERNAL COOLING DIN 341

Ref. BC87

 $\leq 10xD$
**DIN
341**
HSS

OX

**SPECIAL 170° POINT FOR
PERFECT CENTERING**


BC87					
	D ₁ mm	L ₁ mm	L ₂ mm	MT*	€
BC871000	10,0	214	116	2	492,72
BC871050	10,5	214	116	2	499,50
BC871100	11,0	223	125	2	499,50
BC871150	11,5	223	125	2	510,42
BC871200	12,0	232	134	2	510,42
BC871250	12,5	232	134	2	510,42
BC871300	13,0	232	134	2	510,42
BC871350	13,5	240	142	2	510,42
BC871400	14,0	240	142	2	510,42
BC871450	14,5	245	147	2	527,82
BC871500	15,0	245	147	2	527,82
BC871550	15,5	251	153	2	545,55
BC871600	16,0	251	153	2	545,55
BC871650	16,5	257	159	2	545,55
BC871700	17,0	257	159	2	545,55
BC871750	17,5	263	165	2	580,31
BC871800	18,0	263	165	2	580,31
BC871850	18,5	292	171	3	598,16
BC871900	19,0	292	171	3	598,16
BC871950	19,5	298	177	3	633,26
BC872000	20,0	298	177	3	633,26
BC872050	20,5	305	184	3	668,68
BC872100	21,0	305	184	3	668,68
BC872150	21,5	312	191	3	710,54
BC872200	22,0	312	191	3	710,54
BC872250	22,5	319	198	3	703,75
BC872300	23,0	319	198	3	703,75

BC87					
	D ₁ mm	L ₁ mm	L ₂ mm	MT*	€
BC872350	23,5	319	198	3	703,75
BC872400	24,0	327	206	3	703,75
BC872450	24,5	327	206	3	718,31
BC872500	25,0	327	206	3	718,31
BC872550	25,5	335	214	3	791,97
BC872600	26,0	335	214	3	791,97
BC872650	26,5	335	214	3	827,07
BC872700	27,0	371	222	4	827,07
BC872750	27,5	371	222	4	907,72
BC872800	28,0	371	222	4	907,72
BC872850	28,5	379	230	4	968,06
BC872900	29,0	379	230	4	968,06
BC872950	29,5	379	230	4	1.034,71
BC873000	30,0	379	230	4	1.034,71
BC873050	30,5	379	230	4	1.231,72
BC873100	31,0	388	239	4	1.231,72
BC873150	31,5	388	239	4	1.231,72
BC873200	32,0	397	248	4	1.231,72
BC873300	33,0	397	248	4	1.439,24
BC873400	34,0	406	257	4	1.439,24
BC873500	35,0	406	257	4	1.618,57
BC873600	36,0	406	257	4	1.618,57
BC873700	37,0	406	257	4	1.829,73
BC873800	38,0	426	277	4	1.829,73
BC873900	39,0	426	277	4	2.041,07
BC874000	40,0	426	277	4	2.041,07

* Morse taper

TWIST DRILLS IN METAL AND PLASTIC BOXES

Twist drills for Metal
Pink Grey

DIN 338 HSS

(Ref. BC2 drills)

REFERENCE	D0010	D0011	P6010	P6011
QUANTITY	19	25	19	25
QUALITY	HSS	HSS	HSS	HSS
CONTENT	Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm	Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm
PRICE €	62,57	130,18	62,57	130,18

Plus

(Ref. BC2 drills)

REFERENCE	DP010	DP011	PP6010	PP6011
QUANTITY	19	25	19	25
QUALITY	Plus	Plus	Plus	Plus
CONTENT	Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm	Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm
PRICE €	70,74	146,35	70,74	146,35

HSSCo 5%

(Ref. BC5 drills)

REFERENCE	DC010	DC011	PC6010	PC6011
QUANTITY	19	25	19	25
QUALITY	HSSCo	HSSCo	HSSCo	HSSCo
CONTENT	Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm	Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm
PRICE €	104,56	245,22	104,56	245,22

HSS TiN

(Ref. BC18 drills)

REFERENCE	DT010	DT011	PT6010	PT6011
QUANTITY	19	25	19	25
QUALITY	HSS+TiN	HSS+TiN	HSS+TiN	HSS+TiN
CONTENT	Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm	Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm
PRICE €	92,36	202,03	92,36	202,03

TWIST DRILLS IN METAL BOXES (quarters and tenths)
**DIN
338**
HSS

(Ref. BC2 drills)



REFERENCE	AD001	AD002	D0014	D0015
QUANTITY	37	49	50	41
QUALITY	HSS	HSS	HSS	HSS
CONTENT	Ø 1-10 x 0,25 mm	Ø 1-13 x 0,25 mm	Ø 1-5,90 x 0,10 mm	Ø 6-10 x 0,10 mm
PRICE €	170,48	305,97	116,14	302,34

Plus

(Ref. BC02 drills)



ON REQUEST

ON REQUEST

REFERENCE	ADP01	ADP02		
QUANTITY	37	49	50	41
QUALITY	<i>Plus</i>	<i>Plus</i>	<i>Plus</i>	<i>Plus</i>
CONTENT	Ø 1-10 x 0,25 mm	Ø 1-13 x 0,25 mm	Ø 1-5,90 x 0,10 mm	Ø 6-10 x 0,10 mm
PRICE €	204,26	363,40		

**HSSCo
5%**

(Ref. BC5 drills)



REFERENCE	ADC01	ADC02	DC014	DC015
QUANTITY	37	49	50	41
QUALITY	HSSCo	HSSCo	HSSCo	HSSCo
CONTENT	Ø 1-10 x 0,25 mm	Ø 1-13 x 0,25 mm	Ø 1-5,90 x 0,10 mm	Ø 6-10 x 0,10 mm
PRICE €	246,53	551,76	181,66	447,88

HSS
TiN

(Ref. BC18 drills)



ON REQUEST

ON REQUEST

REFERENCE	ADT01	ADT02		
QUANTITY	37	49	50	41
QUALITY	HSS+TiN	HSS+TiN	HSS+TiN	HSS+TiN
CONTENT	Ø 1-10 x 0,25 mm	Ø 1-13 x 0,25 mm	Ø 1-5,90 x 0,10 mm	Ø 6-10 x 0,10 mm
PRICE €	210,50	430,03		

TWIST DRILLS IN METAL BOXES (prior holes and tenths)

Twist drills for Metal

Pink Grey

DIN 338 HSS



(Ref. BC2 drills)

REFERENCE	D0022	D0017	D0035	D0007
QUANTITY	81	23	29	10
QUALITY	HSS	HSS	HSS	HSS
CONTENT	Ø 2-10 x 0,10 mm	Ø 1-10 x 0,50 + Ø PH**	Ø 1-13 x 0,50 + Ø PH**	Ø 1-10 x 1 mm
PRICE €	533,38	119,27	197,15 *	50,92

* Till end of stock

Plus

ON REQUEST



(Ref. BC02 drills)

REFERENCE		DP017	DP035	DP007
QUANTITY	81	23	29	10
QUALITY	<i>Plus</i>	<i>Plus</i>	<i>Plus</i>	<i>Plus</i>
CONTENT	Ø 2-10 x 0,10 mm	Ø 1-10 x 0,50 + Ø PH**	Ø 1-13 x 0,50 + Ø PH**	Ø 1-10 x 1 mm
PRICE €		119,44	205,47*	66,82

* Till end of stock

HSSCo 5%



(Ref. BC5 drills)

REFERENCE	DC022	DC017	DC035	DC007
QUANTITY	81	23	29	10
QUALITY	HSSCo	HSSCo	HSSCo	HSSCo
CONTENT	Ø 2-10 x 0,10 mm	Ø 1-10 x 0,50 + Ø PH**	Ø 1-13 x 0,50 + Ø PH**	Ø 1-10 x 1 mm
PRICE €	728,78	167,39	320,69*	87,01

* Till end of stock

HSS TiN

ON REQUEST

ON REQUEST

ON REQUEST



(Ref. BC18 drills)

REFERENCE				DT007
QUANTITY	81	23	29	10
QUALITY	HSS+TiN	HSS+TiN	HSS+TiN	HSS+TiN
CONTENT	Ø 2-10 x 0,10 mm	Ø 1-10 x 0,50 + Ø PH**	Ø 1-13 x 0,50 + Ø PH**	Ø 1-10 x 1 mm
PRICE €				72,27

** Prior holes: From M3 to M12 (Ø3,30 - Ø4,20 - Ø6,80 - Ø10,20)

TWIST DRILLS IN METAL AND PLASTIC BOXES (additional compositions)
**DIN
338**
HSS
BRIGHT

**HSSCo
8%**


(Ref. BC82 drills)

(Ref. BC58 drills)

REFERENCE	D8210	D8211	REFERENCE	DC810	DC811
QUANTITY	19	25	QUANTITY	19	25
QUALITY	HSS	HSS	QUALITY	HSSCo 8%	HSSCo 8%
CONTENT	Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm	CONTENT	Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm
PRICE €	62,92	130,18	PRICE €	151,30	356,94

**DIN
338**
**HSSCo
5%**
**OX
GOLD**


(Ref. BC95 drills)

REFERENCE	DC9510	DC9511	PC9510	PC9511
QUANTITY	19	25	19	25
QUALITY	HSSCo 5%	HSSCo 5%	HSSCo	HSSCo
CONTENT	Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm	Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm
PRICE €	119,20	269,46	119,20	269,46

**DIN
338**
**HSSCo
5%**
GOLD

HSS
TiAlSiN


(Ref. BTX drills)

(Ref. TTX drills)

REFERENCE	PTX010	PTX011	REFERENCE	PTTX010	PTTX011
QUANTITY	19	25	QUANTITY	19	25
QUALITY	HSSCo 5%	HSSCo 5%	QUALITY	HSS + TiAlSiN	HSS + TiAlSiN
CONTENT	Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm	CONTENT	Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm
PRICE €	113,66	233,35	PRICE €	102,28	210,01

**DIN
338**
HSS
Plus
**HSSCo
5%**
TiN


(Ref. BC2 drills)

(Ref. BC02 drills)

(Ref. BC5 drills)

(Ref. BC18 drills)

REFERENCE	D0009	DP009	DC009	DT009
QUANTITY	13	13	13	13
QUALITY	HSS	<i>Plus</i>	HSSCo 5%	HSS+TiN
CONTENT	Ø 1,5 - 6,5x0,5 (+3,2 & 4,8) mm	Ø 1,5 - 6,5x0,5 (+3,2 & 4,8) mm	Ø 1,5 - 6,5x0,5 (+3,2 & 4,8) mm	Ø 1,5 - 6,5x0,5 (+3,2 & 4,8) mm
PRICE €	24,17	28,43	42,37	37,80

REFERENCE	D0008	DP008	DC008	DT008
QUANTITY	13	13	13	13
QUALITY	HSS	<i>Plus</i>	HSSCo 5%	HSS+TiN
CONTENT	Ø 1 - 7 x 0,50 mm	Ø 1 - 7 x 0,50 mm	Ø 1 - 7 x 0,50 mm	Ø 1 - 7 x 0,50 mm
PRICE €	25,16	28,47	44,39	41,33

TWIST DRILLS IN METAL BOXES (additional compositions)

DIN 338 TWIST DRILLS IN METAL BOXES, 12 PCS

DIN 338	HSS	<i>Plus</i>	HSSCo 5%	TiN	HSSCo 8%
	(Ref. BC2 drills)	(Ref. BC02 drills)	(Ref. BC5 drills)	(Ref. BC18 drills)	(Ref. BC58 drills)
REFERENCE	D0006	DP006	DC006	DT006	DC806
QUANTITY	12	12	12	12	12
QUALITY	HSS	<i>Plus</i>	HSSCo	HSS+TiN	HSSCo 8%
CONTENT	Ø 2-7x0,50 + 8 mm	Ø 2-7x0,50 + 8 mm	Ø 2-7x0,50 + 8 mm	Ø 2-7x0,50 + 8 mm	Ø 2-7x0,50 + 8 mm
PRICE €	46,17	47,78	66,54	60,48	87,69

LONG SERIES DIN 340 TWIST DRILLS IN METAL BOXES

DIN 340	HSS	HSSCo 5%	TiN
			
	(Ref. BC4 drills)	(Ref. BC47 drills)	(Ref. BC40 drills)
REFERENCE	D0004	DC004	DT004
QUANTITY	19	17	19
QUALITY	HSS	HSSCo	HSS+TiN
CONTENT	Ø 1-10 x 0,50 mm	Ø 2-10 x 0,50 mm	Ø 1-10 x 0,50 mm
PRICE €	108,12	230,18	166,55

EXTRA-SHORTS SERIES DIN 1897

DIN 1897	HSS	HSSCo 5%	HSSCo 5%	CARBIDE TIPPED	SOLID CARBIDE
	(Ref. BC3 drills)	(Ref. BC31 drills)	(Ref. BC33 drills)	(Ref. BC77 drills)	(Ref. BC43 drills)
REFERENCE	D3010	D3110	D3310	D7710	D4310
QUANTITY	19	19	19	17	17
QUALITY	HSS	HSSCo	HSSCo "S"	Carbide tipped	Solid carbide
CONTENT	Ø 1-10 x 0,50 mm	Ø 1-10 x 0,50 mm	Ø 1-10 x 0,50 mm	Ø 2-10 x 0,50 mm	Ø 2-10 x 0,50 mm
PRICE €	72,70	108,99	198,65	505,20	751,54



	(Ref. BC3 drills)	(Ref. BC31 drills)	(Ref. BC33 drills)	(Ref. BC77 drills)	(Ref. BC43 drills)
REFERENCE	D3011	D3111	D3311	D7711	D4311
QUANTITY	25	25	25	23	23
QUALITY	HSS	HSSCo	HSSCo "S"	Carbide tipped	Solid carbide
CONTENT	Ø 1-13 x 0,50 mm	Ø 1-13 x 0,50 mm	Ø 1-13 x 0,50 mm	Ø 2-13 x 0,50 mm	Ø 2-13 x 0,50 mm
PRICE €	139,40	229,01	359,51	845,79	1.597,93

TWIST DRILLS IN METAL BOXES (additional compositions)
HSS TWIST DRILLS FOR ALUMINIUM
**DIN
338**
HSS
Al


(Ref. BC16 drills)

REFERENCE	D16010	D16011
QUANTITY	19	25
QUALITY	HSS	HSS
CONTENT	Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm
PRICE €	99,07	217,35

HSSCo "S" TYPE FLUTED TWIST DRILLS
**DIN
338**
**HSSCo
5%**
INOX


(Ref. BC55 drills)

REFERENCE	D55010	D55011
QUANTITY	18	24
QUALITY	HSSCo	HSSCo
CONTENT	Ø 1,50-10 x 0,50 mm	Ø 1,50-13 x 0,50 mm
PRICE €	202,43	460,96

**CARBIDE TIPPED TWIST DRILLS FOR HARDENED
STEELS, CAST IRON, ETC**
**DIN
338**
**CARBIDE
TIPPED**
**CAST
IRON**


(Ref. BC7 drills)

REFERENCE	DPMD010	DPMD011
QUANTITY	17	23
QUALITY	Carbide tipped	Carbide tipped
CONTENT	Ø 2-10 x 0,50 mm	Ø 2-13 x 0,50 mm
PRICE €	407,21	700,72

SOLID CARBIDE TWIST DRILLS FOR HARD MATERIALS
**DIN
338**
**SOLID
CARBIDE**
**HIGH
PERFORMANCE**


(Ref. BC42 drills)

REFERENCE	D42010	D42011
QUANTITY	17	23
QUALITY	Solid carbide	Solid carbide
CONTENT	Ø 2-10 x 0,50 mm	Ø 2-13 x 0,50 mm
PRICE €	1.114,91	2.524,27

HSSCo 8% TWIST DRILLS IN METAL BOXES
**DIN
338**
**HSSCo
8%**


(Ref. BC58 drills)

REFERENCE	ADC81	ADC82	D89380
QUANTITY	37	49	19
QUALITY	HSSCo 8%	HSSCo 8%	HSSCo 8%
CONTENT	Ø 1-10 x 0,25 mm	Ø 1-13 x 0,25 mm	Ø 1-10 x 0,50 mm
PRICE €	348,65	818,11	144,03

REFERENCE	DC807	DC817	DC835
QUANTITY	10	23	29
QUALITY	HSSCo 8%	HSSCo 8%	HSSCo 8%
CONTENT	Ø 1-10 x 1 mm	Ø 1-10 x 0,50 mm + PH*	Ø 1-13 x 0,50 mm + PH*
PRICE €	110,20	224,51	441,47

* Prior holes: From M3 to M12 (Ø3,30 - Ø4,20 - Ø6,80 - Ø10,20)

TWIST DRILLS IN METAL BOXES (additional compositions)

TWIST DRILLS FOR STAINLESS STEEL

DIN 338 **HSSCo 5%** **TiAlN** **INOX Plus**

(Ref. BC50 drills)

REFERENCE	D50010	D50011
QUANTITY	19	25
QUALITY	HSSCo	HSSCo
CONTENT	Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm
PRICE €	352,60	606,35

LEFT HAND CUT TWIST DRILLS

DIN 338 **HSS** 



(Ref. BC15 drills)

REFERENCE	D0010I	D0011I	DR9312I
QUANTITY	19	25	10
QUALITY	HSS	HSS	HSS
CONTENT	Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm	Ø 1-10 x 1 mm
PRICE €	184,04	387,92	91,49

EMPTY BOXES

EMPTY BOXES

REFERENCE	D0010V	D0011V	AD001V
QUANTITY	19	25	37
CONTENT	Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm	Ø 1-10 x 0,25 mm
PRICE €	19,40	27,06	71,08



REFERENCE	AD002V	D0014V	D0015V	D0022V	D0006V
QUANTITY	49	50	41	81	12
CONTENT	Ø 1-13 x 0,25 mm	Ø 1-5,9 x 0,10 mm	Ø 6-10 x 0,10 mm	Ø 2-10 x 0,10 mm	Ø 2-7x0,50 + 8 mm
PRICE €	82,55	62,96	125,80	241,26	26,32

REFERENCE	D0007V	D0017V	D0035V	DE10V (Stub drills)	DE11V (Stub drills)
QUANTITY	10	23	29	19	25
CONTENT	Ø 1-10 x 1 mm	Ø 1-10 x 0,50 mm+ PH*	Ø 1-13 x 0,50 mm+ PH*	Ø 1-10 x 0,50 mm	Ø 1-13 x 0,50 mm
PRICE €	45,15	52,38	74,08	45,82	55,97

* Prior holes: From M3 to M12 (Ø3,30 - Ø4,20 - Ø6,80 - Ø10,20)

DIN 338 FULLY GROUND TWIST DRILLS IN PLASTIC CASES MICRO DRILLS FOR MODEL MAKING AND MARQUETRY

DIN 338



Ref. DR9120

REFERENCE	DR9120	DC9120	DR9102
QUANTITY	10	10	15
QUALITY	HSS	HSSCo5%	HSS
CONTENT	Ø 1-1,90 x 0,10 mm	Ø 1-1,90 x 0,10 mm	Ø 0,30 - 0,35 - 0,40 - 0,45 - 0,50 - 0,55 - 0,60 - 0,65 - 0,70 - 0,75 - 0,80 - 0,85 - 0,90 - 0,95 - 1
PRICE €	24,43	36,84	49,00

TWIST DRILLS IN PLASTIC BOXES
**DIN
338**
HSS


(Ref. BC2 drills)

REFERENCE	DR9314	DR9312	DR9313	DR9311
QUANTITY	6	10	13	19
QUALITY	HSS	HSS	HSS	HSS
CONTENT	Ø 2 - 3 - 4 - 5 - 6 - 8 mm	Ø 1-10 x 1 mm	Ø 2-8 x 0,50 mm	Ø 1-10 x 0,50 mm
PRICE €	18,21	38,77	38,47	67,73

Plus


(Ref. BC02 drills)

REFERENCE	DP9314	DP9312	DP9313	DP9311
QUANTITY	6	10	13	19
QUALITY	<i>Plus</i>	<i>Plus</i>	<i>Plus</i>	<i>Plus</i>
CONTENT	Ø 2 - 3 - 4 - 5 - 6 - 8 mm	Ø 1-10 x 1 mm	Ø 2-8 x 0,50 mm	Ø 1-10 x 0,50 mm
PRICE €	19,19	41,98	41,02	74,04

**HSSCo
5%**


(Ref. BC5 drills)

REFERENCE	DC9314	DC9312	DC9313	DC9311
QUANTITY	6	10	13	19
QUALITY	HSSCo	HSSCo	HSSCo	HSSCo
CONTENT	Ø 2 - 3 - 4 - 5 - 6 - 8 mm	Ø 1-10 x 1 mm	Ø 2-8 x 0,50 mm	Ø 1-10 x 0,50 mm
PRICE €	28,94	62,07	62,53	110,95

HSS
TiN


(Ref. BC18 drills)

REFERENCE	DT9314	DT9312	DT9313	DT9311
QUANTITY	6	10	13	19
QUALITY	HSS+TiN	HSS+TiN	HSS+TiN	HSS+TiN
CONTENT	Ø 2 - 3 - 4 - 5 - 6 - 8 mm	Ø 1-10 x 1 mm	Ø 2-8 x 0,50 mm	Ø 1-10 x 0,50 mm
PRICE €	19,94	42,47	42,14	74,18

TWIST DRILLS IN PLASTIC BOXES

Twist drills for Metal
Pink Grey

HSS BRIGHT



(Ref. BC82 drills)

REFERENCE	D829314	D829312	D829313	D829311
QUANTITY	6	10	13	19
QUALITY	HSS	HSS	HSS	HSS
CONTENT	Ø 2 - 3 - 4 - 5 - 6 - 8 mm	Ø 1-10 x 1 mm	Ø 2-8 x 0,50 mm	Ø 1-10 x 0,50 mm
PRICE €	17,24	36,69	36,40	64,10

HSSCo 8%



(Ref. BC58 drills)

REFERENCE	D89314	D89312	D89313	D89311
QUANTITY	6	10	13	19
QUALITY	HSSCo 8%	HSSCo 8%	HSSCo 8%	HSSCo 8%
CONTENT	Ø 2 - 3 - 4 - 5 - 6 - 8 mm	Ø 1-10 x 1 mm	Ø 2-8 x 0,50 mm	Ø 1-10 x 0,50 mm
PRICE €	36,93	78,98	80,95	142,00

HSSCo 5%



HSSCo 5% GOLD



HSS TiAlSiN



(Ref. BC95 drills)

(Ref. BTX drills)

(Ref. TTX drills)

REFERENCE	DC959314	REFERENCE	PTX9314	REFERENCE	PTTX9314
QUANTITY	6	QUANTITY	6	QUANTITY	6
QUALITY	HSSCo 5%	QUALITY	HSSCo 5%	QUALITY	HSS + TiAlSiN
CONTENT	Ø 2 - 3 - 4 - 5 - 6 - 8 mm	CONTENT	Ø 2 - 3 - 4 - 5 - 6 - 8 mm.	CONTENT	Ø 2 - 3 - 4 - 5 - 6 - 8 mm.
PRICE €	29,05	PRICE €	28,79	PRICE €	26,82

TWIST DRILLS IN ROUND PLASTIC BOXES, 19 PCS

DIN 338

HSS



(Ref. BC2 drills)

Plus



(Ref. BC02 drills)

HSSCo 5%



(Ref. BC5 drills)

TiN



(Ref. BC18 drills)

REFERENCE	DR9380	DP9380	DC9380	DT9380
QUANTITY	19	19	19	19
QUALITY	HSS	<i>Plus</i>	HSSCo	HSS+TiN
CONTENT	Ø 1-10 x 0,50 mm	Ø 1-10 x 0,50 mm	Ø 1-10 x 0,50 mm	Ø 1-10 x 0,50 mm
PRICE €	63,52	71,20	105,90	94,12

MIXED PLASTIC BOXES: METAL, CONCRETE & WOOD WORKING DRILLS
STANDARD SERIES

HSS (Ref. BC2) CARBIDE TIPPED (Ref. BW1) CV (Ref. BM)				
				
				
REFERENCE	EC9330	EC9331	EC9332	
QUANTITY	8	9	9	
QUALITY CONTENT	  Ø 4 - 5 - 6 - 8 mmx 2	   Ø 4 - 6 - 8 mmx 3	   Ø 5 - 6 - 8 mmx 3	
PRICE €	23,38	24,91	25,40	

* Till end of stock

PROFESSIONAL SERIES

HSSCo 5% (Ref. BC5) CARBIDE TIPPED (Ref. BW6) HSS (Ref. BMPR)					
					
					
REFERENCE	M9330	M9331	M9332	M9382	
QUANTITY	8	9	9	18	
QUALITY CONTENT	  Ø 4 - 5 - 6 - 8 mmx 2	   Ø 4 - 6 - 8 mmx 3	   Ø 5 - 6 - 8 mmx 3	   Ø 3 - 4 - 5 - 6 - 8 - 10 mmx 3	
PRICE €	40,39	39,66	40,47	79,13*	

* Till end of stock

EXTRA PROFESSIONAL SERIES

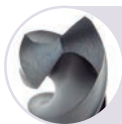
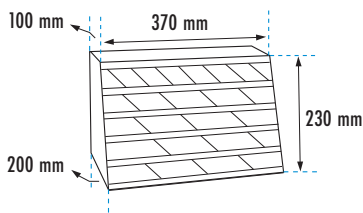
HSSCo 5% (Ref. BC5) CARBIDE TIPPED (Ref. BW15) HSS (Ref. BMPR)					
					
					
REFERENCE	P9330	P9331	P9332	P9382	
QUANTITY	8	9	9	18	
QUALITY CONTENT	  Ø 4 - 5 - 6 - 8 mmx 2	   Ø 4 - 6 - 8 mmx 3	   Ø 5 - 6 - 8 mmx 3	   Ø 3 - 4 - 5 - 6 - 8 - 10 mmx 3	
PRICE €	59,96*	54,72*	55,74*	111,37*	

* Till end of stock

DISPLAY CABINET FOR TWIST DRILLS DIN 338

Twist drills for Metal

Grey



Ref. BC2

DIN 338

HSS



118°



30°
"N"



OX



70
Kg/mm²



HSS

CONTENT 400 DRILLS



EXPBROCASBC2

1.248,83 €

BC2 Drills

1,00 10	1,50 10	2,00 20	2,50 20	3,00 50	3,50 30	4,00 40	4,50 20	5,00 40	5,50 10	6,00 30	6,50 10	7,00 10
7,50 10	8,00 20	8,50 10	9,00 10	9,50 10	10,00 10	10,50 5	11,00 5	11,50 5	12,00 5	12,50 5	13,00 5	



Ref. BC02

DIN 338

HSS-G Plus



118°



30°
"N"



OX GOLD



70
Kg/mm²



HSS-G Plus



CONTENT 316 DRILLS

BC02 Drills

1,00 10	1,50 10	2,00 20	2,50 10	3,00 20	3,50 10	4,00 30	4,50 10	5,00 30	5,50 10	6,00 30	6,50 10	7,00 10
7,50 10	8,00 20	8,50 10	9,00 10	9,50 10	10,00 10	10,50 6	11,00 6	11,50 6	12,00 6	12,50 6	13,00 6	

EXPBROCASBC02

1.331,06 €

DISPLAY CABINET FOR TWIST DRILLS DIN 338



EXPBROCASBC5

1.730,53 €



Ref. BC5

DIN 338

HSSCo 5%



135°



30° "N"



GOLD



120 Kg/mm²



HSSCo 5%



CONTENT 220 DRILLS

BC5 Drills

1,00 10	1,50 10	2,00 10	2,50 10	3,00 10	3,50 10	4,00 10	4,50 10	5,00 10	5,50 10	6,00 10	6,50 10	7,00 10
7,50 10	8,00 10	8,50 10	9,00 10	9,50 10	10,00 10	10,50 5	11,00 5	11,50 5	12,00 5	12,50 5	13,00 5	



Ref. BC18

DIN 338

HSS



118°



30° "N"



TiN



PRODUCTION



HSS



TiN



CONTENT 200 DRILLS

BC18 Drills

1,00 10	1,50 10	2,00 10	2,50 10	3,00 10	3,50 10	4,00 10	4,50 10	5,00 10	5,50 10	6,00 10	6,50 10	7,00 10
7,50 10	8,00 10	8,50 5	9,00 5	9,50 5	10,00 5	10,50 5	11,00 5	11,50 5	12,00 5	12,50 5	13,00 5	



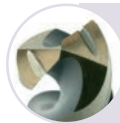
EXPBROCASBC18

1.285,02 €



EXPBROCASBC95

1.112,51 €



Ref. BC95

DIN 338

HSSCo 5%



130°



Ø ≥ 3

OX GOLD

INOX



HSSCo 5%




CONTENT 176 DRILLS

BC95 Drills

1,00 10	1,50 10	2,00 10	2,50 10	3,00 10	3,50 10	4,00 10	4,50 10	5,00 10	5,50 10	6,00 10	6,50 10	7,00 10
7,50 10	8,00 10	8,50 5	9,00 5	9,50 5	10,00 5	10,50 1	11,00 1	11,50 1	12,00 1	12,50 1	13,00 1	

DISPLAY CABINET FOR TWIST DRILLS DIN 338

NEW



Ref. BTX

DIN 338 **HSSCo 5%** $\varnothing \geq 3$ 135° 38° "S" **GOLD** 120 Kg/mm^2



HSSCo 5%  **CONTENT 176 DRILLS**


(Ø1-2,5mm) BC5 Drills (Ø3-13mm) BTX Drills

1,00 10	1,50 10	2,00 10	2,50 10	3,00 10	3,50 10	4,00 10	4,50 10	5,00 10	5,50 10	6,00 10	6,50 10	7,00 10
7,50 10	8,00 10	8,50 5	9,00 5	9,50 5	10,00 5	10,50 1	11,00 1	11,50 1	12,00 1	12,50 1	13,00 1	

EXPBROCASBTX	EXPBROCASBTX
100,76 €	938,72 €



NEW



Ref. TK02

DIN 338 **HSS** $\varnothing \geq 2,5 \text{mm}$ $\varnothing \geq 4$

AI **Cu-Ni-Zn** **PVC** **STEP CUT**


HSS  **CONTENT 176 DRILLS**

TK02 Drills

1,00 10	1,50 10	2,00 10	2,50 10	3,00 10	3,50 10	4,00 10	4,50 10	5,00 10	5,50 10	6,00 10	6,50 10	7,00 10
7,50 10	8,00 10	8,50 5	9,00 5	9,50 5	10,00 5	10,50 1	11,00 1	11,50 1	12,00 1	12,50 1	13,00 1	

EXPBROCASTK02
1.674,83 €

NEW



Ref. TK05

DIN 338 **HSSCo 5%** $\varnothing \geq 3 \text{mm}$ $\varnothing \geq 5$

INOX **CAST IRON** **Cu-Ni-Zn** **PVC** **STEP CUT**

HSSCo 5%  **CONTENT 176 DRILLS**

TK05 Drills

1,00 10	1,50 10	2,00 10	2,50 10	3,00 10	3,50 10	4,00 10	4,50 10	5,00 10	5,50 10	6,00 10	6,50 10	7,00 10
7,50 10	8,00 10	8,50 5	9,00 5	9,50 5	10,00 5	10,50 1	11,00 1	11,50 1	12,00 1	12,50 1	13,00 1	



EXPBROCASTK05
2.117,98 €

TWIST DRILLS IN METAL CASE

**DIN
338**
*** 125 DRILLS Ø 1-10 mm x 0,50**

Ø	1	1,50	2	2,50	3	3,50	4	4,50
Units	10	5	10	5	10	5	10	5
	5	5,50	6	6,50	7	7,50	8	8,50
	10	5	10	5	5	5	5	5
	9	9,50	10	= 125 DRILLS				
	5	5	5					



REFERENCE	BC2880	BC02880	BC5880	BC18880	M0880V
QUANTITY	125	125	125	125	250
QUALITY	HSS	<i>Plus</i>	HSSCo 5%	HSS TiN	
CONTENT	Ø 1-10 x 0,50 DETAILED IN*	Ø 1-10 x 0,50 DETAILED IN*	Ø 1-10 x 0,50 DETAILED IN*	Ø 1-10 x 0,50 DETAILED IN*	EMPTY BOX
PRICE €	398,82	447,06	660,18	547,50	154,62


**DIN
338**
*** 155 DRILLS Ø 1-13 mm x 0,50**

Ø	1	1,50	2	2,50	3	3,50	4	4,50	5	5
Units	10	5	10	5	10	5	10			
	5,50	6	6,50	7	7,50	8	8,50	9	9,50	
	5	10	5	5	5	5	5	5	5	
	10	10,50	11	11,50	12	12,50	13	= 155 DRILLS		
	5	5	5	5	5	5	5			



REFERENCE	BC2881	BC02881	BC5881	BC18881	M0881V
QUANTITY	155	155	155	155	290
QUALITY	HSS	<i>Plus</i>	HSSCo 5%	HSS TiN	
CONTENT	Ø 1-10 x 0,50 DETAILED IN*	Ø 1-10 x 0,50 DETAILED IN*	Ø 1-10 x 0,50 DETAILED IN*	Ø 1-10 x 0,50 DETAILED IN*	EMPTY BOX
PRICE €	801,07	890,36	1.421,56	1.115,43	358,04

TAPER SHANK DRILLS IN METAL CASE
**DIN
345**
HSS


(Ref. BC11 drills)

REFERENCE	MBC11-1	MBC11-2
QUANTITY	10	10
QUALITY	HSS	HSS
CONTENT	Ø 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 23	Ø 14 - 16 - 18 - 20 - 22 - 24 - 25 - 26 - 28 - 30
PRICE €	701,45	978,58

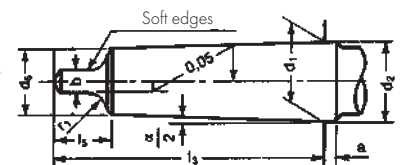
CUTTING SPEED AND FEED CHART FOR METAL DRILLING

			DIAMETER Ø (mm)											
			2	3	5	7	10	12	15	18	20	22	25	30
STEEL 70 kg/mm ² BC2	C/S 25 m/min	RPM	3979	2653	1592	1137	796	663	531	442	398	362	318	265
		mm / rev	0,04	0,06	0,08	0,15	0,20	0,26	0,30	0,33	0,34	0,35	0,35	0,39
		S (mm / min)	159	159	127	171	159	172	159	146	135	127	111	103
HARDENED STEEL 120 kg/mm ² BC5	C/S 13 m/min	RPM	2069	1379	828	591	414	345	276	230	207	188	166	138
		mm / rev	0,03	0,045	0,06	0,10	0,15	0,18	0,20	0,22	0,23	0,25	0,25	0,28
		S (mm / min)	62	62	50	59	62	60	55	51	48	47	41	39
STAINLESS STEEL BC50	C/S 11 m/min	RPM	1751	1167	700	500	350	292	233	195	175	159	140	117
		mm / rev	0,02	0,05	0,08	0,14	0,19	0,23	0,25	0,27	0,28	0,30	0,31	0,33
		S (mm / min)	35	58	56	70	67	67	58	53	49	48	43	39
ALUMINIUM BC16	C/S 50 m/min	RPM	7958	5305	3183	2274	1592	1326	1061	884	796	723	637	531
		mm / rev	0,03	0,06	0,08	0,16	0,20	0,23	0,25	0,28	0,29	0,30	0,30	0,36
		S (mm / min)	239	318	255	364	318	305	265	248	231	217	191	191
TITANIUM BC42	C/S 18 m/min	RPM	5570	3714	2228	1592	1114	928	743	619	557	506	446	371
		mm / rev	0,02	0,03	0,03	0,05	0,08	0,08	0,12	0,15				
		S (mm / min)	111	111	67	80	84	74	89	93				
CAST IRON BC7	C/S 25 m/min	RPM	3979	2653	1592	1137	796	663	531	442	398	362	318	265
		mm / rev	0,05	0,08	0,10	0,20	0,27	0,31	0,37	0,41	0,42	0,42	0,42	0,45
		S (mm / min)	199	199	159	227	215	206	196	181	167	152	134	119
BRASS BC66	C/S 50 m/min	RPM	7958	5305	3183	2274	1592	1326	1061	884	796	723	637	531
		mm / rev	0,04	0,07	0,08	0,17	0,21	0,25	0,28	0,28	0,30	0,30	0,33	0,40
		S (mm / min)	318	345	239	387	334	332	297	248	239	217	210	212
PLASTIC, CARBON FIBER BC7	C/S 12 m/min	RPM	1911	1274	764	546	382	318	255	212	191	174	153	127
		mm / rev	0,02	0,03	0,03	0,05	0,08	0,08	0,12	0,15				
		S (mm / min)	38	38	23	27	29	25	31	32				
NI ALLOYS BC42	C/S 30 m/min	RPM	4775	3183	1910	1364	955	796	637	531	477	434	382	318
		mm / rev	0,015	0,02	0,02	0,03	0,04	0,06	0,07	0,08	0,11	0,12	0,15	
		S (mm / min)	72	64	42	34	38	48	45	42	53	52	57	
CIRCUIT BOARDS BC79	25	RPM	3979	-	-	-	-	-	-	-	-	-	-	

REMARKS:

- If we know the drill diameter and workpiece material, the speed and feed are quickly found.
Example;
Material: Aluminium RPM=2274 RPM
Ø drill: 7 mm. → S=364 mm/min
- After several holes you must adjust the speed and feed again.

TECHNICAL INFORMATION ABOUT DIN 228D MORSE TAPER SHANK DIMENSIONS



MORSE TAPER	Thinning	Ø 2	α	b h13	d ₁	d ₂ Ø max	d ₆ Ø min	d ₇ Dimen. máx.	l ₃ -1	l ₄ Dimen. máx.	l ₅ Dimen. máx.	r ₁	r ₂
0	1:19,212=0,05205	1°29' 27"	3,0	3,9	9,045	9,2	6,1	6,0	56,5	59,5	10,5	4	1,0
1	1:20,047=0,04988	1°25' 43"	3,5	5,2	12,065	12,2	9,0	8,7	62,0	65,5	13,5	5	1,2
2	1:20,020=0,04995	1°25' 50"	5,0	6,3	17,780	18,0	14,0	13,5	75,0	80,0	16,0	6	1,6
3	1:19,922=0,05020	1°26' 16"	5,0	7,0	23,825	24,1	19,1	18,5	94,0	99,0	20,0	7	2,0
4	1:19,254=0,05194	1°29' 15"	6,5	11,9	31,267	31,6	25,2	24,5	117,5	124,0	24,0	8	2,5
5	1:19,002=0,05263	1°30' 26"	6,5	15,9	44,399	44,7	36,5	35,7	149,5	156,0	29,0	10	3,0
6	1:19,180=0,05214	1°29' 36"	8,0	19,0	63,348	63,8	52,4	51,0	210,0	218,0	40,0	10	4,0

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