

BLUE-MASTER[®]
by *celesa*



TWIST DRILLS
FOR METAL

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
- 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		120 Kg/mm²	80 Kg/mm²	HIGH PERFORMANCE	INOX	INOX	INOX	INOX Plus	CAST IRON	70 Hrc	HIGH PERFORMANCE
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										16,43
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			3,58	3,22	4,26	6,08				10,34
1,05	34 x 12										
1,10	36 x 14										10,56
1,15	36 x 14										
1,19	3/64"										
1,20	38 x 16					5,63	5,83				10,97
1,25	38 x 16										
1,30	38 x 16										11,31
1,35	40 x 18										11,38
1,40	40 x 18										
1,45	40 x 18										
1,50	40 x 18			3,62	3,07	4,14	6,07				11,52
1,55	43 x 20										

Twist drills for Metal

Pink

Ø 0,20-1,5mm

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												
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€	€
1,59	1/16"	1,66				3,04						
1,60	43 x 20	1,81	1,81			3,27						2,49
1,65	43 x 20	1,81	1,81									
1,70	43 x 20	1,81	1,81			3,27						2,48
1,75	46 x 22	1,63	1,63			3,18		4,70	2,82	4,57		2,39
1,80	46 x 22	1,62	1,62			3,19						2,34
1,85	46 x 22	1,62	1,62									
1,90	46 x 22	1,62	1,62			3,19						2,34
1,95	48 x 24	1,62										
1,98	5/64"	1,47				2,98						
2,00	49 x 24	1,38	1,38	1,46		2,63		3,89	2,46	2,87	3,87	2,20
2,05	49 x 24	1,41	1,41									
2,10	49 x 24	1,41	1,41			3,10						2,18
2,15	53 x 27	1,41										
2,20	53 x 27	1,41	1,41			3,10						2,17
2,25	53 x 27	1,30	1,30	1,45		2,95		4,70	2,80	3,13		2,11
2,30	53 x 27	1,62	1,62			3,10						2,32
2,35	53 x 27	1,63	1,63									
2,38	3/32"	1,55				2,93						
2,40	57 x 30	1,62	1,62			3,10						2,32
2,45	57 x 30	1,62										
2,50	57 x 30	1,37	1,37	1,53		2,41		3,89	2,30	2,71	3,87	2,18
2,55	57 x 30	1,66	1,66									
2,60	57 x 30	1,66	1,66			2,98						2,33
2,65	57 x 30	1,66										
2,70	61 x 33	1,66	1,66	1,86		2,98						2,33
2,75	61 x 33	1,45	1,45	1,59		2,95		4,70	2,80	3,67		2,27
2,78	7/64"	1,59				2,85						
2,80	61 x 33	1,66	1,66	1,86		2,99						2,33

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

BC9-BC99
BC7-BC98-BC42



TURBO

TURBO

Twist drills for Metal

Pink

		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	€	€	€	€	€	€	€	€	€	€
1,59	1/16"										
1,60	43 x 20					4,70					11,90
1,65	43 x 20					3,99					12,31
1,70	43 x 20					3,07					
1,75	46 x 22										
1,80	46 x 22					4,19	5,97				12,37
1,85	46 x 22										
1,90	46 x 22					4,58					12,62
1,95	48 x 24										
1,98	5/64"										
2,00	49 x 24			3,77	3,07	4,11	6,09	5,17	20,75		14,28
2,05	49 x 24										
2,10	49 x 24					4,30			22,32		20,03
2,15	53 x 27										
2,20	53 x 27					4,35	6,45		22,32		21,54
2,25	53 x 27				3,07				22,32		
2,30	53 x 27					4,25			22,32		21,54
2,35	53 x 27										
2,38	3/32"										
2,40	57 x 30					4,36			22,32		21,92
2,45	57 x 30										
2,50	57 x 30			3,49	2,87	3,84	5,65	5,24	20,75		17,30
2,55	57 x 30										
2,60	57 x 30					4,68			22,32		27,05
2,65	57 x 30										
2,70	61 x 33					4,45			21,26		27,05
2,75	61 x 33			3,69	2,87				22,32		
2,78	7/64"										
2,80	61 x 33					4,82	9,23		22,32		27,05

Ø 1,59-2,80mm

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												
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€	€
2,85	61 x 33	1,68										
2,90	61 x 33	1,66	1,66			2,98						2,33
2,95	61 x 33	1,66										
3,00	61 x 33	1,25	1,25	1,37		2,36		3,76	2,27	3,01	3,36	2,06
3,05	65 x 36	1,61										
3,10	65 x 36	1,45	1,45	1,58		2,86		5,03				2,61
3,15	65 x 36	1,61										
3,17	1/8"	1,39				2,72						
3,20	65 x 36	1,45	1,45	1,58		2,86		5,03	2,80			2,61
3,25	65 x 36	1,45	1,45	1,58		2,86		4,62	2,80	3,67		2,61
3,30	65 x 36	1,45	1,45	1,58		2,86		5,03	2,80			2,61
3,35	65 x 36	1,86										
3,40	70 x 39	1,86	1,86	2,06		2,99						2,80
3,45	70 x 39	1,87										
3,50	70 x 39	1,41	1,41	1,58		2,85		4,53	2,74	3,21	4,00	2,58
3,55	70 x 39	1,94										
3,57	9/64"	1,82				3,42						
3,60	70 x 39	1,94	1,94	2,16		3,59						2,81
3,65	70 x 39	1,94										
3,70	70 x 39	1,94	1,94	2,16		3,59						2,82
3,75	70 x 39	1,62	1,62	1,86		3,38		5,49	3,27	4,78		2,72
3,80	75 x 43	1,99	1,99	2,27		3,59						2,86
3,85	75 x 43	1,99										
3,90	75 x 43	1,99	1,99	2,27		3,59						2,85
3,95	75 x 43	1,99										
3,97	5/32"	1,88				3,42						
4,00	75 x 43	1,58	1,58	1,78		3,04		4,91	2,95	3,49	4,37	2,69
4,05	75 x 43	1,99										
4,10	75 x 43	1,78	1,78	1,99		3,38		6,05	3,21			2,79

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



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° "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	€	€	€	€	€	€	€	€	€	€
2,85	61 x 33										
2,90	61 x 33					4,86			22,32		27,05
2,95	61 x 33										
3,00	61 x 33	2,02	1,92	3,44	2,82	3,73	5,60	5,78	20,64	15,48	20,75
3,05	65 x 36										
3,10	65 x 36					4,50	6,88		21,13		27,30
3,15	65 x 36										
3,17	1/8"										
3,20	65 x 36	2,48	2,36		3,45	4,50	6,93		20,73		27,30
3,25	65 x 36				3,46				21,34		
3,30	65 x 36	2,48	2,36	4,36	3,46	4,50	6,89	7,01	20,94	17,52	24,00
3,35	65 x 36										
3,40	70 x 39					5,24			21,34		29,94
3,45	70 x 39										
3,50	70 x 39	2,47	2,35	4,32	3,40	4,54	6,84	6,20	20,24	16,17	23,67
3,55	70 x 39										
3,57	9/64"										
3,60	70 x 39					5,24			21,13	17,52	31,37
3,65	70 x 39										
3,70	70 x 39					5,24			21,73		31,37
3,75	70 x 39				3,70				21,73		
3,80	75 x 43					5,98	9,94		21,73		32,90
3,85	75 x 43										
3,90	75 x 43					5,72			21,73		32,90
3,95	75 x 43										
3,97	5/32"										
4,00	75 x 43	2,49	2,37	4,46	3,70	4,88	7,21	7,03	20,63	15,74	26,63
4,05	75 x 43										
4,10	75 x 43					5,40	7,77		20,87		34,21

Twist drills for Metal

Pink

Ø 2,85-4,10mm

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												
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€	€
4,15	75 x 43	1,99										
4,20	75 x 43	1,78	1,78	1,99		3,38		6,05	3,21			2,79
4,25	75 x 43	1,78	1,78	1,99		3,38		5,49	3,74	5,18		2,79
4,30	80 x 47	2,36	2,36	2,68		3,59						3,10
4,35	80 x 47	2,34										
4,37	11/64"	2,21				3,42						
4,40	80 x 47	2,36	2,36	2,68		3,59						3,10
4,45	80 x 47	2,36										
4,50	80 x 47	1,86	1,86	2,02		3,48		5,49	3,30	4,26	4,53	2,82
4,55	80 x 47	2,38										
4,60	80 x 47	2,38	2,38			4,00						3,11
4,65	80 x 47	2,38										
4,70	80 x 47	2,38	2,38	2,68		4,00						3,11
4,75	80 x 47	2,11	2,11	2,39		3,80		6,06	4,21	6,27		3,00
4,76	3/16"	2,02				3,55						
4,80	86 x 52	2,68	2,68	2,93		4,03		6,68				3,30
4,85	86 x 52	2,59										
4,90	86 x 52	2,59	2,59	2,86		4,03						3,25
4,95	86 x 52	2,61										
5,00	86 x 52	1,98	1,98	2,20		3,65		5,88	3,53	4,62	4,92	2,88
5,05	86 x 52	2,69	2,69									
5,10	86 x 52	2,68	2,68	2,96		4,37		7,20	4,08		6,83	3,29
5,15	86 x 52	2,69										
5,16	13/64"	2,56				3,76						
5,20	86 x 52	2,68	2,68	2,96		4,37		7,20				3,30
5,25	86 x 52	2,50	2,50	2,84		4,31		6,90	5,03	7,02		3,28
5,30	86 x 52	3,33	3,33	3,68		4,37						3,73
5,35	93 x 57	3,32										
5,40	93 x 57	3,33	3,33			4,37						3,73

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
- 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		120 Kg/mm²	80 Kg/mm²	HIGH PERFORMANCE	INOX	INOX	INOX	INOX Plus	CAST IRON	70 HRc	HIGH PERFORMANCE
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€
4,15	75 x 43										
4,20	75 x 43	2,98	2,82	4,69	4,12	5,37	7,75	8,66	20,87	18,33	32,58
4,25	75 x 43			4,69					22,73		
4,30	80 x 47					5,73			22,73	18,33	40,72
4,35	80 x 47										
4,37	11/64"										
4,40	80 x 47										
4,45	80 x 47					5,73			22,73	18,33	41,53
4,50	80 x 47	3,05	2,89	4,73	4,12	5,56	7,92	8,12	20,48	15,13	32,56
4,55	80 x 47										
4,60	80 x 47					6,92			21,90		40,50
4,65	80 x 47										
4,70	80 x 47					6,43			21,28		40,50
4,75	80 x 47				4,27				22,73		
4,76	3/16"										
4,80	86 x 52					6,43	8,79		21,90		41,54
4,85	86 x 52										
4,90	86 x 52					7,09			22,73		41,54
4,95	86 x 52										
5,00	86 x 52	4,11	3,91	4,84	4,40	5,80	8,14	8,55	21,01	14,82	36,11
5,05	86 x 52										
5,10	86 x 52					6,93	9,23		22,46	18,14	47,10
5,15	86 x 52										
5,16	13/64"										
5,20	86 x 52					6,89	9,30		22,36		47,10
5,25	86 x 52				5,58				23,90		
5,30	86 x 52					6,93			23,90		47,10
5,35	93 x 57										
5,40	93 x 57					8,97			23,90		53,32

Twist drills for Metal

Pink

Ø 4,15-5,40mm

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												
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€	€
5,45	93 x 57	3,33										
5,50	93 x 57	2,61	2,61	2,93		4,62		7,43	4,47	5,65	6,50	3,33
5,55	93 x 57	3,52										
5,56	7/32"	3,35				5,22						
5,60	93 x 57	3,53	3,53	3,91		5,49		9,16				3,88
5,65	93 x 57	3,52										
5,70	93 x 57	3,53	3,53	3,91		5,49		9,16				3,88
5,75	93 x 57	3,41	3,41	3,81		5,21		8,30	6,17	8,59		3,84
5,80	93 x 57	3,32	3,32	3,74		5,49		9,16				3,73
5,85	93 x 57	3,33										
5,90	93 x 57	3,32	3,32	3,74		5,49						3,73
5,95	15/64"	3,14				5,71						
6,00	93 x 57	2,72	2,72	3,02		4,97		7,90	4,73	6,08	6,73	3,38
6,05	101 x 63	3,86										
6,10	101 x 63	3,86	3,86	4,36		6,16						6,80
6,15	101 x 63	3,86										
6,20	101 x 63	3,86	3,86	4,36		6,16						6,80
6,25	101 x 63	3,65	3,65	4,08		5,81		9,25	6,17	8,59		6,80
6,30	101 x 63	4,07	4,07			6,16						6,89
6,35	1/4"	2,90				5,85						
6,40	101 x 63	4,19	4,19			6,17						6,99
6,45	101 x 63	4,09										
6,50	101 x 63	3,15	3,15	3,56		5,95		9,22	5,51	6,77	7,82	6,48
6,55	101 x 63	5,09										
6,60	101 x 63	5,06	5,06			7,40						7,54
6,65	101 x 63	5,09										
6,70	101 x 63	5,08	5,08	5,67		7,40		11,81				7,54
6,75	109 x 69	3,82	3,82	4,31		6,94		10,78	7,43	10,36		6,93
6,80	109 x 69	3,82	3,82	4,31		6,94		11,81	6,48			6,94

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

BC9-BC99
BC7-BC98-BC42



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° "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		120 Kg/mm²	80 Kg/mm²	HIGH PERFORMANCE	INOX	INOX	INOX	INOX Plus	CAST IRON	70 Hrc	HIGH PERFORMANCE
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€
5,45	93 x 57										
5,50	93 x 57	5,21	4,94	5,47	5,58	7,36	9,73	10,44	22,01	15,80	42,15
5,55	93 x 57										
5,56	7/32"										
5,60	93 x 57					8,79			23,39		56,01
5,65	93 x 57										
5,70	93 x 57					10,10			23,37		56,01
5,75	93 x 57				5,93	8,31			24,99		
5,80	93 x 57					8,79	11,14		23,37		56,01
5,85	93 x 57										
5,90	93 x 57					8,79			24,99		56,01
5,95	15/64"										
6,00	93 x 57	5,54	5,26	5,67	5,93	7,89	10,23	11,59	22,79	16,84	47,82
6,05	101 x 63										
6,10	101 x 63				6,25	10,96			26,97		69,37
6,15	101 x 63										
6,20	101 x 63					9,74	16,06		26,97		69,37
6,25	101 x 63				6,75				26,97		69,37
6,30	101 x 63					10,96			26,97		69,37
6,35	1/4"										
6,40	101 x 63					10,96			26,97		69,37
6,45	101 x 63										
6,50	101 x 63	6,47	6,15	10,55	6,93	9,45	15,77	13,80	25,46	17,16	59,38
6,55	101 x 63										
6,60	101 x 63					12,40			27,81		86,24
6,65	101 x 63										
6,70	101 x 63					12,40			27,81		86,24
6,75	109 x 69			11,06	8,06				27,81		
6,80	109 x 69	7,54	7,15	11,06	8,06	11,00	17,35		27,81	20,54	69,62

Ø 5,45-6,80mm

Twist drills for Metal
Pink

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												
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€	€
6,85	109 x 69	5,64										
6,90	109 x 69	5,65	5,65			7,40						7,86
6,95	109 x 69	5,65										
7,00	109 x 69	3,82	3,82	4,31		6,52		9,65	6,03	7,19	9,55	6,94
7,05	109 x 69	5,94										
7,10	109 x 69	5,93	5,93			9,42						8,14
7,14	9/32"	5,68				8,89						
7,15	109 x 69	5,95										
7,20	109 x 69	5,93	5,93			9,42					10,02	8,14
7,25	109 x 69	4,89	4,89	5,44		8,84		13,12	9,83	13,58		7,60
7,30	109 x 69	5,94	5,94			9,45						8,14
7,35	109 x 69	5,93										
7,40	109 x 69	5,94	5,94	6,65		9,45						8,14
7,45	109 x 69	6,09										
7,50	109 x 69	4,07	4,07	4,54		6,95		10,30	6,45	8,40	10,02	7,10
7,54	19/64"	6,63				10,76						
7,55	117 x 75	7,05										
7,60	117 x 75	6,99	6,99			11,36						8,94
7,65	117 x 75	7,05										
7,70	117 x 75	6,99	6,99			11,33						8,94
7,75	117 x 75	5,40	5,40	6,04		10,70		15,90	12,49	18,12		8,04
7,80	117 x 75	7,10	7,10	7,98		11,33						8,96
7,85	117 x 75	7,11										
7,90	117 x 75	7,10	7,10	7,98		11,39						8,96
7,94	5/16"	6,08				10,74						
7,95	117 x 75	7,10										
8,00	117 x 75	4,64	4,64	5,21		8,16		12,50	7,51	8,93	11,47	7,43
8,05	117 x 75	7,25										
8,10	117 x 75	7,25	7,25			10,86						9,81

FULLY GROUND TWIST DRILLS



10 U. Ø 0,20 - Ø 10,50 mm

6 U. Ø 10,60 - Ø 14 mm

3 U. Ø 14,10 - Ø 20 mm

BC9-BC99
BC7-BC98-BC42



TURBO

TURBO

Twist drills for Metal

Pink

		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	€	€	€	€	€	€	€	€	€	€
6,85	109 x 69										
6,90	109 x 69					12,52			27,81	20,54	86,24
6,95	109 x 69										
7,00	109 x 69	7,08	6,73	11,13	7,58	10,25	16,85	16,22	27,74	19,21	69,15
7,05	109 x 69										
7,10	109 x 69					15,16			29,16	22,13	98,64
7,14	9/32"										
7,15	109 x 69										
7,20	109 x 69					14,52	20,95		29,16		98,64
7,25	109 x 69				8,04				29,16		
7,30	109 x 69					15,45			29,16		98,64
7,35	109 x 69										
7,40	109 x 69					15,45			29,16		98,64
7,45	109 x 69										
7,50	109 x 69	7,52	7,14	11,44	8,04	10,96	17,57	18,67	28,64	20,18	73,86
7,54	19/64"										
7,55	117 x 75										
7,60	117 x 75					15,89			31,32		98,64
7,65	117 x 75										
7,70	117 x 75					17,69			31,32		98,64
7,75	117 x 75				8,81				31,32		
7,80	117 x 75					17,69	24,92		31,32		98,64
7,85	117 x 75										
7,90	117 x 75					17,69			31,32		98,64
7,94	5/16"										
7,95	117 x 75										
8,00	117 x 75	8,81	8,36	12,12	9,43	12,85	19,39	19,73	29,17	22,55	84,35
8,05	117 x 75										
8,10	117 x 75					18,63			33,46		114,74

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

BC9-BC99
BC7-BC98-BC42



TURBO

TURBO

Twist drills for Metal

Pink

		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		120 Kg/mm ²	80 Kg/mm ²	HIGH PERFORMANCE	INOX	INOX	INOX	INOX Plus	CAST IRON	70 HRc	HIGH PERFORMANCE
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€
8,15	117 x 75										
8,20	117 x 75					17,37	25,07		33,46		114,74
8,25	117 x 75				9,63				33,46		
8,30	117 x 75					18,46			33,46		114,74
8,33	21/64"										
8,35	117 x 75										
8,40	117 x 75					18,46			33,46		114,74
8,45	117 x 75										
8,50	117 x 75	9,19	8,72	13,58	9,83	13,32	21,07	24,17	31,98	22,55	99,76
8,55	125 x 81										
8,60	125 x 81					18,81			35,93	27,27	133,01
8,65	125 x 81										
8,70	125 x 81					21,89			35,93		133,01
8,73	11/32"										
8,75	125 x 81				11,70				35,93		
8,80	125 x 81					21,40	29,02		35,93		133,01
8,85	125 x 81										
8,90	125 x 81					21,89			35,93		133,01
8,95	125 x 81										
9,00	125 x 81	11,70	11,12	15,03	12,54	17,00	24,78	25,67	31,92	24,45	110,28
9,05	125 x 81										
9,10	125 x 81				12,62	26,93			38,85		146,12
9,13	23/64"										
9,15	125 x 81										
9,20	125 x 81				12,62	26,93	31,27		38,85		146,12
9,25	125 x 81				12,62				38,85		
9,30	125 x 81				12,62	26,93			38,85		146,12
9,35	125 x 81										
9,40	125 x 81					26,93			38,85		146,12
9,45	125 x 81										

Ø 8,15-9,45mm

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												
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€	€
9,50	125 x 81	6,66	6,66	7,45		11,17		17,18	10,38	12,89	16,42	9,46
9,52	3/8"	6,26				10,64						
9,55	133 x 87	11,51										
9,60	133 x 87	11,36	11,36			17,97						12,58
9,65	133 x 87	11,51										
9,70	133 x 87	11,36	11,36			17,97						12,47
9,75	133 x 87	8,29	8,29	9,39		16,93		26,16	16,97	28,85		10,71
9,80	133 x 87	11,12	11,12			17,97						12,39
9,85	133 x 87	11,24										
9,90	133 x 87	11,24	11,24	12,65		17,97						12,39
9,92	25/64"	10,71				16,97						
9,95	133 x 87	11,23										
10,00	133 x 87	7,18	7,18	8,02	12,08	12,34		18,97	11,48	13,39	17,70	9,80
10,10	133 x 87	9,59	9,59	10,79		20,67						
10,20	133 x 87	8,94	8,94	10,01		17,43		34,31				17,20
10,25	133 x 87	9,98	9,98	12,39	15,92	21,32		34,31	18,85	32,89		17,46
10,30	133 x 87	11,19	11,19	12,50		20,72						
10,32	13/32"	10,71				19,64						
10,40	133 x 87	11,19	11,19			20,67						
10,50	133 x 87	8,92	8,92	9,98	13,52	17,44	26,51	27,91	15,32	16,09	24,19	16,34
10,60	133 x 87	12,33	12,33			24,04						
10,70	142 x 94	12,33	12,33			24,04						
10,72	27/64"	10,98				23,56						
10,75	142 x 94	11,53	11,53	12,75	18,00	24,98		39,92	22,04	30,03		18,01
10,80	142 x 94	13,68	13,68			24,04						
10,90	142 x 94	13,68	13,68			24,09						
11,00	142 x 94	10,41	10,41	11,68	15,32	19,26	28,33	30,78	16,63	17,91	27,73	17,26
11,10	142 x 94	13,96	13,96			27,43						
11,11	7 / 16"	13,28				25,87						
11,20	142 x 94	13,96	13,96			27,43						

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



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° "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		120 Kg/mm²	80 Kg/mm²	HIGH PERFORMANCE	INOX	INOX	INOX	INOX Plus	CAST IRON	70 Hrc	HIGH PERFORMANCE
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€
9,50	125 x 81	12,12	11,52	15,26	12,98	17,65	25,20	29,10	34,81	26,67	122,61
9,52	3/8"										
9,55	133 x 87										
9,60	133 x 87					26,93			41,66		154,97
9,65	133 x 87										
9,70	133 x 87					26,93			41,66		154,97
9,75	133 x 87								41,66		
9,80	133 x 87					26,80	34,53		41,66		154,97
9,85	133 x 87										
9,90	133 x 87					29,10			41,66		154,97
9,92	25/64"										
9,95	133 x 87										
10,00	133 x 87	13,34	12,66	16,01	14,28	19,46	27,11	32,08	34,90	27,37	132,55
10,10	133 x 87								46,67		
10,20	133 x 87	17,99	17,10	27,58	19,27	29,10	43,78	37,35	44,96	35,42	153,23
10,25	133 x 87				19,28				46,67		
10,30	133 x 87								46,67	35,42	
10,32	13/32"										
10,40	133 x 87								46,67		
10,50	133 x 87	18,00	17,11	27,55	19,28	27,57	43,08	37,88	41,70	35,15	146,86
10,60	133 x 87								49,64		
10,70	142 x 94								49,64		
10,72	27/64"										
10,75	142 x 94				21,17				49,64		
10,80	142 x 94					38,74			49,64		
10,90	142 x 94								49,64		
11,00	142 x 94	19,88	18,88	28,72	21,27	30,49	45,63	40,24	44,81	35,30	174,88
11,10	142 x 94				23,95				53,17		
11,11	7 / 16"										
11,20	142 x 94				23,95	47,03			53,17		

Ø 9,50-11,20mm

Pink
Twist drills for Metal

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												
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€	€
11,25	142 x 94	11,83	11,83	13,72	19,04	28,45		46,82	29,02	39,55		18,17
11,30	142 x 94	13,68	13,68			27,41						
11,40	142 x 94	13,68	13,68			27,43						
11,50	142 x 94	11,12	11,12	12,49	16,17	23,04	30,63	39,37	19,66	21,53	32,78	17,75
11,51	29/64"	10,59				21,85						
11,60	142 x 94	13,68	13,68			28,31						
11,70	142 x 94	13,68	13,68			28,31						
11,75	142 x 94	11,83	11,83	14,13	20,74	29,42		50,38	28,47	39,55		18,17
11,80	142 x 94	14,99	14,99			28,31						
11,90	151 x 101	14,99	14,99			28,31						
11,91	15/32"	14,27				26,83						
12,00	151 x 101	12,38	12,38	13,95	17,70	24,57	32,84	42,19	21,08	23,32	32,96	18,53
12,10	151 x 101	17,45	17,45			32,90						
12,20	151 x 101	17,45	17,45			32,90						
12,25	151 x 101	15,42	15,42	17,31	22,52	34,04		60,14	39,57	53,91		23,20
12,30	151 x 101	16,43	16,43			32,90						
12,40	151 x 101	16,43	16,43			32,90						
12,50	151 x 101	13,63	13,63	15,27	19,20	30,01	39,96	52,93	23,45	26,45	40,17	22,01
12,60	151 x 101	17,04	17,04			34,20						
12,70	1/2"	15,08				32,57						
12,75	151 x 101	15,15	15,15	17,30	23,21	35,54		62,81	43,67	59,87		23,02
12,80	151 x 101	19,01	19,01			34,20						
12,90	151 x 101	19,01	19,01			34,20						
13,00	151 x 101	14,12	14,12	15,73	19,73	30,70	42,17	53,67	23,79	28,45	41,58	22,35
13,10	151 x 101	19,46	19,46									
13,20	151 x 101	19,46	19,46									
13,25	160 x 108	22,20	22,20		28,22	42,50						
13,30	160 x 108	30,13	30,13									
13,40	160 x 108	30,13	30,13									
13,49	17/32"	19,06				32,23						

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



TURBO BTX TTX BC51 BC95 BC55 BC57 BC50 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	120 Kg/mm²	80 Kg/mm²	HIGH PERFORMANCE	INOX	INOX	INOX	INOX Plus	CAST IRON	70 Hrc	HIGH PERFORMANCE
Ø mm	L1 x L2		€	€	€	€	€	€	€	€
11,25	142 x 94				23,95				53,17	
11,30	142 x 94				23,95				53,17	
11,40	142 x 94							53,17		
11,50	142 x 94		22,88	21,73	30,50	24,49	36,31	51,32	46,15	51,50
11,51	29/64"									193,19
11,60	142 x 94								58,62	44,50
11,70	142 x 94							58,62		
11,75	142 x 94				25,86			58,62		
11,80	142 x 94					48,51		58,62		
11,90	151 x 101							58,62		
11,91	15/32"									
12,00	151 x 101		24,53	23,30	31,55	26,25	38,74	53,95	48,08	51,23
12,10	151 x 101							61,73	46,84	230,19
12,20	151 x 101							61,73		
12,25	151 x 101							61,73		
12,30	151 x 101							61,73		
12,40	151 x 101							61,73		
12,50	151 x 101		29,93	28,45	39,00	32,04	48,57	58,32	54,41	61,43
12,60	151 x 101							65,21		
12,70	1/2"							65,21		
12,75	151 x 101							65,21		
12,80	151 x 101							65,21		
12,90	151 x 101							65,21		
13,00	151 x 101		30,37	28,85	39,57	32,52	49,92	67,38	58,57	61,32
13,10	151 x 101									248,91
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

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												
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€	€
13,50	160 x 108	20,01	20,01	22,45	26,32	33,84	44,78	59,16				27,26
13,60	160 x 108	30,13	30,13									
13,70	160 x 108	30,13	30,13									
13,75	160 x 108	22,45	22,45		30,26	42,50						
13,80	160 x 108	28,72	28,72									
13,89	35/64"	27,48				38,05						
13,90	160 x 108	28,84	28,84									
14,00	160 x 108	21,43	21,43	24,03	27,95	33,44	47,08	58,48				28,17
14,10	169 x 114	30,74										
14,20	169 x 114	30,74										
14,25	169 x 114	25,14	25,14		32,31	55,80						
14,29	9/16"	29,78				42,08						
14,30	169 x 114	31,27										
14,40	169 x 114	31,27										
14,50	169 x 114	23,15	23,15		30,22	47,44	63,18	82,92				29,21
14,60	169 x 114	31,85										
14,68	37/64"	23,94				53,15						
14,70	169 x 114	31,85										
14,75	169 x 114	25,14	25,14		37,11	55,80						
14,80	169 x 114	30,69										
14,90	169 x 114	30,69										
15,00	169 x 114	23,36	23,36	26,17	30,51	48,15	65,98	84,16				29,48
15,08	19/32"	22,25				45,86						
15,25	178 x 120	34,22			38,68	77,03						
15,48	39/64"	33,09				73,36						
15,50	178 x 120	27,36	27,36		35,24	55,69	73,63	97,31				32,06
15,75	178 x 120	34,75			40,08	77,01						
15,88	5/8"	27,08				55,06						
16,00	178 x 120	28,44	28,44		36,52	57,80	75,85	101,15				32,69
16,25	184 x 125	51,10			47,02							

FULLY GROUND TWIST DRILLS



10 U. Ø 0,20 - Ø 10,50 mm

6 U. Ø 10,60 - Ø 14 mm

3 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		 120 Kg/mm²	 80 Kg/mm²	 HIGH PERFORMANCE	 INOX	 INOX	 INOX	 INOX Plus	 CAST IRON	 70 Hrc	 HIGH PERFORMANCE
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€
13,50	160 x 108								70,19		
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								71,38		
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								79,71		
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								81,72		
15,08	19/32"										
15,25	178 x 120										
15,48	39/64"										
15,50	178 x 120								99,26		
15,75	178 x 120										
15,88	5/8"										
16,00	178 x 120								94,28		
16,25	184 x 125										

Twist drills for Metal

Pink

Ø 13,50-16,25mm

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												
Ø mm	L1 x L2	€	€	€	€	€	€	€	€	€	€	€
16,50	184 x 125	33,09	33,09		40,91	66,00	86,48					
16,75	184 x 125	53,53			46,12							
17,00	184 x 125	33,14	33,14		40,91	66,00	87,05					
17,25	191 x 130	55,54			51,94							
17,50	191 x 130	37,98	37,98		46,56	73,12	95,82					
17,75	191 x 130	61,51			54,79							
18,00	191 x 130	40,23	40,23		49,08	79,66	104,99					
18,25	198 x 135	60,34			66,86							
18,50	198 x 135	44,61	44,61		54,16	87,98	117,15					
18,75	198 x 135	62,01			61,85							
19,00	198 x 135	44,61	44,61		54,16	87,98	116,14					
19,25	205 x 140	81,03			66,02							
19,50	205 x 140	47,98	47,98		58,77	97,58	128,69					
19,75	205 x 140	78,88			73,94							
20,00	205 x 140	54,48	54,48		70,34	104,72	137,87					
20,50	205 x 140				81,59		148,50					
21,00	205 x 140				74,49		150,54					
21,50	209 x 140				86,62		165,65					
22,00	209 x 140				82,35		168,11					
22,50	214 x 140				88,10		179,80					
23,00	214 x 140				90,19		184,26					
23,50	220 x 145				100,12		204,54					
24,00	220 x 145				98,99		207,58					
24,50	225 x 150				106,65		223,65					
25,00	225 x 150				108,25		222,63					
26,00	243 x 157				129,85		323,98					
27,00	243 x 157				139,46		332,70					
28,00	253 x 167				144,28		366,53					
29,00	253 x 167				169,38		394,21					
30,00	258 x 171				178,06		408,02					

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



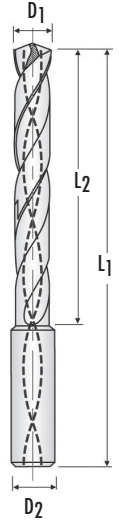
	BTX	TTX	BC51	BC95	BC55	BC57	BC50	BC7	BC98	BC42
MATERIAL	HSSCo 5%	HSS	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	HSSCo 5%	CARBIDE TIPPED	CARBIDE TIPPED	SOLID CARBIDE
SHARPENING										
POINT ANGLE	135°	135°	135°	130°	135°	135°	118°	118°	135°	135°
HELIX ANGLE	38° "S"	38° "S"	30° "N"	Ø ≥ 3	38° "S"	38° "S"	38° "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	€	€	€	€	€	€	€	€	€
16,50	184 x 125							137,82		
16,75	184 x 125									
17,00	184 x 125							103,50		
17,25	191 x 130									
17,50	191 x 130							154,54		
17,75	191 x 130									
18,00	191 x 130							113,83		
18,25	198 x 135									
18,50	198 x 135							184,24		
18,75	198 x 135									
19,00	198 x 135							138,34		
19,25	205 x 140									
19,50	205 x 140							209,68		
19,75	205 x 140									
20,00	205 x 140							157,45		
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									

Pink Twist drills for Metal

Ø 16,50-30mm

SOLID CARBIDE REINFORCED SHANK DRILLS WITH & WITHOUT INTERNAL COOLING

Twist drills for Metal

NEWRef. BC84
Ref. BC97**SOLID
CARBIDE****TOL D₁**
m7**TOL D₂**
h6**TiAlN****HARDOX
450****3xD****5xD**

Recommended for HARDOX 450

BC84

DIN 6537K	D ₁ mm	D ₂ mm	L ₁ mm	L ₂ mm	€
BC840100	1,00	3	47	6,0	52,37
BC840110	1,10	3	47	6,6	52,37
BC840120	1,20	3	47	7,2	55,67
BC840130	1,30	3	47	7,8	55,67
BC840140	1,40	3	47	8,4	55,67
BC840150	1,50	3	47	9,0	55,67
BC840160	1,60	3	47	9,6	58,71
BC840170	1,70	3	47	10,2	58,71
BC840180	1,80	3	52	10,8	58,71
BC840190	1,90	3	52	11,4	58,71
BC840200	2,00	4	59	12,0	66,44
BC840210	2,10	4	59	12,6	66,44
BC840220	2,20	4	59	13,2	66,44
BC840230	2,30	4	59	13,8	66,44
BC840240	2,40	4	59	14,4	71,62
BC840250	2,50	4	59	15,0	71,62
BC840260	2,60	4	59	15,6	71,62
BC840270	2,70	4	59	16,2	71,62
BC840280	2,80	4	59	16,8	74,15
BC840290	2,90	4	59	17,4	74,15

BC97

DIN 6537L	D ₁ mm	D ₂ mm	L ₁ mm	L ₂ mm	€
BC970100	1,00	3	47	8,0	53,11
BC970110	1,10	3	47	8,8	55,67
BC970120	1,20	3	52	10,8	58,71
BC970130	1,30	3	52	11,7	60,76
BC970140	1,40	3	52	12,6	60,76
BC970150	1,50	3	52	13,5	60,76
BC970160	1,60	3	52	14,4	66,44
BC970170	1,70	3	52	15,3	66,44
BC970180	1,80	3	52	16,2	66,44
BC970190	1,90	3	52	17,1	66,44
BC970200	2,00	4	63	18,0	74,15
BC970210	2,10	4	63	18,9	74,15
BC970220	2,20	4	63	19,8	74,15
BC970230	2,30	4	63	20,7	75,46
BC970240	2,40	4	63	21,6	77,99
BC970250	2,50	4	63	22,5	77,99
BC970260	2,60	4	67	23,4	80,52
BC970270	2,70	4	67	24,3	80,52
BC970280	2,80	4	67	25,2	83,14
BC970290	2,90	4	67	26,1	83,14

SOLID CARBIDE REINFORCED SHANK DRILLS WITH & WITHOUT INTERNAL COOLING

Ref. BC84
Ref. BC83

3xD

**DIN
6537K**

**SOLID
CARBIDE**

**TOL D1
m7**

**TOL D2
h6**







TiAlN

**HARDOX
450**



Recommended for HARDOX 450

BC84						BC83		BC84						BC83	
	D1 mm	D2 mm	L1 mm	L2 mm	€		€		D1 mm	D2 mm	L1 mm	L2 mm	€		€
BC840300	3,00	6	62	20	49,57	BC830300	87,80	BC840940	9,4	10	89	47	66,90	BC830940	116,83
BC840310	3,10	6	62	20	49,57	BC830310	87,80	BC840950	9,5	10	89	47	66,90	BC830950	116,83
BC840320	3,20	6	62	20	49,57	BC830320	87,80	BC840960	9,6	10	89	47	66,90	BC830960	116,83
BC840340	3,40	6	62	20	49,57	BC830300	87,80	BC840970	9,7	10	89	47	66,90	BC830970	116,83
BC840350	3,50	6	62	20	49,57	BC830350	87,80	BC840980	9,8	10	89	47	66,90	BC830980	116,83
BC840380	3,80	6	66	24	49,57	BC830380	87,80	BC840990	9,9	10	89	47	66,90	BC830990	116,83
BC840400	4,00	6	66	24	49,57	BC830400	87,80	BC841000	10,0	10	89	47	66,90	BC831000	116,83
BC840420	4,20	6	66	24	49,57	BC830420	87,80	BC841020	10,2	12	102	55	100,34	BC831020	166,96
BC840425	4,25	6	66	24	49,57	BC830425	87,80	BC841040	10,4	12	102	55	100,34	BC831040	166,96
BC840440	4,40	6	66	24	49,54	BC830440	87,80	BC841050	10,5	12	102	55	100,34	BC831050	166,96
BC840450	4,50	6	66	24	49,57	BC830450	87,80	BC841060	10,6	12	102	55	100,34	BC831060	166,96
BC840470	4,70	6	66	24	49,57	BC830470	87,80	BC841070	10,7	12	102	55	100,34	BC831070	166,96
BC840480	4,80	6	66	28	49,57	BC830480	87,80	BC841080	10,8	12	102	55	100,34	BC831080	166,96
BC840490	4,90	6	66	28	49,57	BC830490	87,80	BC841100	11,0	12	102	55	100,34	BC831100	166,96
BC840500	5,00	6	66	28	49,57	BC830500	87,80	BC841110	11,1	12	102	55	100,34	BC831110	166,96
BC840520	5,20	6	66	28	49,57	BC830520	87,80	BC841120	11,2	12	102	55	100,34	BC831120	166,96
BC840550	5,50	6	66	28	49,57	BC830550	87,80	BC841130	11,3	12	102	55	100,34	BC831130	166,96
BC840560	5,60	6	66	28	49,57	BC830560	87,80	BC841150	11,5	12	102	55	100,34	BC831150	166,96
BC840570	5,70	6	66	28	49,57	BC830570	87,80	BC841170	11,7	12	102	55	100,34	BC831170	166,96
BC840580	5,80	6	66	28	49,57	BC830580	87,80	BC841180	11,8	12	102	55	100,34	BC831180	166,96
BC840590	5,90	6	66	28	49,57	BC830590	87,80	BC841200	12,0	12	102	55	100,34	BC831200	166,96
BC840600	6,00	6	66	28	49,57	BC830600	87,80	BC841210	12,1	14	107	60	133,80	BC831210	232,31
BC840610	6,10	8	79	34	58,05	BC830610	104,30	BC841230	12,3	14	107	60	133,80	BC831230	232,31
BC840620	6,20	8	79	34	58,05	BC830620	104,30	BC841240	12,4	14	107	60	133,80	BC831240	232,31
BC840630	6,30	8	79	34	58,05	BC830630	104,30	BC841250	12,5	14	107	60	133,80	BC831250	232,31
BC840650	6,50	8	79	34	58,05	BC830650	104,30	BC841270	12,7	14	107	60	133,80	BC831270	232,31
BC840660	6,60	8	79	34	58,05	BC830660	104,30	BC841280	12,8	14	107	60	133,80	BC831280	232,31
BC840670	6,70	8	79	34	58,05	BC830670	104,30	BC841300	13,0	14	107	60	133,80	BC831300	232,31
BC840680	6,80	8	79	34	58,05	BC830680	104,30	BC841310	13,1	14	107	60	133,80	BC831310	232,31
BC840690	6,90	8	79	34	58,05	BC830690	104,30	BC841330	13,3	14	107	60	133,80	BC831330	232,31
BC840700	7,00	8	79	34	58,05	BC830700	104,30	BC841350	13,5	14	107	60	133,80	BC831350	232,31
BC840710	7,10	8	79	41	58,05	BC830710	104,30	BC841370	13,7	14	107	60	133,80	BC831370	232,31
BC840740	7,40	8	79	41	58,05	BC830740	104,30	BC841380	13,8	14	107	60	133,80	BC831380	232,31
BC840750	7,50	8	79	41	58,05	BC830750	104,30	BC841400	14,0	14	107	60	133,80	BC831400	232,31
BC840780	7,80	8	79	41	58,05	BC830780	104,30	BC841450	14,5	16	115	65	167,53	BC831450	287,49
BC840790	7,90	8	79	41	58,05	BC830790	104,30	BC841470	14,7	16	115	65	167,53	BC831470	287,49
BC840800	8,00	8	79	41	58,05	BC830800	104,30	BC841480	14,8	16	115	65	167,53	BC831480	287,49
BC840810	8,10	10	89	47	66,90	BC830810	116,83	BC841500	15,0	16	115	65	167,53	BC831500	287,49
BC840820	8,20	10	89	47	66,90	BC830820	116,83	BC841550	15,5	16	115	65	167,53	BC831550	287,49
BC840830	8,30	10	89	47	66,90	BC830830	116,83	BC841600	16,0	16	115	65	167,53	BC831600	287,49
BC840840	8,40	10	89	47	66,90	BC830840	116,83	BC841650	16,5	18	123	73	256,09	BC831650	453,30
BC840850	8,50	10	89	47	66,90	BC830850	116,83	BC841700	17,0	18	123	73	256,09	BC831700	453,30
BC840860	8,60	10	89	47	66,90	BC830860	116,83	BC841750	17,5	18	123	73	256,09	BC831750	453,30
BC840870	8,70	10	89	47	66,90	BC830870	116,83	BC841800	18,0	18	123	73	256,09	BC831800	453,30
BC840880	8,80	10	89	47	66,90	BC830880	116,83	BC841850	18,5	20	131	79	312,68	BC831850	498,14
BC840890	8,90	10	89	47	66,90	BC830890	116,83	BC841900	19,0	20	131	79	312,68	BC831900	498,14
BC840900	9,00	10	89	47	66,90	BC830900	116,83	BC841950	19,5	20	131	79	312,68	BC831950	498,14
BC840910	9,10	10	89	47	66,90	BC830910	116,83	BC842000	20,0	20	131	79	312,68	BC832000	498,14
BC840930	9,30	10	89	47	66,90	BC830930	116,83								



Twist drills for Metal

Pink

SOLID CARBIDE REINFORCED SHANK DRILLS WITH & WITHOUT INTERNAL COOLING

Twist drills for Metal

Pink

 Ref. BC97
 Ref. BC89

5xD
**DIN
6537L**
**SOLID
CARBIDE**
**TOL D1
m7**
**TOL D2
h6**





























































































































































TiAIN
**HARDOX
450**


Recommended for HARDOX 450



BC97

BC89

	BC97					BC89		BC97					BC89		
	D1 mm	D2 mm	L1 mm	L2 mm	€		€		D1 mm	D2 mm	L1 mm	L2 mm	€		€
BC970300	3,0	6	66	28	57,57		99,25		9,0	10	103	61	81,94		129,25
BC970310	3,1	6	66	28	57,57		99,25		9,1	10	103	61	81,94		129,25
BC970320	3,2	6	66	28	57,57		99,25		9,2	10	103	61	81,94		129,25
BC970340	3,4	6	66	28	57,57		99,25		9,3	10	103	61	81,94		129,25
BC970350	3,5	6	66	28	57,57		99,25		9,4	10	103	61	81,94		129,25
BC970360	3,6	6	66	28	57,57		99,25		9,5	10	103	61	81,94		129,25
BC970380	3,8	6	74	36	57,57		99,25		9,6	10	103	61	81,94		129,25
BC970390	3,9	6	74	36	57,57		99,25		9,7	10	103	61	81,94		129,25
BC970400	4,0	6	74	36	57,57		99,25		9,8	10	103	61	81,94		129,25
BC970420	4,2	6	74	36	57,57		99,25		9,9	10	103	61	81,94		129,25
BC970440	4,4	6	74	36	57,57		99,25		10,0	10	103	61	81,94		129,25
BC970450	4,5	6	74	36	57,57		99,25		10,1	12	118	71	117,96		184,04
BC970460	4,6	6	74	36	57,57		99,25		10,2	12	118	71	117,96		184,04
BC970470	4,7	6	74	36	57,57		99,25		10,4	12	118	71	117,96		184,04
BC970480	4,8	6	82	44	57,57		99,25		10,5	12	118	71	117,96		184,04
BC970490	4,9	6	82	44	57,57		99,25		10,6	12	118	71	117,96		184,04
BC970500	5,0	6	82	44	57,57		99,25		10,7	12	118	71	117,96		184,04
BC970520	5,2	6	82	44	57,57		99,25		10,8	12	118	71	117,96		184,04
BC970530	5,3	6	82	44	57,57		99,25		11,0	12	118	71	117,96		184,04
BC970540	5,4	6	82	44	57,57		99,25		11,1	12	118	71	117,96		184,04
BC970550	5,5	6	82	44	57,57		99,25		11,2	12	118	71	117,96		184,04
BC970560	5,6	6	82	44	57,57		99,25		11,3	12	118	71	117,96		184,04
BC970570	5,7	6	82	44	57,57		99,25		11,4	12	118	71	117,96		184,04
BC970580	5,8	6	82	44	57,57		99,25		11,5	12	118	71	117,96		184,04
BC970590	5,9	6	82	44	57,57		99,25		11,5	12	118	71	117,96		184,04
BC970600	6,0	6	82	44	57,57		99,25		11,5	12	118	71	117,96		184,04
BC970610	6,1	8	91	53	63,06		111,20		11,8	12	118	71	117,96		184,04
BC970620	6,2	8	91	53	63,06		111,20		12,0	12	118	71	117,96		184,04
BC970630	6,3	8	91	53	63,06		111,20		12,1	14	124	77	155,06		249,97
BC970640	6,4	8	91	53	63,06		111,20		12,3	14	124	77	155,06		249,97
BC970650	6,5	8	91	53	63,06		111,20		12,4	14	124	77	155,06		249,97
BC970660	6,6	8	91	53	63,06		111,20		12,5	14	124	77	155,06		249,97
BC970670	6,7	8	91	53	63,06		111,20		12,7	14	124	77	155,06		249,97
BC970680	6,8	8	91	53	63,06		111,20		13,0	14	124	77	155,06		249,97
BC970690	6,9	8	91	53	63,06		111,20		13,1	14	124	77	155,06		249,97
BC970700	7,0	8	91	53	63,06		111,20		13,3	14	124	77	155,06		249,97
BC970710	7,1	8	91	53	63,06		111,20		13,5	14	124	77	155,06		249,97
BC970720	7,2	8	91	53	63,06		111,20		13,7	14	124	77	155,06		249,97
BC970730	7,3	8	91	53	63,06		111,20		13,8	14	124	77	155,06		249,97
BC970740	7,4	8	91	53	63,06		111,20		14,0	14	124	77	155,06		249,97
BC970750	7,5	8	91	53	63,06		111,20		14,5	16	133	83	194,38		313,48
BC970760	7,6	8	91	53	63,06		111,20		14,7	16	133	83	194,38		313,48
BC970770	7,7	8	91	53	63,06		111,20		14,8	16	133	83	194,38		313,48
BC970780	7,8	8	91	53	63,06		111,20		15,0	16	133	83	194,38		313,48
BC970790	7,9	8	91	53	63,06		111,20		15,5	16	133	83	194,38		313,48
BC970800	8,0	8	91	53	63,06		111,20		15,8	16	133	83	194,38		313,48
BC970810	8,1	10	103	61	81,94		129,25		16,0	16	133	83	194,38		313,48
BC970830	8,3	10	103	61	81,94		129,25		16,5	18	143	93	323,79		494,93
BC970840	8,4	10	103	61	81,94		129,25		17,0	18	143	93	323,79		494,93
BC970850	8,5	10	103	61	81,94		129,25		17,5	18	143	93	323,79		494,93
BC970860	8,6	10	103	61	81,94		129,25		18,0	18	143	93	323,79		494,93
BC970870	8,7														

SOLID CARBIDE REINFORCED SHANK DRILLS WITH INTERNAL COOLING

Ref. BC96

7xD

SOLID CARBIDE

**TOL D1
m7**

**TOL D2
h6**

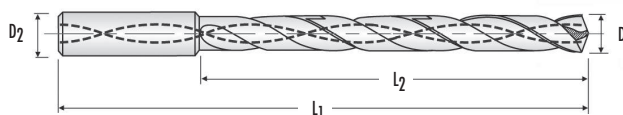


TiAIN

**HARDOX
450**

HIGH PERFORMANCE

Recommended for HARDOX 450



	BC96				
	D1 mm	D2 mm	L1 mm	L2 mm	€
BC960300	3,00	6	72	34	187,74
BC960320	3,20	6	72	34	187,74
BC960350	3,50	6	72	34	187,74
BC960380	3,80	6	81	43	187,74
BC960400	4,00	6	81	43	187,74
BC960420	4,20	6	81	43	187,74
BC960450	4,50	6	81	43	187,74
BC960480	4,80	6	95	57	187,74
BC960500	5,00	6	95	57	187,74
BC960520	5,20	6	95	57	187,74
BC960550	5,50	6	95	57	187,74
BC960560	5,60	6	95	57	187,74
BC960570	5,70	6	95	57	187,74
BC960580	5,80	6	95	57	187,74
BC960590	5,90	6	95	57	187,74
BC960600	6,00	6	95	57	187,74
BC960610	6,10	8	114	76	204,52
BC960620	6,20	8	114	76	204,52
BC960630	6,30	8	114	76	204,52
BC960650	6,50	8	114	76	204,52
BC960660	6,60	8	114	76	204,52
BC960680	6,80	8	114	76	204,52
BC960690	6,90	8	114	76	204,52
BC960700	7,00	8	114	76	204,52
BC960710	7,10	8	114	76	204,52
BC960740	7,40	8	114	76	204,52
BC960750	7,50	8	114	76	204,52
BC960780	7,80	8	114	76	204,52
BC960800	8,00	8	114	76	204,52
BC960810	8,10	10	142	95	276,93
BC960840	8,40	10	142	95	276,93
BC960850	8,50	10	142	95	276,93
BC960860	8,60	10	142	95	276,93
BC960870	8,70	10	142	95	276,93
BC960880	8,80	10	142	95	276,93
BC960900	9,00	10	131	87	276,93
BC960930	9,30	10	142	95	276,93
BC960950	9,50	10	142	95	276,93
BC960960	9,60	10	142	95	276,93
BC960980	9,80	10	142	95	276,93
BC961000	10,00	10	142	95	276,93
BC961020	10,20	12	162	114	365,08
BC961040	10,40	12	162	114	365,08
BC961050	10,50	12	162	114	365,08
BC961060	10,60	12	162	114	365,08
BC961080	10,80	12	162	114	365,08
BC961100	11,00	12	162	114	365,08
BC961120	11,20	12	162	114	365,08
BC961150	11,50	12	162	114	365,08
BC961180	11,80	12	162	114	365,08
BC961200	12,00	12	162	114	365,08



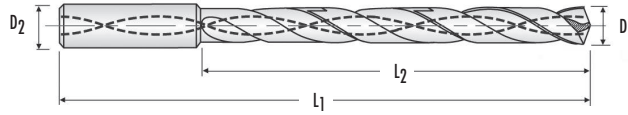
SOLID CARBIDE REINFORCED SHANK DRILLS WITH INTERNAL COOLING

Ref. BXX

12xD
**DIN
6537L**
**SOLID
CARBIDE**
**TOL D1
m7**
**TOL D2
h6**

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

Recommended for HARDOX 450



BXX					
	D1 mm	D2 mm	L1 mm	L2 mm	€
BXX0300	3,0	6	92	54	206,08
BXX0320	3,2	6	92	54	206,08
BXX0330	3,3	6	92	54	206,08
BXX0350	3,5	6	92	54	206,08
BXX0370	3,7	6	92	54	206,08
BXX0380	3,8	6	102	64	206,08
BXX0390	3,9	6	102	64	206,08
BXX0400	4,0	6	102	64	206,08
BXX0420	4,2	6	102	64	206,08
BXX0430	4,3	6	102	64	206,08
BXX0440	4,4	6	102	64	219,84
BXX0450	4,5	6	102	64	219,84
BXX0460	4,6	6	102	64	219,84
BXX0470	4,7	6	102	64	219,84
BXX0480	4,8	6	116	78	219,84
BXX0490	4,9	6	116	78	219,84
BXX0500	5,0	6	116	78	219,84
BXX0510	5,1	6	116	78	219,84
BXX0520	5,2	6	116	78	219,84
BXX0530	5,3	6	116	78	219,84
BXX0540	5,4	6	116	78	219,84
BXX0550	5,5	6	116	78	219,84
BXX0560	5,6	6	116	78	219,84
BXX0570	5,7	6	116	78	219,84
BXX0580	5,8	6	116	78	219,84
BXX0590	5,9	6	116	78	219,84
BXX0600	6,0	6	116	78	219,84
BXX0610	6,1	8	146	108	269,31
BXX0620	6,2	8	146	108	269,31
BXX0650	6,5	8	146	108	269,31
BXX0660	6,6	8	146	108	269,31
BXX0670	6,7	8	146	108	269,31
BXX0680	6,8	8	146	108	285,77
BXX0690	6,9	8	146	108	285,77
BXX0700	7,0	8	146	108	285,77

BXX					
	D1 mm	D2 mm	L1 mm	L2 mm	€
BXX0740	7,4	8	146	108	285,77
BXX0750	7,5	8	146	108	285,77
BXX0770	7,7	8	146	108	285,77
BXX0780	7,8	8	146	108	315,42
BXX0800	8,0	8	146	108	319,58
BXX0820	8,2	10	162	120	357,27
BXX0850	8,5	10	162	120	357,27
BXX0880	8,8	10	162	120	357,27
BXX0900	9,0	10	162	120	357,27
BXX0950	9,5	10	162	120	357,27
BXX0980	9,8	10	162	120	357,27
BXX0990	9,9	10	162	120	357,27
BXX1000	10,0	10	162	120	357,27
BXX1010	10,1	12	204	156	500,15
BXX1020	10,2	12	204	156	500,15
BXX1030	10,3	12	204	156	500,15
BXX1050	10,5	12	204	156	500,15
BXX1080	10,8	12	204	156	500,15
BXX1100	11,0	12	204	156	500,15
BXX1120	11,2	12	204	156	500,15
BXX1140	11,4	12	204	156	500,15
BXX1150	11,5	12	204	156	500,15
BXX1180	11,8	12	204	156	500,15
BXX1200	12,0	12	204	156	500,15
BXX1250	12,5	14	230	182	654,04
BXX1280	12,8	14	230	182	654,04
BXX1300	13,0	14	230	182	654,04
BXX1350	13,5	14	230	182	654,04
BXX1380	13,8	14	230	182	654,04
BXX1400	14,0	14	230	182	654,04
BXX1450	14,5	16	260	208	851,85
BXX1500	15,0	16	260	208	851,85
BXX1550	15,5	16	260	208	851,85
BXX1600	16,0	16	260	208	851,85



SOLID CARBIDE REINFORCED SHANK DRILLS WITH INTERNAL COOLING

Ref. BXL
Ref. BXXL

DIN 6537L

SOLID CARBIDE

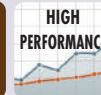
TOL D1 m7

TOL D2 h6

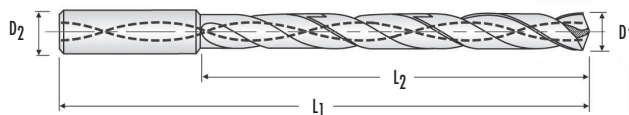


TiAIN

HARDOX 450



Recommended for HARDOX 450



15xD

	D1 mm	D2 mm	L1 mm	L2 mm	BXL €
BXL0300	3,0	6	100	60	279,60
BXL0320	3,2	6	100	60	279,60
BXL0330	3,3	6	100	60	279,60
BXL0350	3,5	6	100	60	279,60
BXL0380	3,8	6	108	68	279,60
BXL0390	3,9	6	108	68	279,60
BXL0400	4,0	6	108	68	279,60
BXL0420	4,2	6	115	78	311,34
BXL0450	4,5	6	115	78	311,34
BXL0500	5,0	6	125	84	320,02
BXL0550	5,5	6	130	92	325,63
BXL0590	5,9	6	140	100	325,63
BXL0600	6,0	6	140	100	325,63
BXL0650	6,5	8	145	108	427,81
BXL0680	6,8	8	170	130	486,52
BXL0700	7,0	8	170	130	486,52
BXL0750	7,5	8	170	130	486,52
BXL0780	7,8	8	170	130	486,52
BXL0800	8,0	8	170	130	486,52
BXL0850	8,5	10	208	163	659,68
BXL0900	9,0	10	208	163	659,68
BXL0950	9,5	10	208	163	659,68
BXL0980	9,8	10	208	163	659,68
BXL1000	10,0	10	208	163	659,68
BXL1050	10,5	12	245	195	847,76
BXL1100	11,0	12	245	195	847,76
BXL1150	11,5	12	245	195	847,76
BXL1180	11,8	12	245	195	847,76
BXL1200	12,0	12	245	195	847,76
BXL1250	12,5	14	280	230	1.161,34
BXL1300	13,0	14	280	230	1.161,34
BXL1400	14,0	14	280	230	1.161,34
BXL1500	15,0	16	310	260	1.414,23

20xD

	D1 mm	D2 mm	L1 mm	L2 mm	BXXL €
BXXL0300	3,0	6	110	70	307,56
BXXL0350	3,5	6	136	96	307,56
BXXL0400	4,0	6	136	96	307,56
BXXL0450	4,5	6	158	118	342,47
BXXL0500	5,0	6	158	118	352,02
BXXL0510	5,1	6	180	140	358,19
BXXL0550	5,5	6	180	140	358,19
BXXL0600	6,0	6	180	140	358,19
BXXL0650	6,5	8	202	162	470,59
BXXL0700	7,0	8	202	162	535,17
BXXL0750	7,5	8	223	183	535,17
BXXL0800	8,0	8	223	183	535,17
BXXL0850	8,5	10	249	205	725,65
BXXL0900	9,0	10	249	205	725,65
BXXL1000	10,0	10	271	227	725,65



BXL

BXXL

Twist drills for Metal

Pink

NEW

MICRO DRILLS WITH REINFORCED SHANK

Ref. BC30

HSS



5xD

BC30				
	D ₁ mm	L ₁ mm	L ₂ mm	€
BC300050	0,50	43	5	3,37
BC300060	0,60	43	7	3,37
BC300070	0,70	43	7	3,37
BC300075	0,75	43	7	3,37
BC300080	0,80	43	7	3,37
BC300090	0,90	43	7	3,37
BC300095	0,95	43	7	3,37
BC300100	1,00	43	7	3,37
BC300110	1,10	43	7	3,37
BC300120	1,20	43	10	3,37
BC300125	1,25	43	10	3,37
BC300130	1,30	43	10	3,37

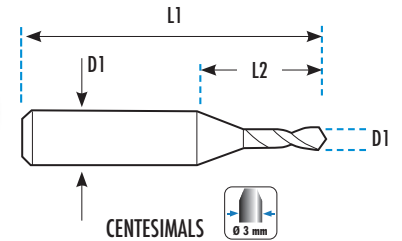
BC30				
	D ₁ mm	L ₁ mm	L ₂ mm	€
BC300140	1,40	43	10	3,37
BC300150	1,50	43	10	3,37
BC300160	1,60	43	10	3,37
BC300170	1,70	43	10	3,37
BC300175	1,75	43	10	3,37
BC300180	1,80	43	10	3,37
BC300190	1,90	43	10	3,37
BC300200	2,00	43	10	3,37
BC300210	2,10	43	10	3,37
BC300220	2,20	43	10	3,37
BC300225	2,25	43	10	3,37
BC300235	2,35	43	10	3,37
BC300240	2,40	43	10	3,37



Ref. BC79

SOLID
CARBIDE

5xD



BC79				
	D ₁ mm	L ₁ mm	L ₂ mm	€
BC790025	0,25	38	5	28,84
BC790030	0,30	38	5	28,84
BC790035	0,35	38	5	28,84
BC790040	0,40	38	5	20,96
BC790045	0,45	38	5	20,96
BC790050	0,50	38	5	15,29
BC790055	0,55	38	5	15,29
BC790060	0,60	38	5	15,29
BC790065	0,65	38	5	13,80
BC790070	0,70	38	10	13,80
BC790075	0,75	38	10	13,80
BC790080	0,80	38	10	13,80
BC790085	0,85	38	10	13,80
BC790090	0,90	38	10	13,80
BC790095	0,95	38	10	13,80
BC790100	1,00	38	10	13,80
BC790105	1,05	38	10	13,80
BC790110	1,10	38	10	13,80
BC790115	1,15	38	10	13,80
BC790120	1,20	38	10	13,80
BC790125	1,25	38	10	13,80
BC790130	1,30	38	10	13,80
BC790135	1,35	38	10	13,80
BC790140	1,40	38	10	13,80
BC790145	1,45	38	10	13,80
BC790150	1,50	38	10	13,80
BC790155	1,55	38	10	13,80
BC790160	1,60	38	10	13,80
BC790165	1,65	38	10	17,33
BC790170	1,70	38	10	17,33

BC79				
	D ₁ mm	L ₁ mm	L ₂ mm	€
BC790175	1,75	38	10	17,33
BC790180	1,80	38	10	17,33
BC790185	1,85	38	10	17,33
BC790190	1,90	38	10	17,33
BC790195	1,95	38	10	17,33
BC790200	2,00	38	10	17,33
BC790205	2,05	38	10	17,33
BC790210	2,10	38	10	17,33
BC790215	2,15	38	10	17,33
BC790220	2,20	38	10	17,33
BC790225	2,25	38	10	17,33
BC790230	2,30	38	10	17,33
BC790235	2,35	38	10	17,33
BC790240	2,40	38	10	17,33
BC790245	2,45	38	10	17,33
BC790250	2,50	38	10	17,33
BC790255	2,55	38	10	17,33
BC790260	2,60	38	10	17,33
BC790265	2,65	38	10	17,33
BC790270	2,70	38	10	17,33
BC790275	2,75	38	10	17,33
BC790280	2,80	38	10	17,33
BC790285	2,85	38	10	17,33
BC790290	2,90	38	10	17,33
BC790295	2,95	38	10	17,33
BC790300	3,00	38	10	17,33
BC790305	3,05	38	10	17,33
BC790310	3,10	38	10	17,33
BC790315	3,15	38	10	17,33

BC79	
D ₁ mm	€
0,10 - 0,39	28,84
0,41 - 0,89	21,51
0,91 - 1,19	21,51
1,21 - 1,39	23,22
1,41 - 1,89	23,22
1,91 - 2,19	23,22
2,21 - 2,39	24,20
2,41 - 2,89	24,20
2,91 - 2,99	24,20



SOLID CARBIDE DRILLS FOR HARDENED AND HIGH RESISTANCE STEEL

Ref. BC85

**70
HRC**

**SOLID
CARBIDE**

**TOL D1
h7**

**TOL D2
h6**

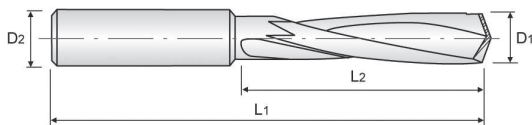


TiAIN

**HARDOX
600**



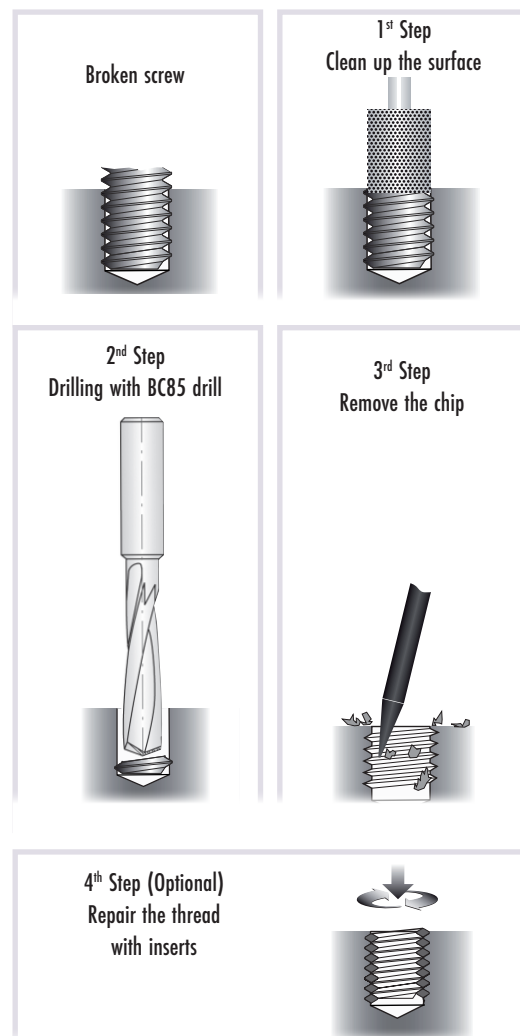
Recommended for HARDOX 600



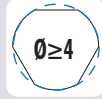
	BC85				
	D1 mm	D2 mm	L1 mm	L2 mm	€
BC850300	3,0	3	46	16	49,79
BC850330	3,3	4	48	18	57,14
BC850340	3,4	4	50	20	57,14
BC850350	3,5	4	50	20	57,14
BC850400	4,0	4	52	22	58,30
BC850420	4,2	6	65	25	82,78
BC850430	4,3	6	68	28	82,78
BC850440	4,4	6	68	28	82,78
BC850450	4,5	6	68	28	82,78
BC850500	5,0	6	72	32	82,78
BC850510	5,1	6	72	32	82,78
BC850520	5,2	6	72	32	82,78
BC850550	5,5	6	75	35	82,78
BC850600	6,0	6	75	35	82,78
BC850630	6,3	8	80	40	102,69*
BC850650	6,5	8	80	40	102,69
BC850680	6,8	8	85	45	102,69
BC850690	6,9	8	85	45	102,69
BC850700	7,0	8	85	45	102,69
BC850750	7,5	8	85	45	102,69
BC850800	8,0	8	98	50	102,69
BC850850	8,5	10	98	50	156,94
BC850860	8,6	10	105	57	156,94
BC850880	8,8	10	105	57	156,94
BC850900	9,0	10	105	57	156,94
BC850950	9,5	10	105	57	156,94
BC851000	10,0	10	111	63	156,94
BC851020	10,2	12	111	63	203,26
BC851030	10,3	12	111	63	238,49
BC851040	10,4	12	111	63	238,49
BC851050	10,5	12	111	63	238,49
BC851080	10,8	12	119	71	238,49
BC851100	11,0	12	119	71	238,49
BC851150	11,5	12	119	71	238,49
BC851200	12,0	12	119	71	238,49
BC851400	14,0	14	125	77	271,01

* Till end of stock

DRILLING THROUGH BROKEN SCREWS



STEP CUT DRILL FOR EASY DRILLING IN CURVED AND UNSTABLE SURFACES
**DIN
338**
HSS

 $\varnothing \geq 2,5\text{mm}$

Al

Cu - Ni - Zn

PVC


Ref. TK02

STEP CUT


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

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

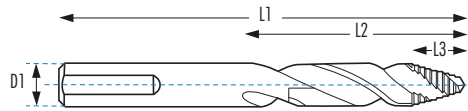
Work in a comfortable, fast and accurate way in curved, unstable or sloping surfaces.


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...



	TK02					
	D1 mm	L1 mm	L2 mm	L3 mm		€
TK020100	1,0	34	12	-	10	3,42
TK020150	1,5	40	18	-	10	3,52
TK020200	2,0	49	24	-	10	3,67
TK020250	2,5	57	30	1,6	10	4,27
TK020300	3,0	61	33	1,9	10	4,48
TK020320	3,2	65	36	2,1	10	5,36
TK020330	3,3	65	36	2,2	10	5,36
TK020350	3,5	70	39	2,1	10	5,36
TK020400	4,0	75	43	2,9	10	6,34
TK020410	4,1	75	43	3,0	10	6,97
TK020420	4,2	75	43	3,0	10	6,97
TK020450	4,5	80	47	3,3	10	6,97
TK020490	4,9	76	52	3,8	10	6,97
TK020500	5,0	76	52	3,9	10	7,87
TK020510	5,1	76	52	4,0	10	8,26
TK020520	5,2	76	52	4,2	10	8,26
TK020550	5,5	93	57	4,6	10	8,33
TK020600	6,0	93	57	5,3	10	9,08
TK020650	6,5	101	63	5,8	10	10,59
TK020680	6,8	109	69	5,9	10	11,57
TK020700	7,0	109	69	6,4	10	12,11
TK020750	7,5	109	69	6,9	10	14,16
TK020800	8,0	117	75	7,6	10	14,63
TK020850	8,5	117	75	8,2	10	17,36
TK020900	9,0	125	81	8,8	10	19,17
TK020950	9,5	125	81	9,3	10	20,68
TK021000	10,0	133	87	10,0	10	22,05
TK021020	10,2	133	87	9,9	10	23,33
TK021050	10,5	133	87	10,7	10	24,02
TK021100	11,0	142	94	11,3	6	26,52
TK021150	11,5	142	94	12,0	6	28,85
TK021200	12,0	151	101	12,6	6	31,48
TK021250	12,5	151	101	13,8	6	33,50
TK021300	13,0	151	101	14,7	6	36,11



STEP CUT DRILL FOR EASY DRILLING IN CURVED AND UNSTABLE SURFACES

Ref. TK05

DIN 338

HSSCo 5%



INOX



CAST IRON

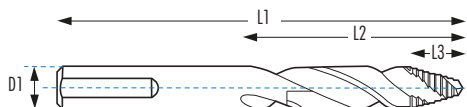
Cu - Ni - Zn


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, ...



	TK05					
	D1 mm	L1 mm	L2 mm	L3 mm		€
TK050100	1,0	34	12	-	10	4,61
TK050150	1,5	40	18	-	10	4,76
TK050200	2,0	49	24	-	10	4,95
TK050250	2,5	57	30	1,6	10	5,77
TK050300	3,0	61	33	1,9	10	6,06
TK050350	3,5	70	39	2,1	10	7,23
TK050400	4,0	75	43	2,9	10	8,57
TK050450	4,5	80	47	3,3	10	9,41
TK050500	5,0	76	52	3,9	10	10,62
TK050550	5,5	93	57	4,6	10	11,25
TK050600	6,0	93	57	5,3	10	11,35
TK050650	6,5	101	63	5,8	10	13,24
TK050700	7,0	109	69	6,4	10	15,14
TK050750	7,5	109	69	6,9	10	17,71
TK050800	8,0	117	75	7,6	10	18,28
TK050850	8,5	117	75	8,2	10	21,70
TK050900	9,0	125	81	8,8	10	23,96
TK050950	9,5	125	81	9,3	10	25,85
TK051000	10,0	133	87	10,0	10	25,36
TK051050	10,5	133	87	10,7	10	27,61
TK051100	11,0	142	94	11,3	6	30,51
TK051150	11,5	142	94	12,0	6	33,18
TK051200	12,0	151	101	12,6	6	36,19
TK051250	12,5	151	101	13,8	6	38,51
TK051300	13,0	151	101	14,7	6	41,53



STEP CUT TOOLS FOR EASY DRILLING IN CURVED AND UNSTABLE SURFACES

Twist drills for Metal

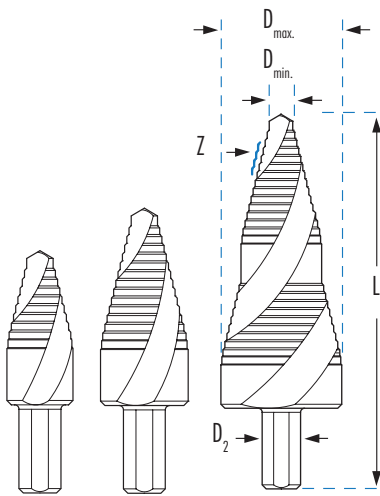
NEW
HSS

HSS STEP CUT MICRO STEP DRILL

NEW
STEP CUT



STEP 2 mm



AV40BM37

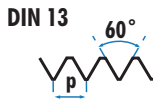
AV40BM38

AV40BM36

							AV40BM
	D min. mm	D max. mm	D2 mm	L1 mm	Z	Ø Z mm min - max	HSS
							€
AV40BM37B	6,0	15,0	9,5	55	11	6-7-8-9-10-11-12-13-14-14,5-15	27,75
AV40BM38B	6,0	20,0	9,5	65	16	6-7-8-9-10-11-12-13-14-15-16-17-18-19-19,5-20	41,49
AV40BM36B	6,0	30,0	9,5	93	27	6-7-8-9-10-11-12-13-14-15-16-17-18-19-19,5-20-21-22-23-24-25-26-27-28-29-29,5-30	102,31

HSSCo STEP CUT DRILL-TAP WITH COUNTERSINK

NEW



DIN 13

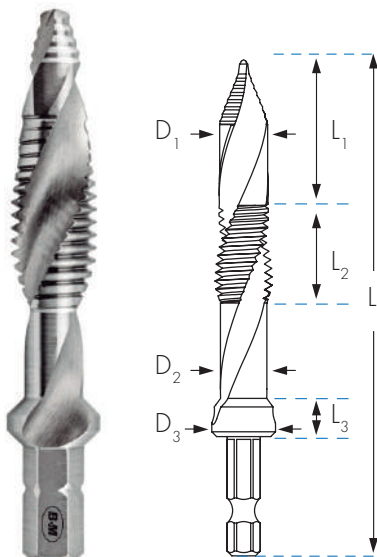
HSSCo
5%

BRIGHT

TOL
6H

D
REDUCED
SHANK

STEP CUT

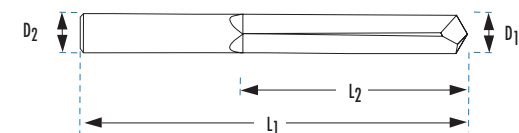


									MTKM	
			L1 mm	L2 mm	L3 mm	L mm	D1 mm	D2 mm	D3 mm	€
M	3x0,50	D	7,5	6,0	6,0	52,0	2,5	2,2	7,3	28,21
M	4x0,70	D	10,0	8,4	6,0	56,4	3,3	3,0	7,3	28,21
M	5x0,80	D	13,0	9,5	6,0	63,5	4,2	3,7	7,3	29,44
M	6x1,00	D	15,0	12,0	6,0	68,0	5,0	4,5	7,3	30,66
M	8x1,25	D	20,0	15,0	6,0	81,0	6,8	6,3	9,4	42,38
M	10x1,50	D	25,0	18,0	6,0	89,0	8,5	8,0	11,4	51,14
M	12x1,75	D	30,0	21,0	8,0	104,0	10,3	9,8	13,4	56,36

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	61,93

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

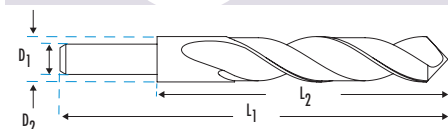


NON-SPARKING DRILL BIT (ATEX)

Ref. BACH

22 HRC

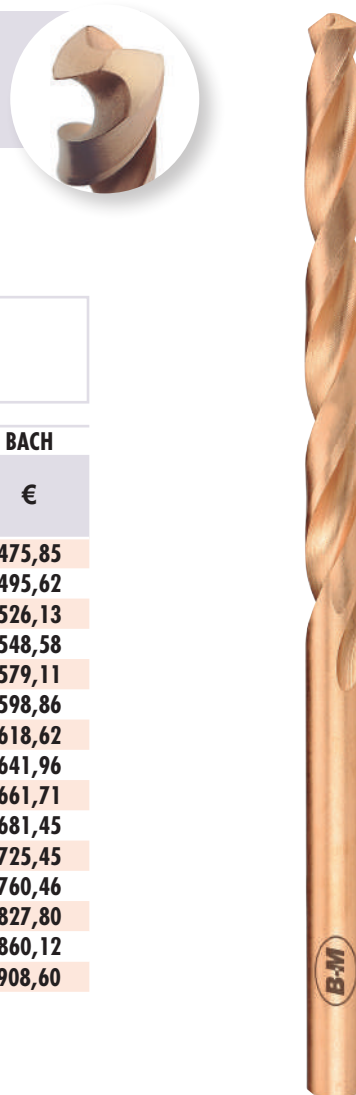
Cu-Be



* 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	475,85
BACH0700	7,0	7,0	120	80	495,62
BACH0800	8,0	8,0	140	80	526,13
BACH0900	9,0	9,0	160	86	548,58
BACH1000	10,0	10,0	180	108	579,11
BACH1100	11,0	11,0	200	125	598,86
BACH1200	12,0	12,0	220	135	618,62
BACH1300	13,0	12,0	240	150	641,96
BACH1400	14,0	12,0	260	160	661,71
BACH1500	15,0	12,0	280	190	681,45
BACH1600	16,0	12,0	300	195	725,45
BACH1700	17,0	12,0	300	195	760,46
BACH1800	18,0	12,0	320	195	827,80
BACH1900	19,0	12,0	320	205	860,12
BACH2000	20,0	12,0	330	205	908,60

* Special lengths available on request

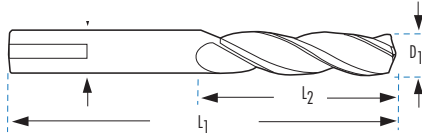


Due to its hardness (inferior compared with HSS Tools), non-sparking drill bits can not be guaranteed against deformation or breaking. We'll only accept to replace only non-sparking drill bits with hardness less than 35 HRC.

3 FLUTE DELTABIT DRILL BIT
3Z

Ref. BTT33

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

**TOL
H8**


- 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	2,63
BTT330330	3,3	65	36	3,40
BTT330350	3,5	70	39	3,40
BTT330400	4,0	75	43	3,99
BTT330420	4,2	75	43	4,92
BTT330450	4,5	80	47	4,92
BTT330500	5,0	86	52	5,62
BTT330550	5,5	93	57	6,98
BTT330600	6,0	93	57	8,06
BTT330650	6,5	101	63	9,27
BTT330680	6,8	109	69	10,67
BTT330700	7,0	109	69	10,67
BTT330750	7,5	109	69	12,17
BTT330800	8,0	117	75	14,55
BTT330850	8,5	117	75	16,19
BTT330900	9,0	125	81	18,78
BTT330950	9,5	125	81	20,45
BTT331000	10,0	133	87	23,04
BTT331020	10,2	133	87	25,66
BTT331050	10,5	133	87	25,66
BTT331100	11,0	142	94	29,54
BTT331150	11,5	142	94	31,95
BTT331200	12,0	151	101	36,96
BTT331250	12,5	151	101	39,55
BTT331300	13,0	151	101	42,14



SPECIAL DRILL FOR HARDOX AND WEAR-RESISTANCE SHEETS

Ref. BHA

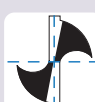
3xD

DIN 338

HSSCo 8%



135°



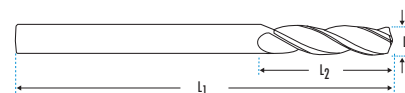
HARDTOP

HARDOX 400

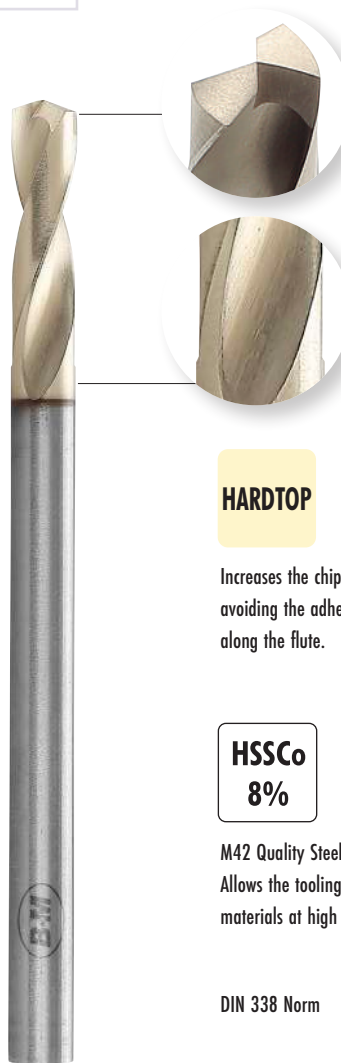
HARDOX 450

HARDOX 600

Special point geometry, with Split point and double facet relief.
 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			
	D1 mm	L1 mm	L2 mm	€
BHA0100	1,0	34	6	12,02
BHA0150	1,5	40	9	12,02
BHA0200	2,0	49	12	12,49
BHA0250	2,5	57	14	12,73
BHA0300	3,0	61	16	12,84
BHA0320	3,2	65	18	13,67
BHA0330	3,3	65	18	13,67
BHA0350	3,5	70	20	13,67
BHA0400	4,0	75	22	14,52
BHA0420	4,2	75	22	18,93
BHA0450	4,5	80	24	18,93
BHA0500	5,0	86	26	17,94
BHA0550	5,5	93	28	24,24
BHA0600	6,0	93	28	22,71
BHA0650	6,5	101	31	26,18
BHA0680	6,8	109	34	30,41
BHA0700	7,0	109	34	28,03
BHA0750	7,5	109	34	33,57
BHA0800	8,0	117	37	36,50
BHA0850	8,5	117	37	36,50
BHA0900	9,0	125	40	43,70
BHA0950	9,5	125	40	49,33
BHA1000	10,0	133	43	47,85
BHA1020	10,2	133	43	55,67
BHA1050	10,5	133	43	60,13
BHA1100	11,0	142	47	62,57
BHA1150	11,5	142	47	70,45
BHA1200	12,0	151	51	65,62
BHA1250	12,5	151	51	86,20
BHA1300	13,0	151	51	93,94



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

	BHA			
	Hardox® HiTuf	Hardox® 400	Hardox® 450	Hardox® 600
Cutting speed (m/min)	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

DIN 340		DIN 1897						DIN 1897									
		BC4	BC47	BC40	BC44	BC48	BC78										
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°	135°	118°	118°	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																	
Ø mm	L1 x L2	€	€	€	€	€	€	L1 x L2	€	€	€	€	€	€	€	€	€
2,75	100x66	4,10						46x16	1,10	2,39	2,66						
2,80	100x66	3,99			10,82			46x16	1,29	2,32	2,84			14,75			
2,90	100x66	3,99			10,80			46x16	1,29	2,32	2,84			14,75			
3,00	100x66	2,78	5,45	4,10	8,64	10,95	32,34	46x16	1,10	1,98	2,66	3,76	4,89	19,15	13,39	2,05	
3,10	106x69	3,09	6,16	4,78	9,91	12,85		49x18	1,19	2,07	3,04	4,19			14,99	2,05	
3,20	106x69	3,09	6,17		9,94	12,77		49x18	1,19	2,07	3,04	4,19			14,99	2,05	
3,25	106x69	3,09	6,16	4,78				49x18	1,19	2,07	3,04			25,20		2,05	2,95
3,30	106x69	3,09			9,96	12,74		49x18	1,21	2,07	3,05	4,19	6,05		14,99	2,05	
3,40	112x73	4,00			12,61			52x20	1,35	2,55	3,19	4,06		25,20	16,12	2,30	
3,50	112x73	2,93	6,43	4,57	10,27	13,13	30,97	52x20	1,19	2,07	3,04	4,43	6,02	19,15	15,03	2,30	3,65
3,60	112x73	4,00			11,97			52x20	1,50	2,55	3,35	5,10			17,73		
3,70	112x73	4,00			12,41			52x20	1,50	2,55	3,35	5,10	6,73		17,73		
3,75	112x73	4,13	7,33	5,80				52x20	1,32	2,64	3,17						2,62
3,80	119x78	4,96			14,91			55x22	1,50	2,55	3,35	5,11			19,07	2,52	
3,90	119x78	4,96	7,32		13,17			55x22	1,50	2,55	3,35	5,11			19,07		
4,00	119x78	3,17	6,63	4,84	10,54	13,47	32,09	55x22	1,32	2,34	3,17	4,90	6,27	19,11	17,82	2,33	3,74
4,10	119x78	4,14	7,44		11,69	14,50		55x22	1,57	2,79	3,42	5,34			20,02	2,52	
4,20	119x78	4,14	7,44		11,71	14,61		55x22	1,57	2,79	3,42	5,40	6,87	22,40	20,02	2,52	
4,25	119x78	4,14	7,30	5,80				55x22	1,57	2,79	3,42					2,52	
4,30	126x82	5,38		5,80	13,04	15,81		58x24	1,79	3,18	3,65	5,73			21,24		
4,40	126x82	5,38			13,58			58x24	1,79	3,18	3,65	5,92			21,24		
4,50	126x82	3,78	8,15	5,49	12,93	15,92	32,80	58x24	1,57	2,79	3,42	5,50	6,97	20,93	20,62	2,62	
4,60	126x82	5,34			17,46			58x24	2,03	3,34	3,88	6,60			21,24		
4,70	126x82	5,34			12,96			58x24	2,03	3,34	3,88	6,34			22,76		
4,75	126x82	5,58	8,18	7,25				58x24	1,74	3,10	3,59					4,21	
4,80	132x87	6,19	8,32		13,58			62x26	2,03	3,34	3,88	6,46			22,76		
4,90	132x87	6,19			18,83			62x26	2,03	3,34	3,88	6,60			22,76		
5,00	132x87	4,07	8,15	5,72	13,12	15,92	33,10	62x26	1,74	3,09	3,59	6,00	7,34	22,63	21,82	2,99	4,77
5,10	132x87	6,19	8,98		15,23	18,08		62x26	2,22	3,79	4,08	6,91		28,79	22,76	4,05	
5,20	132x87	6,19			15,27		35,91	62x26	2,21	3,76	4,07	7,12			29,48	4,05	
5,25	132x87	6,46	9,67	8,09				62x26	1,93	3,44	3,78					4,21	
5,30	132x87	6,74			15,86	18,72		62x26	2,24	3,76	4,09	7,29			29,48		
5,40	139x91	6,74			22,10			66x28	2,24	3,76	4,09	7,51			29,48		
5,50	139x91	5,36	11,20	6,99	17,71	20,56	35,92	66x28	1,93	3,44	3,78	7,13	8,55	27,05	28,61	3,61	
5,60	139x91	6,75			18,19			66x28	2,55	4,01	4,41	7,89			31,32		
5,70	139x91	6,75		8,64	14,45			66x28	2,58	4,01	4,43	8,15		30,05	31,32		
5,75	139x91	7,01	11,27	8,64				66x28	2,16	4,16	4,01					5,01	
5,80	139x91	7,41	11,26		18,54			66x28	2,55	4,01	4,41	7,90			31,32		
5,90	139x91	7,41			18,88			66x28	2,58	4,01	4,43	7,88			31,32		
6,00	139x91	4,94	11,20	6,56	17,79	20,72	35,89	66x28	2,20	3,91	4,06	7,61	8,97	29,57	31,87	4,07	
6,10	148x97	7,41			24,88			70x31	3,01	5,06	5,82	9,29		30,83	39,00		
6,20	148x97	7,41			23,24			70x31	3,01	5,06	5,82	9,15			39,00		
6,25	148x97	7,71		10,11				70x31	2,62	5,22	5,42						
6,30	148x97	7,50						70x31	3,01	5,06	5,82	9,50			39,00		
6,40	148x97	7,50						70x31	3,01	5,03	5,82	9,51			39,00		
6,50	148x97	6,37	12,86	10,74	20,53	28,07	38,63	70x31	2,61	4,67	7,56	9,17	13,68	30,91	37,50		
6,60	148x97	7,50						74x34	3,50	6,31	8,47	10,69			45,88		
6,70	148x97	7,50			19,29			74x34	3,50	6,31	8,47	10,69			45,88		
6,75	156x102	7,81	14,81	12,12				74x34	2,98	6,51	7,93						
6,80	156x102	7,77			23,84	31,53		74x34	3,04	6,49	8,00	10,51	16,88	39,00	45,88		
6,90	156x102	7,96						74x34	3,34					34,39	45,88		

TWIST DRILLS, LONG AND EXTRA SHORT SERIES

Twist drills for Metal

Pink



		BC4	BC47	BC40	BC44	BC48	BC78										
		HSS	HSSCo 5%	HSS	HSSCo 5%	HSSCo 5%	CARBIDE TIPPED										
		118°	135°	118°	135°	135°	118°										
		30° "N"	30° "N"	30° "N"	38° "5"	38° "5"	30° "N"										
		OX	GOLD	TiN	BRIGHT	TiAlN	BRIGHT										
		70 Kg/mm²	120 Kg/mm²	PRODUCTION	INOX	INOX	CAST IRON										
		70 Kg/mm²	120 Kg/mm²	PRODUCTION	INOX	INOX Plus	CAST IRON	HIGH PERFORMANCE	70 Kg/mm²	120 Kg/mm²					70 Kg/mm²	120 Kg/mm²	
Ø mm	L1 x L2	€	€	€	€	€	€	L1 x L2	€	€	€	€	€	€	€	€	€
7,00	156x102	7,41	15,01	11,86	23,94	32,01	38,63	74x34	3,04	5,35	8,00	10,49	14,71	33,96	44,07	5,30	
7,10	156x102	7,96						74x34							55,89		
7,20	156x102	7,96			29,09			74x34	3,93						54,82		
7,25	156x102	8,30						74x34	3,44	6,97	8,39						
7,30	156x102	8,14			29,08			74x34		6,96					55,89		
7,40	156x102	8,14						74x34							55,89		
7,50	156x102	7,90	15,94	12,29	25,52	33,48	44,01	74x34	3,44	6,51	8,39	12,50	17,41	35,69	49,44		
7,60	165x109	8,14						79x37		7,54					61,87		
7,70	165x109	8,14						79x37		7,54					63,08		
7,75	165x109	8,46		11,92				79x37	3,79	7,54	8,76						
7,80	165x109	9,11			35,08			79x37	4,34	7,78	9,29	13,61	26,38		61,87		
7,90	165x109	9,11						79x37		7,78					61,87		
8,00	165x109	8,72	17,66	13,24	28,34	36,06	44,01	79x37	3,75	6,74	8,70	13,09	17,20	38,07	57,98	6,54	
8,10	165x109	9,11						79x37						42,34	75,44		
8,20	165x109	9,11			31,87			79x37							76,92		
8,25	165x109	9,46						79x37	4,51	8,88	9,47						
8,30	165x109	13,88						79x37							76,92		
8,40	165x109	14,00						79x37							76,92		
8,50	165x109	9,80	19,79	14,98	31,35	40,93	55,69	79x37	4,51	7,97	9,47	15,24	20,38	41,78	74,35		
8,60	175x115	14,00						84x40		9,65				43,38	81,86		
8,70	175x115	14,00						84x40							83,45		
8,75	175x115	14,54		15,30				84x40	4,92	9,64	9,89						
8,80	175x115	14,30			34,04			84x40							81,86		
8,90	175x115	14,30						84x40							83,45		
9,00	175x115	10,62	21,43	15,75	34,42	43,63	48,67	84x40	4,88	8,76	10,67	16,56	21,62	44,52	70,20		

TWIST DRILLS, LONG AND EXTRA SHORT SERIES

Twist drills for Metal

Pink



		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																		
SHARPENING																									
POINT ANGLE		118°	135°	118°	135°	135°	118°																		
HELIX ANGLE		30° "N"	30° "N"	30° "N"	38° "5"	38° "5"	30° "N"																		
COATING		OX	GOLD	TiN	BRIGHT	TiAlN	BRIGHT																		
APPLICATION				PRODUCTION	INOX	INOX	CAST IRON																		
Ø mm	L1 x L2	€	€	€	€	€	€	L1 x L2	€	€	€	€	€	€	€	€	€	€	€	€	€	€	€	€	
14,00	214x140	28,69					100,99	107x54	15,23	27,06	30,11	50,06							95,68	194,64					
14,25	220x144	51,70																							
14,50	220x144	33,56						111x56	17,53	37,54	32,41	63,35									318,61				
14,75	220x144	51,70																							
15,00	220x144	32,49					109,79	111x56	20,05	38,12	34,94	59,96							118,22	209,10					
15,25	227x149	58,32																							
15,50	227x149	48,20						115x58	24,15	44,08	39,04	69,31									383,52				
15,75	227x149	58,35																							
16,00	227x149	37,81					135,85	115x58	24,15	45,71	39,04	70,55							137,13	259,90					
16,25	235x154	64,38																							
16,50	235x154	44,74						119x60	28,41	52,28	48,25														
16,75	235x154	64,38																							
17,00	235x154	44,94					173,13	119x60	28,41	52,28	48,25														
17,25	241x158	74,02																							
17,50	241x158	66,40						123x62	31,64	57,91	51,48														
17,75	241x158	86,47																							
18,00	241x158	46,84					181,15	123x62	31,64	63,09	54,79														
18,25	247x162	90,41																							
18,50	247x162	72,54						127x64	35,26	69,66	58,40														
18,75	247x162	125,91																							
19,00	247x162	58,74						127x64	35,26	69,66	58,40														
19,25	254x166	130,96																							
19,50	254x166	112,95						131x66	42,26	77,26	68,71														
19,75	254x166	127,56																							
20,00	254x166	65,91					251,29	131x66	42,26	82,79	68,71										653,21				

TWIST DRILLS, EXTRA-LONG SERIES, DIN 1869 I/II/III

**DIN
1869
I/II/III**



		BC8	BC88
MATERIAL		HSS	HSSCo 5%
SHARPENING			
POINT ANGLE		 118°	 135°
HELIX ANGLE		 30° "N"	 38° "S"
COATING		OX	BRIGHT
APPLICATION		 70 Kg/mm²	INOX
Ø mm	L1 x L2	€	€
0,50	50x25	13,35	
0,60	60x30	13,35	
0,70	60x30	13,49	
0,70	80x50	15,30	
0,80	60x30	13,76	
0,80	80x50	15,56	
0,80	120x60	19,94	
1,00	80x50	16,10	
1,00	100x70	17,46	
1,00	150x75	18,91	
1,50	100x70	12,73	
1,50	140x100	14,10	
2,00	100x70	12,50	
2,00	125x85	13,54	18,53
2,00	150x100	16,74	
2,00	160x125		29,90
2,00	200x135		35,67
2,25	135x90		23,59
2,50	140x95	14,27	18,53
2,50	180x130		33,31
2,50	225x150		39,34
2,75	150x100		25,85
3,00	150x100	14,66	21,05
3,00	190x130	17,02	25,88
3,00	240x160		42,88
3,25	155x105		25,85
3,25	200x135		31,92
3,50	165x115	16,64	21,34
3,50	210x145	19,12	27,41
3,50	265x180	27,25	37,18
3,75	165x115		29,94
3,75	210x145		31,92
3,75	265x180		42,15
4,00	175x120	16,48	21,34
4,00	220x150	19,58	27,41
4,00	280x190	27,91	37,18
4,25	175x120		31,71
4,25	220x150	34,09	40,99
4,25	280x190		51,29
4,50	185x125	18,45	24,97
4,50	235x160	22,96	32,57
4,50	295x220	32,81	46,28

		BC8	BC88
Ø mm	L1 x L2	€	€
4,75	185x125		32,65
4,75	235x160		40,99
4,75	295x200		51,29
5,00	195x135	19,34	33,53
5,00	245x170	24,68	37,90
5,00	315x210	30,41	43,73
5,25	195x135		33,10
5,25	245x170		45,78
5,25	315x210		54,86
5,50	205x140	23,00	26,74
5,50	260x180	32,77	40,45
5,50	330x225	38,00	49,73
5,75	205x140	27,77	33,10
5,75	260x180	38,41	45,78
5,75	330x225	47,03	55,56
6,00	205x140	22,97	26,73
6,00	260x180	32,96	40,45
6,00	330x225	37,85	49,89
6,25	215x150		38,80
6,25	275x190		47,91
6,25	350x235		61,84
6,50	215x150	27,24	33,11
6,50	275x190	35,26	44,64
6,50	350x235	43,92	56,97
6,75	225x155		42,15
6,75	290x200		55,32
6,75	370x250		78,43
7,00	225x155	28,97	41,10
7,00	290x200	40,31	49,89
7,00	370x250	54,48	73,48
7,25	225x155		53,68
7,25	290x200		66,19
7,25	370x250		88,43
7,50	225x155	32,58	45,34
7,50	290x200	43,45	59,44
7,50	370x250	63,26	83,44
7,75	240x165		55,32
7,75	305x210		66,19
7,75	390x265		97,81
8,00	240x165	36,02	46,28
8,00	305x210	49,94	57,89
8,00	390x265	65,08	85,71
8,25	240x165		72,55
8,25	305x210		96,32
8,25	390x265		117,00
8,50	240x165	48,97	62,78
8,50	305x210	66,86	87,54
8,50	390x265	91,28	107,21
8,75	240x165		77,52
8,75	320x220		96,32
8,75	410x280		123,16

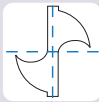
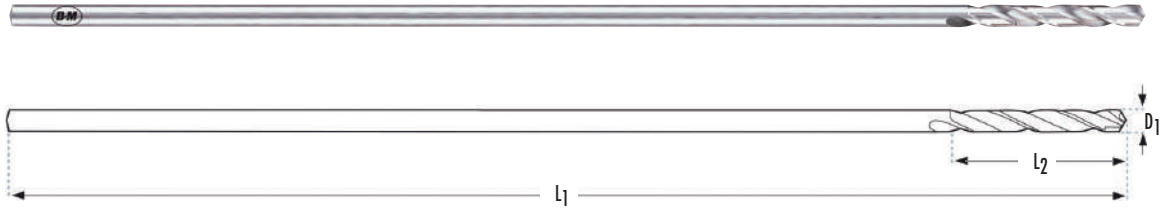
		BC8	BC88
Ø mm	L1 x L2	€	€
9,00	250x175	46,80	66,98
9,00	320x220	61,47	84,18
9,00	410x280	90,74	113,83
9,25	250x175		90,65
9,25	320x220		115,60
9,25	410x280		144,56
9,50	250x175	54,88	77,53
9,50	320x220	75,86	100,65
9,50	410x280	101,97	133,79
9,75	265x185		92,50
9,75	340x235		120,45
9,75	430x295		155,24
10,00	265x185	54,61	70,28
10,00	340x235	71,02	92,54
10,00	430x295	98,66	130,43
10,25	265x185		137,06
10,25	340x235		148,59
10,25	430x295		158,01
10,50	265x185	100,62	118,82
10,50	340x235	109,05	128,80
10,50	430x295	115,98	136,97
10,75	280x195		137,06
10,75	365x250		148,59
10,75	455x310		158,01
11,00	280x195	68,90	89,10
11,00	365x250	97,91	115,65
11,00	455x310	114,62	135,35
11,25	280x195		127,66
11,25	365x250		171,38
11,25	455x310		177,03
11,50	280x195	93,68	110,67
11,50	365x250	125,78	148,58
11,50	455x310	129,96	153,48
11,75	280x195		127,66
11,75	365x250		171,38
11,75	455x310		177,03
12,00	295x205	90,64	100,65
12,00	375x260	110,47	130,43
12,00	480x330	134,42	158,73
12,25	295x205		148,59
12,25	375x260		166,40
12,25	480x330		201,96
12,50	295x205	109,05	128,80
12,50	375x260	122,12	144,23
12,50	480x330	148,22	175,05
12,75	295x205		148,59
12,75	375x260		166,40
12,75	480x330		201,96
13,00	295x205	109,05	128,80
13,00	375x260	125,80	148,58
13,00	480x330	149,62	176,70

* Special lengths available on request

EXTRA-LONG SERIES CARBIDE TIPPED DRILL FOR AIRCRAFT INDUSTRY

Ref. BC08

HSS


AIRCRAFT

150 mm

				BC08
	D ₁ mm	L ₁ mm	L ₂ mm	€
BC080225150	2,25	150	25	14,82
BC080250150	2,50	150	25	14,31
BC080320150	3,20	150	26	14,28
BC080325150	3,25	150	36	14,07
BC080400150	4,00	150	43	14,55

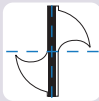
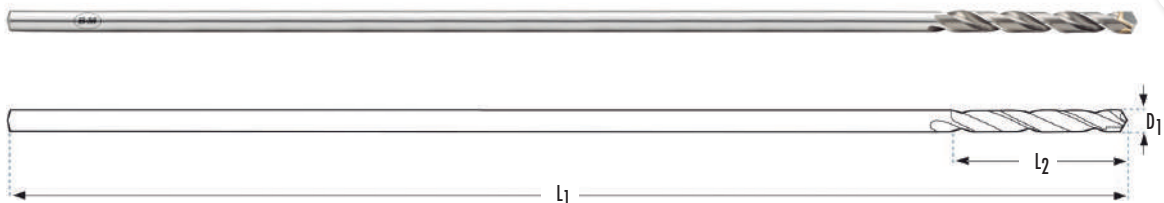
300 mm

				BC08
	D ₁ mm	L ₁ mm	L ₂ mm	€
BC080225300	2,25	300	25	15,74
BC080250300	2,50	300	25	14,88
BC080320300	3,20	300	26	14,91
BC080325300	3,25	300	36	14,86
BC080400300	4,00	300	43	16,63

* Others diameters available on request

EXTRA-LONG SERIES CARBIDE TIPPED DRILL FOR AIRCRAFT INDUSTRY

Ref. BC08PMD

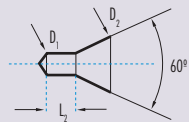
**CARBIDE
TIPPED**

**AIRCRAFT
MD**


* MD AirCraft series available. Special sizes available on request

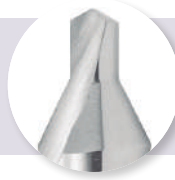
HSS & SOLID CARBIDE CENTRE DRILLS

Ref. BC10
Ref. BC10Co
Ref. BC65

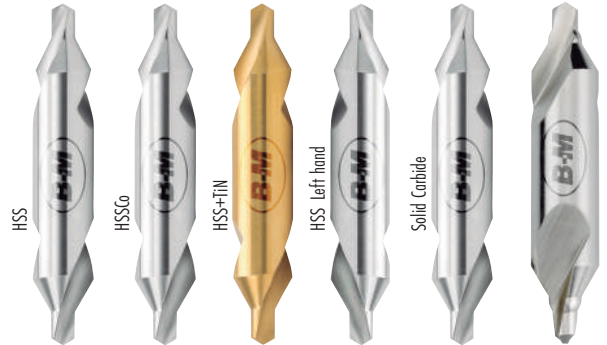
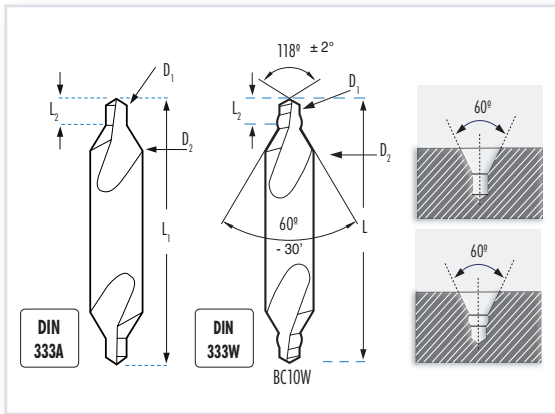
Ref. BC10I
Ref. BC10MD
Ref. BC10W



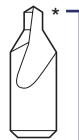
**DIN
333A**



**DIN
333W**



D1 x D2 mm	L1 x L2 mm	BC10	BC10Co	BC65	BC10I	BC10MD	BCW10
		HSS	HSSCo 5%	TiN	HSS	SOLID CARBIDE	HSS
		€	€	€	€	€	€
0,50 x 3,00	31 x 1	14,42		19,88			17,30
0,50 x 3,15*	25 x 1	8,47	9,21	14,10			10,16
0,63 x 3,15*	25 x 1	8,47		14,10		65,83	
0,80 x 3,15*	25 x 1	8,32	9,21	13,97			9,99
1,00 x 3,15	31 x 1	6,16	9,21	11,88		62,70	7,39
1,25 x 3,15	33 x 1	6,16	9,21	11,88		62,70	7,39
0,75 x 3,50	35 x 1	8,99	9,21	14,63			
1,00 x 4,00	35 x 1	7,74	9,21	13,41		70,29	9,28
1,25 x 4,00	35 x 1	6,54		12,69			7,85
1,50 x 5,00	40 x 2	7,45	9,91	14,32		71,71	8,94
1,60 x 4,00	37 x 2	6,16	9,21	12,34	11,12	66,96	7,39
1,60 x 5,00	40 x 2	6,51		13,40			7,81
2,00 x 5,00	42 x 2	6,62	9,91	13,51	11,95	76,30	7,95
2,00 x 6,00	45 x 2	7,45	10,44	14,79		81,35	8,94
2,00 x 6,30	45 x 2	6,68		14,54	12,68		8,84
2,50 x 6,30	47 x 3	7,36	11,01	14,72	13,28	86,94	8,84
2,50 x 8,00	50 x 3	8,12	11,01	15,43	14,66	102,42	9,74
3,00 x 8,00	50 x 3	8,13	11,61	15,46		102,42	9,75
3,15 x 8,00	52 x 4	8,10	12,10	15,43	14,63	97,55	9,71
3,00 x 10,00	55 x 4	10,57	16,05	18,34		121,54	12,68
3,15 x 10,00	56 x 4	9,58		20,10	17,28		11,49
4,00 x 10,00	59 x 5	11,24	16,05	20,82	20,29	121,54	13,48
4,00 x 12,00	63 x 5	18,16	25,30	26,87			21,79
4,00 x 12,50	63 x 5	13,08		26,87	23,63		21,79
5,00 x 12,00	63 x 5	18,16	25,30	26,87		196,88	21,79
5,00 x 12,50	66 x 6	19,70	26,44	28,49	35,59	202,99	23,64
5,00 x 14,00	69 x 6	31,21	34,94	40,82			37,45
5,00 x 16,00	71 x 6	31,21		37,15	56,36		37,45
6,30 x 16,00	74 x 8	26,96	37,84	37,15		324,26	32,35
6,30 x 18,00	77 x 8	47,51		60,50			57,02
6,30 x 20,00	80 x 8	47,51		60,50			61,77
8,00 x 20,00	81 x 27	52,04	103,55	75,17			62,44
8,00 x 25,00	100 x 10	113,49		144,34			
10,00 x 25,00	100 x 31	80,74	113,97	112,55			96,89
10,00 x 31,50	125 x 12	239,51		288,78			
12,50 x 31,50	125 x 33	192,06	249,61	243,72			



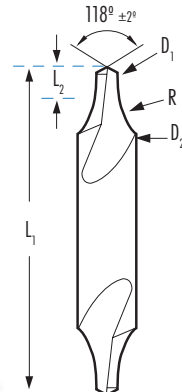
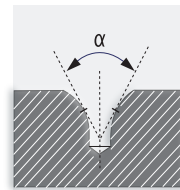
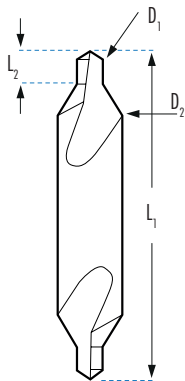
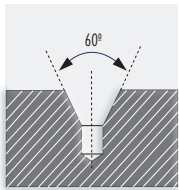
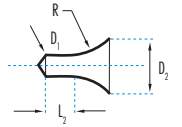
NEW

HSS & SOLID CARBIDE CENTRE DRILLS

 Ref. BC64
 Ref. BC68

**DIN
333A**
LONG SERIES


Ref. BC62

**DIN
333R**


D1 x D2 mm	L1 x L2 mm	BC64		BC68	
		HSS €	TiN €	HSS €	TiN €
1,00 x 4,00	60 x 1	21,10	32,00		
1,00 x 4,00	120 x 1	42,62	81,40		
1,50 x 5,00	60 x 2	21,53	32,41		
1,50 x 5,00	120 x 2	43,45	72,02		
2,00 x 5,00	200 x 2	88,86	159,07		
2,00 x 6,00	80 x 2	22,42	35,20		
2,00 x 6,00	120 x 2	33,96	71,18		
2,50 x 6,30	200 x 2	87,27	157,48		
2,50 x 8,00	80 x 3	27,28	45,77		
2,50 x 8,00	120 x 3	41,31	84,37		
3,00 x 8,00	80 x 4	27,28	45,77		
3,00 x 8,00	120 x 4	41,31	84,37		
3,15 x 8,00	200 x 4	82,50	152,72		
3,00 x 10,00	100 x 4	35,23	57,58		
3,00 x 10,00	120 x 4	42,67	95,50		
4,00 x 10,00	100 x 5	35,27	57,58		
4,00 x 10,00	120 x 5	42,73	95,50		
4,00 x 10,00	200 x 5	90,44	160,66		
4,00 x 12,00	100 x 5	47,50	85,96		
4,00 x 12,00	120 x 5	57,54	121,58		
5,00 x 14,00	120 x 6	80,57	146,54		

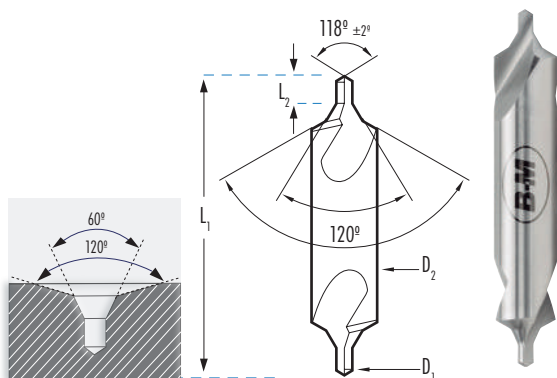
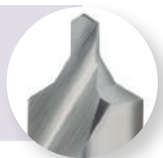
D1 x D2 mm	L1 x L2 mm	BC62		BC62MDI	
		HSS €	SOLID CARBIDE €	HSS €	SOLID CARBIDE €
0,50 x 3,00	31 x 2,3	10,12			
0,50 x 3,15	25 x 2,3	6,73	46,26		
0,80 x 3,15	25 x 2,6	6,73			
1,00 x 3,15	31 x 3,0	6,73	48,27		
1,25 x 3,15	31 x 3,3	6,73	48,27		
0,50 x 3,50	35 x 2,7	10,12			
0,75 x 3,50	35 x 2,8	6,73			
1,00 x 4,00	35 x 3,3	6,73			
1,25 x 4,00	35 x 3,7	6,73			
1,60 x 4,00	37 x 4,0	6,73	52,29		
1,50 x 5,00	40 x 4,5	7,36			
1,60 x 5,00	40 x 4,5	7,59			
2,00 x 5,00	42 x 5,0	7,32	62,34		
2,00 x 6,00	45 x 5,4	8,20			
2,00 x 6,30	45 x 6,0	8,49			
2,50 x 6,30	47 x 6,0	8,14	74,41		
2,50 x 8,00	50 x 7,0	8,94			
3,00 x 8,00	50 x 8,0	8,94			
3,15 x 8,00	52 x 8,0	8,94	90,50		
3,00 x 10,00	55 x 8,9	11,64			
3,15 x 10,00	56 x 9,0	11,64			
4,00 x 10,00	56 x 10,0	11,64	123,88		
4,00 x 12,00	63 x 10,7	18,39			
5,00 x 12,00	63 x 11,4	18,39			
4,00 x 12,50	63 x 11,0	19,41			
5,00 x 12,50	66 x 13,0	19,46	197,09		
5,00 x 14,00	69 x 12,8	25,09			
5,00 x 16,00	71 x 15,0	27,61			
6,30 x 16,00	74 x 17,0	27,95			
6,00 x 18,00	77 x 16,6	41,57			
6,30 x 20,00	80 x 19,0	49,55			
8,00 x 20,00	80 x 21,0	53,11			
10,00 x 25,00	100 x 26,0	87,98			
12,50 x 31,50	125 x 33,0	200,70			

HSS & SOLID CARBIDE CENTRE DRILLS

Ref. BC63

DIN 333B

HSS



BC63

D1 x D2 mm	L1 x L2 mm	€
0,50 x 3,00	31,00 x 0,6	12,59
0,75 x 4,00	35,00 x 1,0	11,28
1,00 x 4,00	37,50 x 1,60	11,28
1,25 x 5,00	42,00 x 1,90	11,28
1,50 x 5,00	40,00 x 2,00	12,05
1,00 x 6,00	45,00 x 1,30	12,05
2,00 x 6,00	45,00 x 2,50	12,05
1,60 x 6,30	47,00 x 2,40	11,28
1,50 x 8,00	50,00 x 2,00	12,64
2,00 x 8,00	52,00 x 2,90	11,83
2,50 x 8,00	50,00 x 3,10	13,75
3,00 x 8,00	50,00 x 3,90	14,14
2,00 x 10,00	55,00 x 2,50	14,42
2,50 x 10,00	59,00 x 3,60	13,69
3,00 x 10,00	55,00 x 3,90	16,35
4,00 x 10,00	55,00 x 5,00	16,46
3,15 x 11,20	63,00 x 4,40	15,82
2,50 x 12,00	63,00 x 3,10	21,27
4,00 x 12,00	63,00 x 5,00	21,85
5,00 x 12,00	63,00 x 6,30	23,23
3,00 x 14,00	69,00 x 3,90	26,70
4,00 x 14,00	70,00 x 5,60	24,33
5,00 x 14,00	69,00 x 6,30	31,63
4,00 x 16,00	71,00 x 5,00	34,03
4,00 x 18,00	77,00 x 5,00	37,50
5,00 x 18,00	78,00 x 6,90	33,63
6,00 x 18,00	77,00 x 8,00	44,74
5,00 x 20,00	80,00 x 6,30	63,54
6,30 x 20,00	83,00 x 8,60	49,06
6,00 x 25,00	100,00 x 8,00	113,06
6,30 x 25,00	100,00 x 8,00	113,06
8,00 x 25,00	100,00 x 26,00	108,36
10,00 x 31,50	125,00 x 30,00	214,71

HSSCo & SOLID CARBIDE POINTING DRILLS FOR CNC

Ref. BC75
Ref. BI75
Ref. BC76

HSSCo 5%

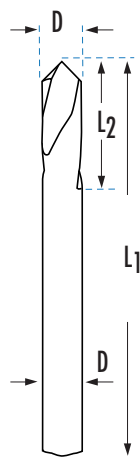
TiAIN

DIN 1412A

D₂

TOL h6

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



BC75 BI75 BC76 BH75

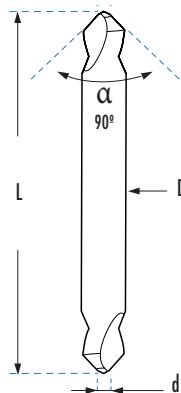
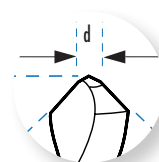
D mm	L1 x L2 mm	90°	90°	120°	142°
		€	€	€	€
2,0	49 x 8	19,11		19,11	
3,0	50 x 10	22,10	68,14	22,10	27,90
4,0	52 x 12	22,10	72,70	22,10	27,90
5,0	60 x 15	24,93	77,24	24,93	31,46
6,0	66 x 20	24,93	81,77	24,93	31,46
8,0	79 x 25	28,15	90,86	28,15	35,53
10,0	89 x 25	28,15	102,22	28,15	35,53
12,0	102 x 30	38,83	113,58	38,83	49,01
16,0	115 x 35	53,41		53,41	67,41
20,0	131 x 40	105,10		105,10	132,65

DOUBLE POINTING DRILL

Ref. DP75

HSSCo 5%

TiAIN



D x d mm	L mm	DP75
		90° €
3,0 x 0,5	40	27,58
4,0 x 1,0	45	27,70
6,0 x 2,0	55	31,42
8,0 x 2,5	65	36,28
10,0 x 3,0	75	38,93
12,0 x 3,5	85	48,03
16,0 x 4,0	90	73,98
20,0 x 5,0	100	121,36



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

SOLID CARBIDE POINTING DRILL

MULTI-FUNCTION POINTING DRILL

Ref. BC92
Ref. BC93

SOLID CARBIDE

DIN 1412A

TOL h6

DIN 6535HB



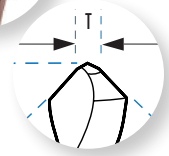
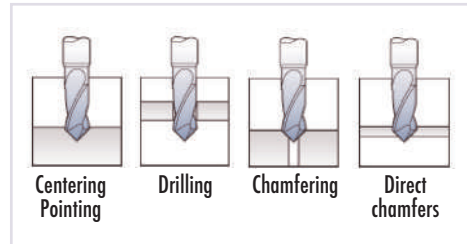
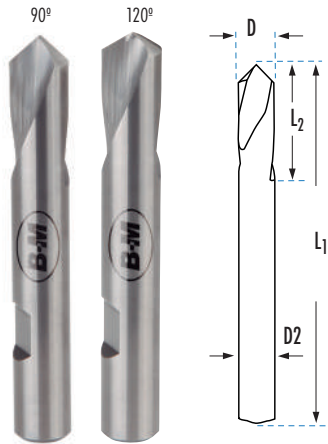
Ref. BN75

HSSCo 5%

120 Kg/mm²



D mm	L1 x L2 mm	BC92		BC93	
		90° €	120° €	90° €	120° €
1,0	26 x 6	29,29			
1,5	32 x 9	29,73			
2,0	38 x 12	30,03			
3,0	45 x 12	30,46	31,33		
4,0	50 x 15	30,77	31,65		
5,0	50 x 18	36,66	37,70		
6,0	50 x 13	47,54	48,90		
8,0	60 x 23	66,93	68,83		
10,0	70 x 24	94,88	97,59		
12,0	70 x 24	122,50	126,00		
14,0	70 x 27	184,48	189,75		
16,0	75 x 29	225,44	219,00		
18,0	100 x 33	335,96	345,55		
20,0	100 x 35	397,83	388,31		



	D mm	L1 x L2 mm	T* mm	BN75	
				90° €	
BN750300	3,0	50 x 6	0,3	32,64	
BN750400	4,0	52 x 8	0,4	35,39	
BN750500	5,0	60 x 10	0,5	38,43	
BN750600	6,0	66 x 12	0,6	41,19	
BN750800	8,0	79 x 14	0,8	49,72	
BN751000	10,0	89 x 16	1,0	59,48	
BN751200	12,0	102 x 18	1,2	77,79	
BN751400	14,0	115 x 21	1,4	109,81	
BN751600	16,0	115 x 24	1,6	122,01	



T*: Core Thickness

MORSE TAPER SHANK POINTING DRILL LARGE SERIES

Ref. BL75

HSSCo 5%

TiAIN

90°



MORSE TAPER SHANK POINTING DRILL

Ref. BP11

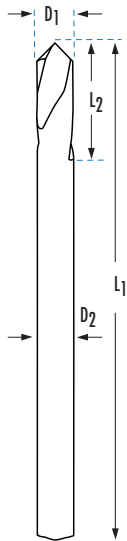
HSSCo 5%

120 Kg/mm²

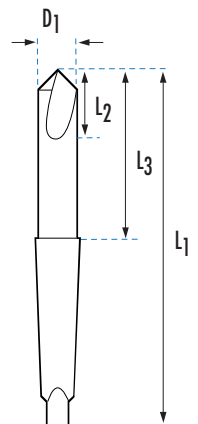
90°



BL75		
D1 mm	L1 x L2 mm	€
3,0	80 x 10	45,43
4,0	100 x 12	49,97
5,0	120 x 15	54,52
6,0	140 x 20	59,06
8,0	140 x 25	65,87
10,0	170 x 25	81,77
12,0	170 x 30	99,95
16,0	200 x 35	134,02
20,0	200 x 40	170,36

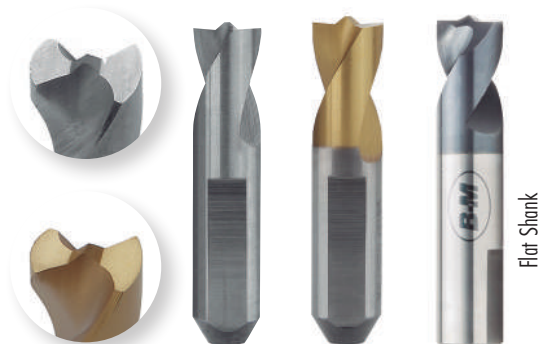


BP11					
D1 mm	L1 mm	L2 mm	L3 mm	MT	€
10,0	130	25	64	1	136,30
12,0	130	30	64	1	147,65
16,0	148	35	68	2	181,72
20,0	148	40	68	2	227,16
25,0	171	45	72	3	306,66



HSSCo & SOLID CARBIDE DRILLS TO REMOVE WELDING SPOTS

SHORT DRILLS FOR PNEUMATIC DRILLING MACHINES



Flat Shank

D1 mm	D2 mm	L1 x L2 mm	BC70	BC71	BC70MD*
			HSSCo 8% €	HSSCo 8% TiN €	SOLID CARBIDE TiAlN €
6,0	8,0	45 x 18	26,33	35,70	
6,5	6,5	40 x 18	27,45	40,88	66,97
8,0	8,0	38 x 18	21,58	35,70	
8,0	8,0	45 x 18	24,07	40,88	81,71
9,0	8,0	45 x 18	26,00	42,48	
10,0	8,0	45 x 18	28,49	48,19	

* 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.

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	13,02	22,84
7,0	74 x 34	18,67	29,73
8,0	79 x 36	17,26	32,21
10,0	89 x 44	21,31	34,02

CUTTING SET: ARBOR, HOLE SAW & PILOT DRILL

HOLE SAW: 9,5 mm

PILOT DRILL



EBC70-1
24,80 €



EBC70-2
17,93 €



EBC70-3
1,09 €



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

112,46 €

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	18,16	28,51
8,0	90 x 60	23,36	36,49

SOLID CARBIDE DRILL MILLS

Ref. BC91

**SOLID
CARBIDE**

CHARACTERISTICS:

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



Ti

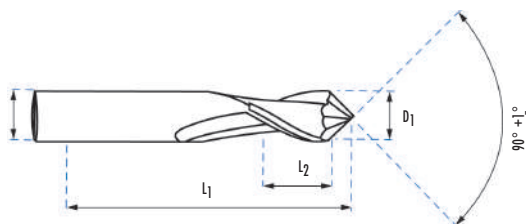
INC

Ni

INOX

PVC

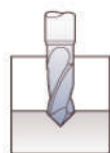
**D2
TOL h6**



**D1
TOL h9**



BC91			
D1 mm	D2 mm	L1 x L2 mm	€
3,0	3,0	50 x 6	61,94
4,0	4,0	50 x 8	70,42
5,0	5,0	50 x 10	80,48
6,0	6,0	60 x 12	87,14
8,0	8,0	70 x 16	121,03
10,0	10,0	70 x 18	168,35
12,0	12,0	70 x 20	168,35
14,0	14,0	88 x 30	200,83
16,0	16,0	80 x 26	240,47
20,0	20,0	100 x 32	424,83



Centering
Pointing



V-grooving



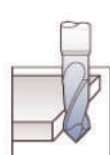
Machining



Drilling



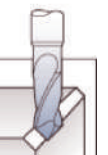
Chamfering



Contouring



Longitudinal chamfering

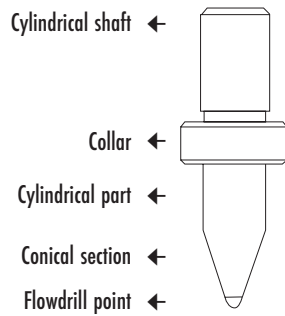
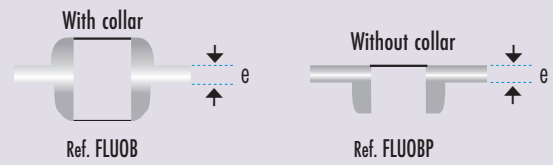


Direct
chamfers

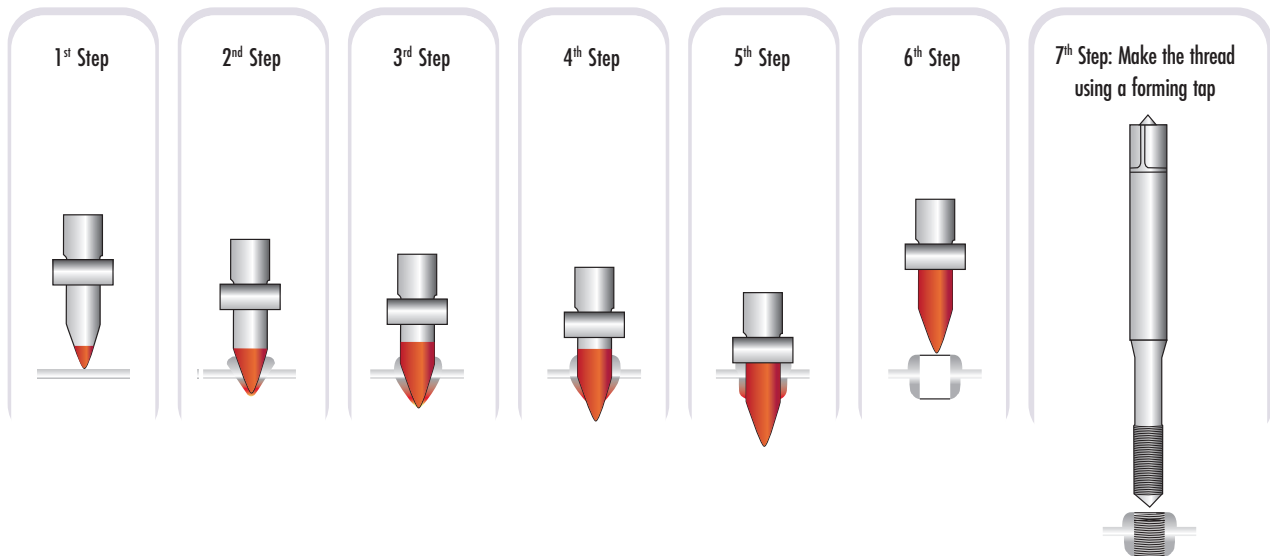


Engraving

FLOWDRILL FOR THREADING METAL SHEET



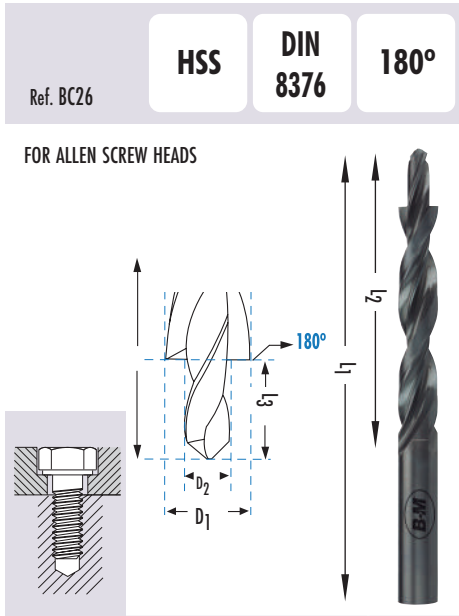
	e max. mm	D ₁ mm	D ₂ mm	R.P.M.	FLUOB		FLUOBP	
						€		€
M3x0,50	1,7	6	2,7	3000	FLUOBM03	138,52	FLUOBPM03	193,94
M4x0,70	1,7	6	3,7	2600	FLUOBM04	143,56	FLUOBPM04	200,99
M5x0,80	2,0	8	4,5	2500	FLUOBM05	149,94	FLUOBPM05	217,86
M6x1,00	2,0	8	5,3	2400	FLUOBM06	159,83	FLUOBPM06	232,19
M8x1,25	2,4	8	7,3	2200	FLUOBM08	197,18	FLUOBPM08	286,49
M10x1,50	2,6	10	9,2	2000	FLUOBM10	223,46	FLUOBPM10	324,67
M12x1,75	3,0	12	10,9	1800	FLUOBM12	239,60	FLUOBPM12	329,23
M16x2,00	3,4	16	14,8	1200	FLUOBM16	330,48	FLUOBPM16	422,10
M20x2,50	3,8	18	18,7	800	FLUOBM20	466,49	FLUOBPM20	595,04



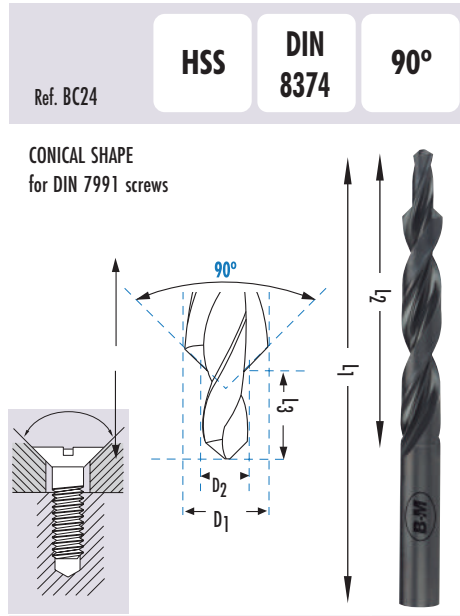
FLOW-DRILLING LUBRICANT (250ml. & 750ml.)

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

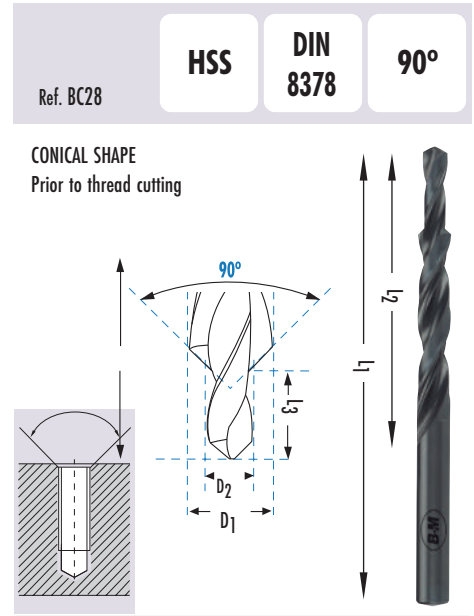


HSS SUBLAND TWIST DRILLS STRAIGHT AND TAPER SHANK
**BC26**

	D2 mm	D1 mm	L1 x L2 mm	L3 mm	€
M3	3,4	6	93 x 57	9	61,86
M4	4,5	8	117 x 75	11	64,88
M5	5,5	10	133 x 87	13	77,11
M6	6,6	11	142 x 94	15	87,13
M8	9,0	15	169 x 114	19	107,05
M10	11,0	18	191 x 130	23	212,73

**BC24**

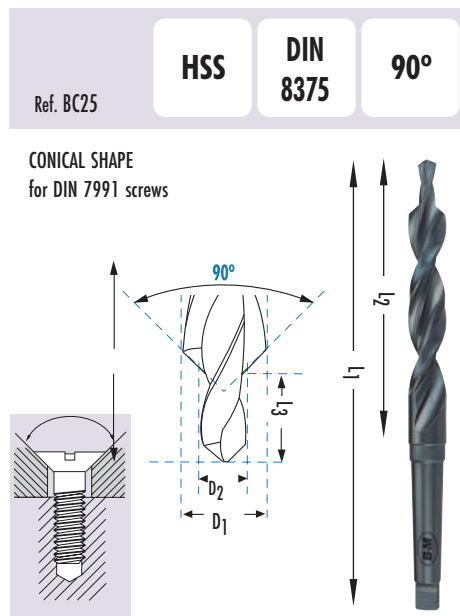
	D2 mm	D1 mm	L1 x L2 mm	L3 mm	€
M3	3,2	6,0	93 x 57	9	72,17
M4	4,3	8,0	117 x 75	11	75,69
M5	5,3	10,0	133 x 87	13	89,96
M6	6,4	11,5	142 x 94	15	102,77
M8	8,4	15,0	169 x 114	19	140,56
M10	10,5	19,0	198 x 135	23	217,04

**BC28**

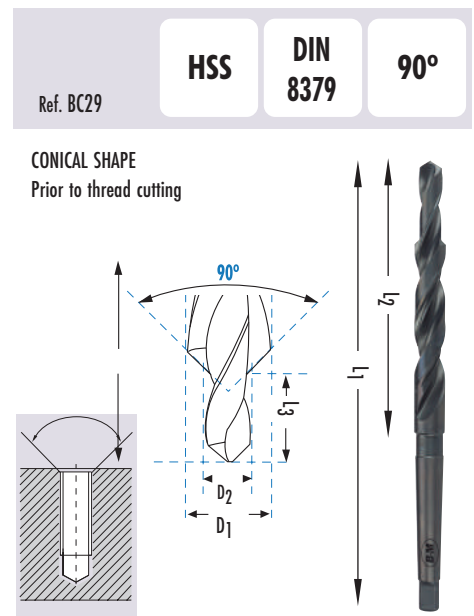
	D2 mm	D1 mm	L1 x L2 mm	L3 mm	€
M3	2,5	3,4	70 x 39	8,8	55,49
M4	3,3	4,5	80 x 47	11,8	59,70
M5	4,2	5,5	93 x 57	13,6	64,30
M6	5,0	6,6	101 x 63	16,5	73,17
M8	6,8	9,0	125 x 81	21,0	87,19
M10	8,5	11,0	142 x 94	25,5	101,70
M12	10,2	13,5	160 x 108	30,0	126,62

**BC27**

	D2 mm	D1 mm	L1 x L2 mm	L3 mm	MT	€
M6	6,6	11	175 x 94	15	1	155,02
M8	9,0	15	212 x 114	19	2	160,08
M10	11,0	18	228 x 130	23	2	180,49
M12	13,5	20	238 x 140	27	2	201,89
M14	15,5	24	281 x 160	31	3	286,29
M16	17,5	26	286 x 165	35	3	408,22
M18	20,0	30	296 x 175	39	3	456,48
M20	22,0	33	334 x 185	43	4	516,15

**BC25**

	D2 mm	D1 mm	L1 x L2 mm	L3 mm	MT	€
M5	5,5	11,0	175 x 94	13	1	154,86
M6	6,6	13,0	182 x 101	15	1	157,97
M8	9,0	17,2	228 x 130	19	2	188,27
M10	11,0	21,5	248 x 150	23	2	222,90

**BC29**

	D2 mm	D1 mm	L1 x L2 mm	L3 mm	MT	€
M8	6,8	9,0	162 x 81	21,0	1	142,03
M10	8,5	11,0	175 x 94	25,5	1	154,76
M12	10,2	13,5	189 x 108	30,0	1	182,79
M14	12,0	15,5	218 x 120	34,5	2	195,06
M16	14,0	17,5	228 x 130	38,5	2	210,51
M18	15,5	20,0	238 x 140	43,5	2	235,45
M20	17,5	22,0	248 x 150	47,5	2	284,69

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	30,05
M4	4,5	3,3	4,5	58 x 24	11	31,47
M5	5,5	4,2	5,5	66 x 28	13	32,90
M6	6,6	5,0	6,6	70 x 31	16	35,75
M8	9,0	6,8	9,0	84 x 40	20	42,91
M10	11,0	8,5	11,0	95 x 47	24	56,50
M12	14,0	10,2	14,0	107 x 54	29	75,80
M14	16,0	12,0	16,0	115 x 56	32	193,08
M16	18,0	14,0	18,0	135 x 60	34	243,14

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	57,21
M4	6,0	3,3	6,0	66 x 24	11,4	66,74
M5	6,0	4,2	6,0	66 x 28	13,6	71,51
M6	8,0	5,0	8,0	79 x 31	16,5	83,44
M8	10,0	6,8	10,0	89 x 40	21,0	114,42
M10	12,0	8,5	12,0	102 x 47	25,5	154,94
M12	14,0	10,2	14,0	107 x 54	30,0	214,54

Ref. BC74

HSSCo 5% **180°**

BC74

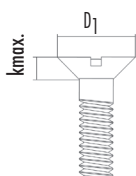
	D1 mm	D2 mm	D3 mm	L1 x L2 mm	L3 mm	€
M2	4,3	2,4	4,3	45 x 12	6	20,74
M3	6,0	3,4	6,0	45 x 18	9	21,09
M4	8,0	4,5	8,0	50 x 22	11	25,04
M5	10,0	5,5	10,0	55 x 26	13	27,89
M6	11,0	6,6	11,0	63 x 30	15	35,05
M8	15,0	9,0	12,5	100 x 34	19	65,80
M10	18,0	11,0	12,5	110 x 42	23	95,83
M12	20,0	14,0	12,5	110 x 34	28	125,86
M14	24,0	16,0	12,5	120 x 42	34	254,59

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	20,74
M3	6,5	3,2	6,5	45 x 18	9	21,09
M4	8,6	4,3	8,6	50 x 26	11	25,04
M5	10,4	5,3	10,4	55 x 30	13	27,89
M6	12,4	6,4	12,4	63 x 34	15	35,05
M8	16,4	8,4	12,5	100 x 42	19	65,80
M10	20,4	10,5	12,5	110 x 34	23	95,83
M12	25,0	13,0	12,5	120 x 42	28	254,59



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

Twist drills for Metal

Pink

MORSE TAPER SHANK DRILLS DIN 345

Twist drills for Metal

Grey

Pink

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	€	€	€	€	€
10,75	175 x 94	1	40,87				
11,00	175 x 94	1	35,31	103,90		50,50	94,31
11,25	175 x 94	1	42,67				
11,50	175 x 94	1	37,12	108,19		51,82	94,31
11,75	175 x 94	1	42,68				
12,00	182 x 101	1	37,31	111,59		38,32	98,46
12,25	182 x 101	1	47,52				
12,50	182 x 101	1	39,93	116,81		53,46	98,66
12,75	182 x 101	1	47,53				
13,00	182 x 101	1	41,64	114,31	86,71	54,59	112,30
13,25	189 x 101	1	52,61				
13,50	189 x 101	1	43,94	149,73	104,78	56,33	111,99
13,75	189 x 101	1	52,61				
14,00	189 x 108	1	43,97	146,98	99,61	45,24	122,02
14,25	212 x 114	2	56,98				
14,50	212 x 114	2	49,49	162,65	122,24	75,56	122,00
14,75	212 x 114	2	56,96				
15,00	212 x 114	2	49,49	149,91	116,19	75,56	138,06
15,25	218 x 120	2	58,60				
15,50	218 x 120	2	50,94	165,75	119,92	77,78	147,02
15,75	218 x 120	2	58,60	204,42	149,89		
16,00	218 x 120	2	51,23	157,72	119,92	51,30	146,95
16,25	223 x 125	2	66,25				
16,50	223 x 125	2	57,90	167,47	127,27	79,35	147,41
16,75	223 x 125	2	66,25				
17,00	223 x 125	2	57,89	164,95	127,27	78,94	156,17
17,25	228 x 130	2	73,36				
17,50	228 x 130	2	64,02	174,90	134,63	85,05	155,97
17,75	228 x 130	2	73,36	238,52	179,86		
18,00	228 x 130	2	61,48	171,58	143,89	58,56	168,81
18,25	233 x 135	2	80,66				
18,50	233 x 135	2	70,47	188,28	149,43	87,13	197,30
18,75	233 x 135	2	81,19				
19,00	233 x 135	2	70,70	184,15	149,43	73,34	197,01
19,25	238 x 140	2	87,82				
19,50	238 x 140	2	76,46	212,80	156,79	93,36	221,25
19,75	238 x 140	2	88,43				
20,00	238 x 140	2	76,49	205,69	156,79	77,13	221,79
20,25	243 x 145	2	91,48				
20,50	243 x 145	2	79,28	236,91	182,62	94,77	225,36
20,75	243 x 145	2	91,48				
21,00	243 x 145	2	79,28	239,58	182,62	94,34	225,36
21,25	248 x 150	2	100,94				
21,50	248 x 150	2	87,43	269,90	199,22	99,81	245,73
21,75	248 x 150	2	100,94	349,01	249,03		
22,00	248 x 150	2	87,60	243,41	199,22	89,83	245,73
22,00*	265 x 150	3	119,07				
22,25	248 x 150	2	110,48				
22,50	253 x 155	2	95,86	301,87	210,28	108,68	246,11
22,75	253 x 155	2	110,48				
23,00	253 x 155	2	95,63	283,57	228,72	107,89	266,92
23,25	276 x 155	3	121,85				
23,50	276 x 155	3	106,13	301,28	275,75	130,01	266,75
23,75	281 x 160	3	122,00				
24,00	281 x 160	3	105,90	305,16	254,57	111,30	293,42

	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/mm²	120 Kg/mm²	INOX	PRODUCTION	CAST IRON

* 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	191,53	449,13		207,93	
								31,25	301x180	3	233,06				
								31,50	301x180	3	201,41	689,91			
								31,75	306x185	3	233,06		604,12		
								32,00	334x185	4	201,75	519,57	483,28	217,56	559,55*
								32,00	334x185	3	375,70				
								32,25	334x185	4	272,02				
								32,50	334x185	4	231,75				
								32,75	334x185	4	272,02				
								33,00	334x185	4	230,37	594,01		236,79	689,59*
								33,25	334x185	4	284,14				
								33,50	334x185	4	251,32				
								33,75	339x190	4	285,69				
								34,00	339x190	4	250,55	669,29		336,48	690,75*
								34,25	339x190	4	312,21				
								34,50	339x190	4	273,66				
								34,75	339x190	4	312,21	727,66			
								35,00	339x190	4	275,02	703,28	662,16	371,01	
								35,25	339x190	4	334,61				
								35,50	339x190	4	293,58				
								35,75	344x195	4	343,59				
								36,00	344x195	4	294,30	755,59		385,08	1.109,34*
								36,25	344x195	4	361,12				
								36,50	344x195	4	311,26				
								36,75	344x195	4	361,07				
								37,00	344x195	4	310,85	706,22		396,30	1.198,18*
								37,25	344x195	4	384,85				
								37,50	344x195	4	387,17				
								37,75	344x195	4	417,53				
								38,00	349x200	4	326,47	815,02		407,63	
								38,25	349x200	4	406,71				
								38,50	349x200	4	347,40				
								38,75	349x200	4	406,71				
								39,00	349x200	4	347,69	833,98		422,89	1.324,94*
								39,25	349x200	4	409,09				
								39,50	349x200	4	368,23				
								39,75	349x200	4	409,09				
								40,00	349x200	4	367,75	873,94		436,63	1.366,77*
								40,50	354x205	4	385,50				
								41,00	354x205	4	385,98	918,69			
								41,50	354x205	4	410,27				
								42,00	354x205	4	409,43	961,94			
								42,50	354x205	4	430,29				
								43,00	359x210	4	430,30	1.008,64			
								43,50	359x210	4	450,51				
								44,00	359x210	4	450,79	1.047,33			
								44,50	359x210	4	471,46				
								45,00	359x210	4	471,82	1.095,28			
								45,50	364x215	4	490,24				
								46,00	364x215	4	488,18				
								46,50	364x215	4	510,25				
								47,00	364x215	4	510,01	1.183,45			
								47,50	364x215	4	527,38				
								48,00	369x220	4	527,01	1.233,05			
								48,50	369x220	4	548,31				

* Morse taper

* Till end of stock

MORSE TAPER SHANK DRILLS DIN 345

Ref. BC11

**DIN
345**
HSS

OX


Twist drills for Metal

Grey



BC11			
Ø mm	L1 x L2 mm	MT*	€
49,00	369x220	4	546,01
49,50	369x220	4	563,18
50,00	369x220	4	569,22
50,50	369x220	4	815,08
51,00	412x225	5	667,49
51,50	412x225	5	894,63
52,00	412x225	5	713,37
52,50	412x225	5	916,41
53,00	412x225	5	764,01
53,50	412x225	5	958,63
54,00	417x230	5	840,75
54,50	417x230	5	949,03
55,00	417x230	5	832,30
56,00	417x230	5	936,50
57,00	422x235	5	994,89
58,00	422x235	5	1.003,40
59,00	422x235	5	1.033,53
60,00	422x235	5	978,36
61,00	427x240	5	1.147,56
62,00	427x240	5	1.195,22
63,00	427x240	5	1.264,00
64,00	432x245	5	1.333,61
65,00	432x245	5	1.276,93
66,00	432x245	5	1.439,68
67,00	432x245	5	1.486,10
68,00	437x250	5	1.524,65
69,00	437x250	5	1.572,05
70,00	437x250	5	1.419,57
71,00	437x250	5	1.638,94
72,00	442x255	5	1.672,89
73,00	442x255	5	1.716,68
74,00	442x255	5	1.766,91
75,00	442x255	5	1.664,38
76,00	447x260	5	1.959,80
77,00	514x260	6	2.103,11
78,00	514x260	6	2.144,21
79,00	514x260	6	2.187,42
80,00	514x260	6	2.753,24
81,00	519x265	6	3.032,29
82,00	519x265	6	3.108,06
83,00	519x265	6	3.167,67
84,00	519x265	6	3.234,92
85,00	519x265	6	3.314,83
86,00	524x270	6	3.387,20
87,00	524x270	6	3.459,14
88,00	524x270	6	3.548,03
89,00	524x270	6	3.616,71
90,00	524x270	6	3.720,22
91,00	529x275	6	3.923,75
92,00	529x275	6	3.946,37
93,00	529x275	6	4.087,10
94,00	529x275	6	4.170,16
95,00	529x275	6	4.255,85
96,00	534x280	6	4.396,03
97,00	534x280	6	4.432,91
98,00	534x280	6	4.531,80
99,00	534x280	6	4.613,75
100,00	534x280	6	4.701,77



Ref. EXPBC11MC

DIN 345 MORSE TAPER SHANK DRILLS DISPLAY, 15 PCS

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

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

1.337,18 €
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 RESISTANT MATERIALS

Ref. BC73

HSSCo
8%

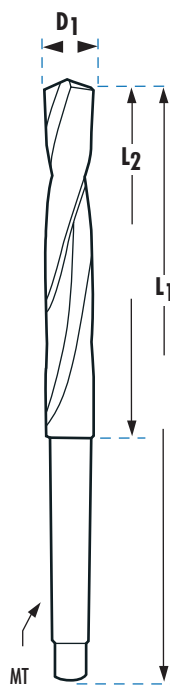


OX

HARDOX
450

BC73

	D1 mm	L1 mm	L2 mm	MT*	€
BC731000	10,00	175	76	2	59,19
BC731020	10,20	175	76	2	59,19
BC731100	11,00	175	76	2	59,19
BC731200	12,00	179	81	2	64,83
BC731250	12,50	179	81	2	64,83
BC731300	13,00	179	81	2	64,83
BC731400	14,00	184	86	2	69,01
BC731450	14,50	187	89	2	69,92
BC731500	15,00	187	89	2	70,36
BC731550	15,50	187	89	2	79,93
BC731600	16,00	187	89	2	83,73
BC731650	16,50	190	92	2	87,59
BC731700	17,00	190	92	2	89,25
BC731800	18,00	190	92	2	90,59
BC731850	18,50	213	95	3	100,97
BC731900	19,00	213	95	3	102,94
BC732000	20,00	213	95	3	109,43
BC732100	21,00	219	102	3	119,18
BC732200	22,00	222	105	3	137,01
BC732400	24,00	222	105	3	147,61
BC732500	25,00	225	108	3	174,90
BC732600	26,00	270	124	4	207,25
BC732700	27,00	270	124	4	222,89
BC732800	28,00	270	124	4	231,43
BC733000	30,00	270	124	4	257,43
BC733200	32,00	280	133	4	299,61
BC733500	35,00	292	136	4	374,36
BC733600	36,00	292	146	4	393,74
BC734000	40,00	298	152	4	481,24
BC734500	45,00	298	152	4	654,48
BC735000	50,00	356	152	5	768,86
BC735500	55,00	360	156	5	913,46
BC736000	60,00	360	156	5	1.114,81



* 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



HARDOX
450

BC22...FT

	D1 mm	L1 mm	L2 mm	MT*	€
BC221600FT	16,00	218	120	2	101,49
BC221800FT	18,00	228	130	2	110,40
BC222000FT	20,00	238	140	2	132,36
BC222200FT	22,00	248	150	2	156,63
BC222400FT	24,00	281	160	3	196,36
BC222500FT	25,00	281	160	3	205,71
BC222600FT	26,00	286	165	3	243,17
BC222800FT	28,00	291	170	3	299,00
BC223000FT	30,00	296	175	3	295,47
BC223200FT	32,00	334	185	4	334,33
BC223400FT	34,00	339	190	4	430,66
BC223600FT	36,00	344	195	4	486,19



- The best solution to drill large diameter holes in hardened metals.
- Special sharpening for very hard materials.
- This drill has been used historically to drill railway rails.

Recommended for HARDOX 450



* Morse taper

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

Ref. BC12



Ref. BC56



			BC12	BC56				BC12	BC56				BC12	BC56
MATERIAL			HSS	HSSCo 5%				€	€				€	€
SHARPENING								€	€				€	€
POINT ANGLE			 118°	 135°				€	€				€	€
HELIX ANGLE			 30° N°	 38° N°				€	€				€	€
COATING			OX	OX				€	€				€	€
APPLICATION			 70 Kg/mm ²	 120 Kg/mm ²				€	€				€	€
Ø mm	L1 x L2	MT*	€	€	Ø mm	L1 x L2	MT*	€	€	Ø mm	L1 x L2	MT*	€	€
5,00	155x74	1	25,67		14,00	223x142	1	48,65	122,32	27,00	343x222	3	162,75	394,18
5,50	161x80	1	34,42		14,25	245x147	2	81,69		27,50	343x222	3	209,73	
6,00	161x80	1	27,30		14,50	245x147	2	61,21		28,00	343x222	3	185,76	405,77
6,50	167x86	1	27,88		14,75	245x147	2	81,69		28,50	351x230	3	248,91	
7,00	174x93	1	29,60		15,00	245x147	2	61,21	142,04	29,00	351x230	3	203,41	440,58
7,50	174x93	1	31,14		15,25	251x153	2	80,89		29,50	351x230	3	249,13	
8,00	181x100	1	31,67		15,50	251x153	2	60,07	147,82	30,00	351x230	3	208,62	463,76
8,50	181x100	1	31,67		15,75	251x153	2	83,87		30,50	360x239	3	284,86	
9,00	188x107	1	34,94		16,00	251x153	2	62,29	147,82	31,00	360x239	3	263,46	521,73
9,50	188x107	1	38,22		16,25	257x159	2	91,23		31,50	360x239	3	305,57	
10,00	197x116	1	39,36	82,60	16,50	257x159	2	67,72	156,54	32,00	397x248	4	264,51	579,70
10,25	197x116	1	47,10		16,75	257x159	2	91,23		32,50	397x248	4	334,86	
10,50	197x116	1	40,94		17,00	257x159	2	67,72	156,54	33,00	397x248	4	281,86	
10,75	206x125	1	60,02		17,25	263x165	2	89,28		33,50	397x248	4	330,62	
11,00	206x125	1	39,36	90,43	17,50	263x165	2	71,97	165,21	34,00	406x257	4	343,08	
11,25	206x125	1	60,02		17,75	263x165	2	101,52		34,50	406x257	4	363,27	
11,50	206x125	1	39,36		18,00	263x165	2	75,37	176,82	35,00	406x257	4	345,15	
11,75	206x125	1	54,18		18,25	269x171	2	101,92		35,50	406x257	4	363,27	
12,00	215x134	1	42,09	101,71	18,50	269x171	2	81,80	184,04	36,00	416x267	4	397,14	
12,25	215x134	1	54,18		18,75	269x171	2	105,19		36,50	416x267	4	502,59	
12,50	215x134	1	43,18		19,00	269x171	2	79,53	184,04	37,00	416x267	4	427,76	
12,75	215x134	1	58,12		19,25	275x177	2	110,39		37,50	416x267	4	498,05	
13,00	215x134	1	43,18	106,39	19,50	275x177	2	89,39	191,88	38,00	426x277	4	447,82	
13,25	223x142	1	60,59		19,75	275x177	2	111,76		38,50	426x277	4	567,71	
13,50	223x142	1	47,06		20,00	275x177	2	85,27	191,88	39,00	426x277	4	465,27	
13,75	223x142	1	65,47		20,50	282x184	2	103,41	223,19	39,50	426x277	4	567,71	
					21,00	282x184	2	97,83	223,19	40,00	426x277	4	503,21	
					21,50	289x191	2	118,03	243,46	41,00	436x287	4	643,43	
					22,00	289x191	2	111,36	243,46	42,00	436x287	4	671,13	
					22,50	296x198	2	121,70	257,95	43,00	447x298	4	714,25	
					23,00	296x198	2	111,43	278,26	44,00	447x298	4	725,13	
					23,50	319x198	3	141,70	286,93	45,00	447x298	4	764,25	
					24,00	327x206	3	143,03	313,04	46,00	459x310	4	804,15	
					24,50	327x206	3	151,93	324,64	47,00	459x310	4	846,34	
					25,00	327x206	3	143,01	304,35	48,00	470x321	4	884,65	
					25,50	335x214	3	172,46		49,00	470x321	4	913,55	
					26,00	335x214	3	150,77	359,42	50,00	470x321	4	945,82	
					26,50	335x214	3	177,90		55,00	505x310	5	1.236,74	

* Morse taper

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

**DIN
1870
I/II**

Ref. BC14



Ref. BC41



	BC14		BC41		BC14		BC41		BC14		BC41					
	Ø mm	L1 x L2	MT*	€	€	Ø mm	L1 x L2	MT*	€	€	Ø mm	L1 x L2	MT*	€	€	
MATERIAL	HSS		HSSCo 5%													
SHARPENING																
POINT ANGLE	118°		135°													
HELIX ANGLE	30° "N"		38° "S"													
COATING	OX		BRIGHT													
APPLICATION	70 Kg/mm²		120 Kg/mm²													
	Ø mm	L1 x L2	MT*	€	€	Ø mm	L1 x L2	MT*	€	€	Ø mm	L1 x L2	MT*	€	€	
	8,00	265x165	1	88,34		17,00	355x230	2	210,35	369,95	29,00	460x305	3	491,37	1.148,82	
	8,00	330x210	1	110,12		17,00	445x295	2	252,91	517,10	29,00	580x385	3	704,53	1.559,41	
	8,50	265x165	1	97,02		17,50	370x245	2	231,46	416,08	29,50	460x305	3	508,74	1.315,21	
	8,50	330x210	1	112,58		17,50	465x310	2	278,49	562,69	29,50	580x385	3	710,35	1.814,93	
	9,00	275x175	1	99,86		18,00	370x245	2	231,46	404,91	30,00	460x305	3	508,74	1.201,90	
	9,00	345x220	1	126,93		18,00	465x310	2	278,49	533,62	30,00	580x385	3	710,35	1.621,10	
	9,50	275x175	1	106,86		18,50	370x245	2	251,10	467,89	31,00	480x320	4	570,25	1.521,12	
	9,50	345x220	1	128,31		18,50	465x310	2	300,99	638,46	31,00	610x410	4	757,32		
	10,00	285x185	1	109,79		19,00	370x245	2	250,97	466,79	32,00	505x320	4	596,25		
	10,00	360x235	1	135,41		19,00	465x310	2	300,99	595,98	32,00	635x410	4	794,62		
	10,50	285x185	1	116,61		19,50	385x260	2	268,04	522,03	33,00	505x320	4	649,71		
	10,50	360x235	1	139,57		19,50	490x325	2	325,73	668,48	33,00	635x410	4	879,68		
	11,00	300x195	1	121,73		20,00	385x260	2	267,99	512,89	34,00	530x340	4	704,50		
	11,00	375x250	1	144,76		20,00	490x325	2	325,73	668,13	34,00	665x430	4	912,81		
	11,50	300x195	1	133,30		20,50	385x260	2	303,49	682,64	35,00	530x340	4	725,62		
	11,50	375x250	1	166,49		20,50	490x325	2	364,44	786,02	35,00	665x430	4	991,93		
	12,00	310x205	1	136,43	303,48	21,00	385x260	2	303,49	626,95	36,00	530x340	4	782,83		
	12,00	395x260	1	170,00		21,00	490x325	2	364,44	778,87	36,00	665x430	4	1.041,59		
	12,50	310x205	1	145,19		21,50	405x270	2	323,66	738,43	37,00	530x340	4	802,63		
	12,50	395x260	1	189,73		21,50	515x345	2	391,11	922,37	37,00	665x430	4	1.157,31		
	13,00	310x205	1	145,19	324,69	22,00	405x270	2	323,66	669,58	38,00	555x360	4	875,53		
	13,00	395x260	1	189,73		22,00	515x345	2	391,11	899,15	38,00	695x460	4	1.225,52		
	13,50	325x220	1	158,95		22,50	405x270	2	368,82	786,02	39,00	555x360	4	912,49		
	13,50	410x275	1	194,86		22,50	515x345	2	441,52	976,21	39,00	695x460	4	1.283,99		
	14,00	325x220	1	159,00	309,92	23,00	405x270	2	368,82	766,59	40,00	555x360	4	961,93		
	14,00	410x275	1	194,86	434,21	23,00	515x345	2	441,52	922,37	40,00	695x460	4	1.224,74		
	14,50	340x220	2	174,12	339,02	23,50	425x270	3	405,24	960,65	41,00	555x360	4	1.082,33		
	14,50	425x275	2	212,21	476,09	24,00	440x290	3	405,24	877,18	42,00	695x460	4	1.117,99		
	15,00	340x220	2	174,12	325,69	24,00	555x365	3	491,37	1.073,38	42,00	695x460	4	1.486,30		
	15,00	425x275	2	212,21	462,41	24,50	440x290	3	419,96	1.036,44	43,00	585x385	4	1.165,88		
	15,50	355x230	2	195,20	378,76	24,50	555x365	3	517,86	1.231,92	43,00	735x490	4	1.516,55		
	15,50	445x295	2	234,06	510,33	25,00	440x290	3	419,96	924,40	44,00	585x385	4	1.220,93		
	16,00	355x230	2	195,20	359,71	25,00	555x365	3	517,86	1.101,78	44,00	735x490	4	1.569,85		
	16,00	445x295	2	234,06	497,37	25,50	440x290	3	434,07	1.102,86	45,00	585x385	4	1.257,63		
	16,50	355x230	2	210,15	378,76	25,50	555x365	3	572,06	1.436,19	45,00	735x490	4	1.642,97		
	16,50	445x295	2	252,91	516,18	26,00	440x290	3	434,07	999,46	46,00	585x385	4	1.296,07		
						26,00	555x365	3	572,06	1.292,33	46,00	735x490	4	1.716,42		
						26,50	440x290	3	444,51	1.119,90	47,00	585x385	4	1.404,05		
						26,50	555x365	3	590,23	1.541,97	47,00	735x490	4	1.800,68		
						27,00	460x305	3	444,51	1.038,81	48,00	605x405	4	1.404,66		
						27,00	580x385	3	590,23	1.367,92	48,00	765x510	4	1.905,42		
						27,50	460x305	3	474,18	1.218,40	49,00	605x405	4	1.447,43		
						27,50	580x385	3	638,52	1.632,81	49,00	765x510	4	1.977,95		
						28,00	460x305	3	474,18	1.100,50	50,00	605x405	4	1.490,03		
						28,00	580x385	3	638,52	1.486,55	50,00	765x510	4	2.029,66		
						28,50	460x305	3	491,37	1.292,69						
						28,50	580x385	3	704,53	1.700,52						

* Morse taper

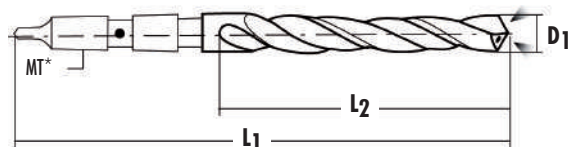
MORSE TAPER SHANK HSS DRILLS WITH INTERNAL COOLING DIN 341

Ref. BC87

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

170°

OX

**SPECIAL 170° POINT FOR
PERFECT CENTERING**


BC87					
	D1 mm	L1 mm	L2 mm	MT*	€
BC871000	10,0	268	116	3	507,50
BC871050	10,5	268	116	3	514,49
BC871100	11,0	278	125	3	514,49
BC871200	12,0	287	134	3	525,73
BC871300	13,0	287	134	3	525,73
BC871350	13,5	285	142	3	525,73
BC871400	14,0	285	142	3	525,73
BC871450	14,5	245	147	2	543,65*
BC871500	15,0	300	147	3	543,65
BC871550	15,5	251	153	2	561,92*
BC871600	16,0	306	153	3	561,92
BC871650	16,5	257	159	2	561,92*
BC871700	17,0	311	159	3	561,92
BC871750	17,5	318	165	3	597,72
BC871800	18,0	318	165	3	597,72
BC871900	19,0	324	171	3	616,10
BC872000	20,0	330	177	3	652,26
BC872100	21,0	343	184	3	688,74
BC872200	22,0	350	191	3	731,86

BC87					
	D1 mm	L1 mm	L2 mm	MT*	€
BC872300	23,0	357	198	3	724,86
BC872400	24,0	365	206	3	724,86
BC872500	25,0	365	206	3	739,86
BC872600	26,0	373	214	3	815,73
BC872700	27,0	375	222	4	851,88
BC872800	28,0	375	222	4	934,95
BC872900	29,0	375	230	4	997,10
BC873000	30,0	375	230	4	1.065,75
BC873100	31,0	375	239	4	1.268,67
BC873200	32,0	375	248	4	1.268,67
BC873300	33,0	375	248	4	1.482,42
BC873400	34,0	375	257	4	1.482,42
BC873500	35,0	375	257	4	1.667,13
BC873600	36,0	375	257	4	1.667,13
BC873700	37,0	375	257	4	1.884,62
BC873800	38,0	375	277	4	1.884,62
BC873900	39,0	375	277	4	2.102,30
BC874000	40,0	375	277	4	2.102,30

* Till end of stock

TWIST DRILLS IN METAL AND PLASTIC BOXES



Ref. PT6010

Blue Plastic

- Light, rigid and robust
- Transparent window
- Reinforced plastic and shock-resistant rubber

P References beginning with "P" are supplied in a plastic case

Ref. P6011



Ref. PP6010

Metal Classic

- High resistance metal drill box



Ref. DC011



Ref. DC010

Ref. BC2



Ref. BC02



BC2		Ref.	U.		CONTENT	€
DIN 338	HSS	D0010	19	M	Ø 1-10 x 0,50 mm	64,45
		D0011	25	M	Ø 1-13 x 0,50 mm	134,09
		P6010	19	P	Ø 1-10 x 0,50 mm	64,45
		P6011	25	P	Ø 1-13 x 0,50 mm	134,09
Quarters		AD001	37	M	Ø 1-10 x 0,25 mm	175,59
		AD002	49	M	Ø 1-13 x 0,25 mm	315,15
Tenths		D0014	50	M	Ø 1-5,90 x 0,10 mm	119,62
		D0015	41	M	Ø 6-10 x 0,10 mm	311,41
		D0022	81	M	Ø 2-10 x 0,10 mm	549,38
Half + Prior holes		D0017	23	M	Ø 1-10 x 0,50 + Ø PH*	122,85
		D0035	29	M	Ø 1-13 x 0,50 + Ø PH*	203,06
Additional Compositions		D0007	10	M	Ø 1-10 x 1 mm	52,45
		D0009	13	M	Ø 1,5-6,5x0,5 (+3,2 & 4,8) mm	24,90
		D0008	13	M	Ø 1-7 x 0,50 mm	25,91
		D0006	12	M	Ø 2-7 x 0,50 + 8 mm	47,56

BC02		Ref.	U.		CONTENT	€
DIN 338	Plus	DP010	19	M	Ø 1-10 x 0,50 mm	72,86
		DP011	25	M	Ø 1-13 x 0,50 mm	150,74
		PP6010	19	P	Ø 1-10 x 0,50 mm	72,86
		PP6011	25	P	Ø 1-13 x 0,50 mm	150,74
Quarters		ADP01	37	M	Ø 1-10 x 0,25 mm	210,39
		ADP02	49	M	Ø 1-13 x 0,25 mm	374,30
Tenths		On request	50	M	Ø 1-5,90 x 0,10 mm	
		On request	41	M	Ø 6-10 x 0,10 mm	
		On request	81	M	Ø 2-10 x 0,10 mm	
Half + Prior holes		DP017	23	M	Ø 1-10 x 0,50 + Ø PH*	123,02
		DP035	29	M	Ø 1-13 x 0,50 + Ø PH*	211,63
Additional Compositions		DP007	10	M	Ø 1-10 x 1 mm	68,82
		DP009	13	M	Ø 1,5-6,5x0,5 (+3,2 & 4,8) mm	29,28
		DP008	13	M	Ø 1-7 x 0,50 mm	29,32
		DP006	12	M	Ø 2-7 x 0,50 + 8 mm	49,21

Ref. BC5



Ref. BC18



BC5		Ref.	U.		CONTENT	€
DIN 338	HSSCo 5%	DC010	19	M	Ø 1-10 x 0,50 mm	107,70
		DC011	25	M	Ø 1-13 x 0,50 mm	252,58
		PC6010	19	P	Ø 1-10 x 0,50 mm	107,70
		PC6011	25	P	Ø 1-13 x 0,50 mm	252,58
Quarters		ADC01	37	M	Ø 1-10 x 0,25 mm	253,93
		ADC02	49	M	Ø 1-13 x 0,25 mm	568,31
Tenths		DC014	50	M	Ø 1-5,90 x 0,10 mm	187,11
		DC015	41	M	Ø 6-10 x 0,10 mm	461,32
		DC022	81	M	Ø 2-10 x 0,10 mm	750,64
Half + Prior holes		DC017	23	M	Ø 1-10 x 0,50 + Ø PH*	172,41
		DC035	29	M	Ø 1-13 x 0,50 + Ø PH*	330,31
Additional Compositions		DC007	10	M	Ø 1-10 x 1 mm	89,62
		DC009	13	M	Ø 1,5-6,5x0,5 (+3,2 & 4,8) mm	43,64
		DC008	13	M	Ø 1-7 x 0,50 mm	45,72
		DC006	12	M	Ø 2-7 x 0,50 + 8 mm	68,54

BC18		Ref.	U.		CONTENT	€
HSS	TIN	DT010	19	M	Ø 1-10 x 0,50 mm	95,13
		DT011	25	M	Ø 1-13 x 0,50 mm	208,09
		PT6010	19	P	Ø 1-10 x 0,50 mm	95,13
		PT6011	25	P	Ø 1-13 x 0,50 mm	208,09
Quarters		ADT01	37	M	Ø 1-10 x 0,25 mm	216,82
		ADT02	49	M	Ø 1-13 x 0,25 mm	442,93
Tenths		On request	50	M	Ø 1-5,90 x 0,10 mm	
		On request	41	M	Ø 6-10 x 0,10 mm	
		On request	81	M	Ø 2-10 x 0,10 mm	
Half + Prior holes		On request	23	M	Ø 1-10 x 0,50 + Ø PH*	
		On request	29	M	Ø 1-13 x 0,50 + Ø PH*	
Additional Compositions		DT007	10	M	Ø 1-10 x 1 mm	74,44
		DT009	13	M	Ø 1,5-6,5x0,5 (+3,2 & 4,8) mm	38,93
		DT008	13	M	Ø 1-7 x 0,50 mm	42,57
		DT006	12	M	Ø 2-7 x 0,50 + 8 mm	62,29

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

TWIST DRILLS IN METAL AND PLASTIC BOXES

Twist drills for Metal

Grey
Pink
Metal Classic

- High resistance metal drill box

M
Blue Plastic

- Light, rigid and robust
- Transparent window
- Reinforced plastic and shock-resistant rubber

P

References beginning with "P" are supplied in a plastic case



Ref. PTTX011

Ref. BC95



Ref. BC58



BC95		Ref.	U.		CONTENT	€
HSSCo 5%		DC9510	19	M	Ø 1-10 x 0,50 mm	122,78
		DC9511	25	M	Ø 1-13 x 0,50 mm	277,54
		PC9510	19	P	Ø 1-10 x 0,50 mm	122,78
		PC9511	25	P	Ø 1-13 x 0,50 mm	277,54

BC58		Ref.	U.		CONTENT	€
DIN 338	HSSCo 8%	DC810	19	M	Ø 1-10 x 0,50 mm	155,84
		DC811	25	M	Ø 1-13 x 0,50 mm	367,65

Ref. BC82



Quarters		Ref.	U.		CONTENT	€
		ADC81	37	M	Ø 1-10 x 0,25 mm	359,11
		ADC82	49	M	Ø 1-13 x 0,25 mm	842,65

BC82		Ref.	U.		CONTENT	€
DIN 338	HSS	D8210	19	M	Ø 1-10 x 0,50 mm	64,81
		D8211	25	M	Ø 1-13 x 0,50 mm	134,09

Half + Prior holes		Ref.	U.		CONTENT	€
		DC817	23	M	Ø 1-10 x 0,50 + Ø PH*	231,25
		DC835	29	M	Ø 1-10 x 0,50 + Ø PH*	454,71

Additional Compositions		Ref.	U.		CONTENT	€
		DC806	12	M	Ø 2-7 x 0,50 + 8 mm	90,32
		DC807	10	M	Ø 1-10 x 1 mm	113,51

Ref. BTX



Ref. TTX



BTX		Ref.	U.		CONTENT	€
Ø ≥ 3	HSSCo 5%	PTX010	19	P	Ø 1-10 x 0,50 mm	118,13
		PTX011	25	P	Ø 1-13 x 0,50 mm	259,84

TTX		Ref.	U.		CONTENT	€
Ø ≥ 3	HSS	PTTX010	19	P	Ø 1-10 x 0,50 mm	106,31
	TiAlSiN	PTTX011	25	P	Ø 1-13 x 0,50 mm	233,86

Ref. TK02



Ref. TK05



TK02		Ref.	U.		CONTENT	€
DIN 338	HSS	TK02010	19	P	Ø 1-10 x 0,50 mm	198,38
Ø ≥ 4		TK02011	25	P	Ø 1-13 x 0,50 mm	353,91

TK05		Ref.	U.		CONTENT	€
DIN 338	HSSCo 5%	TK05010	19	P	Ø 1-10 x 0,50 mm	247,97
Ø ≥ 5		TK05011	25	P	Ø 1-13 x 0,50 mm	442,39

TWIST DRILLS IN METAL BOXES (additional compositions)

HSS TWIST DRILLS FOR ALUMINIUM

Ref. BC16



BC16		Ref.	U.		CONTENT	€
DIN 338	HSS	D16010	19	M	Ø 1-10 x 0,50 mm	102,04
		D16011	25	M	Ø 1-13 x 0,50 mm	223,87

HSSCo "S" TYPE FLUTED TWIST DRILLS

Ref. BC55



BC55		Ref.	U.		CONTENT	€
DIN 338	HSSCo 5%	D55010	18	M	Ø 1,50-10 x 0,50 mm	208,50
		D55011	24	M	Ø 1,50-13 x 0,50 mm	474,79

CARBIDE TIPPED TWIST DRILLS FOR HARDENED STEELS, CAST IRON, ETC

Ref. BC7



BC7		Ref.	U.		CONTENT	€
DIN 338	CARBIDE TIPPED	DPMD010	17	M	Ø 2-10 x 0,50 mm	419,43
		DPMD011	23	M	Ø 2-13 x 0,50 mm	721,74

SOLID CARBIDE TWIST DRILLS FOR HARD MATERIALS

Ref. BC42



BC42		Ref.	U.		CONTENT	€
DIN 338	SOLID CARBIDE	D42010	17	M	Ø 2-10 x 0,50 mm	1.148,36
		D42011	23	M	Ø 2-13 x 0,50 mm	2.600,00

TWIST DRILLS FOR STAINLESS STEEL

Ref. BC50



BC50		Ref.	U.		CONTENT	€
DIN 338	HSSCo 5%	D50010	19	M	Ø 1-10 x 0,50 mm	363,18
		D50011	25	M	Ø 1-13 x 0,50 mm	624,54

LEFT HAND CUT TWIST DRILLS

Ref. BC15



BC15		Ref.	U.		CONTENT	€
DIN 338	HSS	D0010I	19	M	Ø 1-10 x 0,50 mm	189,56
		D0011I	25	M	Ø 1-13 x 0,50 mm	399,56
		DR9312I	10	P	Ø 1-10 x 1 mm	94,23

EMPTY BOXES

Ref.	U.		CONTENT	€
D0010V	19	M	Ø 1-10 x 0,50 mm	19,98
D0011V	25	M	Ø 1-13 x 0,50 mm	27,87
AD001V	37	M	Ø 1-10 x 0,25 mm	73,21
AD002V	49	M	Ø 1-13 x 0,25 mm	85,03
D0014V	50	M	Ø 1-5,9 x 0,10 mm	64,85
D0015V	41	M	Ø 6-10 x 0,10 mm	129,57
D0022V	81	M	Ø 2-10 x 0,10 mm	248,50
D0006V	12	M	Ø 2-7 x 0,50 + 8 mm	27,11
D0007V	10	M	Ø 1-10 x 1 mm	46,50
D0017V	23	M	Ø 1-10 x 0,50 mm + PH*	53,95
D0035V	29	M	Ø 1-13 x 0,50 mm + PH*	76,30
DE10V	19	M	Ø 1-10 x 0,50 mm	47,19
DE11V	25	M	Ø 1-13 x 0,50 mm	57,65

DIN 1897



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

TWIST DRILLS IN METAL BOXES
LONG SERIES DIN 340 TWIST DRILLS IN METAL BOXES

Ref. BC4



BC4		Ref.	U.	CONTENT	€	
DIN 340	HSS	D0004	19	M	Ø 1-10 x 0,50 mm	111,36

Ref. BC47

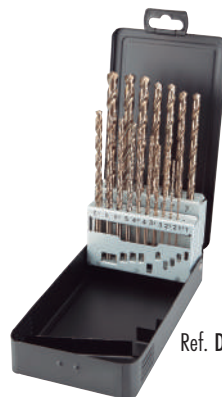


BC47		Ref.	U.	CONTENT	€	
DIN 340	HSSCo 5%	DC004	x17	M	Ø 2-10 x 0,50 mm	237,09

Ref. BC40



BC40		Ref.	U.	CONTENT	€	
HSS	TiN	DT004	19	M	Ø 1-10 x 0,50 mm	171,55



Ref. DC004



Ref. DT004

EXTRA-SHORT SERIES DIN 1897

Ref. BC3



BC3		Ref.	U.	CONTENT	€	
DIN 1897	HSS	D3010	19	M	Ø 1-10 x 0,50 mm	74,88
		D3011	25	M	Ø 1-13 x 0,50 mm	143,58

Ref. BC31



BC31		Ref.	Ref.	U.	CONTENT	€
DIN 1897	HSSCo 5%	D3110	19	M	Ø 1-10 x 0,50 mm	112,26
		D3111	25	M	Ø 1-13 x 0,50 mm	235,88

Ref. BC33



BC33		Ref.	U.	CONTENT	€	
DIN 1897	HSSCo 5%	D3310	19	M	Ø 1-10 x 0,50 mm	204,61
		D3311	25	M	Ø 1-13 x 0,50 mm	370,30

Ref. BC77



BC77		Ref.	U.	CONTENT	€	
DIN 1897	CARBIDE TIPPED	D7710	17	M	Ø 2-10 x 0,50 mm	520,36
		D7711	23	M	Ø 2-13 x 0,50 mm	871,16

Ref. BC43



BC43		Ref.	U.	CONTENT	€	
DIN 1897	SOLID CARBIDE	D4310	17	M	Ø 2-10 x 0,50 mm	774,09
		D4311	23	M	Ø 2-13 x 0,50 mm	1.645,87



Ref. D7710



Ref. D3110

TWIST DRILLS IN PLASTIC BOXES



Ref. DP9314



Ref. DP9312



Ref. DP9313



Ref. DP9311

Ref. BC2



BC2		Ref.	U.	CONTENT	€
DIN 338	HSS	DR9314	6	Ø 2 - 3 - 4 - 5 - 6 - 8 mm	18,76
		DR9312	10	Ø 1-10 x 1 mm	39,93
		DR9313	13	Ø 2-8 x 0,50 mm	39,62
		DR9311	19	Ø 1-10 x 0,50 mm	69,76

Ref. BC02



BC02		Ref.	U.	CONTENT	€
DIN 338	Plus	DP9314	6	Ø 2 - 3 - 4 - 5 - 6 - 8 mm	19,77
		DP9312	10	Ø 1-10 x 1 mm	43,24
		DP9313	13	Ø 2-8 x 0,50 mm	42,25
		DP9311	19	Ø 1-10 x 0,50 mm	76,26

Ref. BC5



BC5		Ref.	U.	CONTENT	€
DIN 338	HSSCo 5%	DC9314	6	Ø 2 - 3 - 4 - 5 - 6 - 8 mm	29,81
		DC9312	10	Ø 1-10 x 1 mm	63,93
		DC9313	13	Ø 2-8 x 0,50 mm	64,41
		DC9311	19	Ø 1-10 x 0,50 mm	114,28

Ref. BC18



BC18		Ref.	U.	CONTENT	€
HSS	TiN	DT9314	6	Ø 2 - 3 - 4 - 5 - 6 - 8 mm	20,54
		DT9312	10	Ø 1-10 x 1 mm	43,74
		DT9313	13	Ø 2-8 x 0,50 mm	43,40
		DT9311	19	Ø 1-10 x 0,50 mm	76,41

Ref. BC82



BC82		Ref.	U.	CONTENT	€
DIN 338	HSS	D829314	6	Ø 2 - 3 - 4 - 5 - 6 - 8 mm	17,76
		D829312	10	Ø 1-10 x 1 mm	37,79
		D829313	13	Ø 2-8 x 0,50 mm	37,49
		D829311	19	Ø 1-10 x 0,50 mm	66,02

Ref. BC58



BC58		Ref.	U.	CONTENT	€
DIN 338	HSSCo 8%	D89314	6	Ø 2 - 3 - 4 - 5 - 6 - 8 mm	38,04
		D89312	10	Ø 1-10 x 1 mm	81,35
		D89313	13	Ø 2-8 x 0,50 mm	83,38
		D89311	19	Ø 1-10 x 0,50 mm	146,26

				Ref.	U.	CONTENT	€
BC95	HSSCo 5%	OX GOLD		DC959314	6	Ø 2-3-4-5-6-8 mm	29,92
BTX	Ø ≥ 3	HSSCo 5%		PTX9314	6	Ø 2-3-4-5-6-8 mm	29,65
TTX	Ø ≥ 3	HSS		PTTX9314	6	Ø 2-3-4-5-6-8 mm	27,62
TK02	DIN 338	HSS		PTK029314	6	Ø 2-3-4-5-6-8 mm	48,83
TK05	DIN 338	HSSCo 5%		PTK059314	6	Ø 2-3-4-5-6-8 mm	61,04

Ref. BC95



Ref. BTX



Ref. TTX



Ref. TK02



Ref. TK05



TWIST DRILLS IN PLASTIC BOXES
TWIST DRILLS IN ROUND PLASTIC BOXES, 19 PCS


					Ref.	U.	CONTENT	€
BC2	DIN 338	HSS	118°		DR9380	19	Ø 1-10 x 0,50 mm	65,43
BC02	DIN 338	Plus	118°		DP9380	19	Ø 1-10 x 0,50 mm	73,34
BC5	DIN 338	HSSCo 5%	135°		DC9380	19	Ø 1-10 x 0,50 mm	109,08
BC18	TiN	HSS	118°		DT9380	19	Ø 1-10 x 0,50 mm	96,94
BC58	DIN 338	HSSCo 8%	135°		D89380	19	Ø 1-10 x 0,50 mm	148,35

Ref. BC2



Ref. BC02



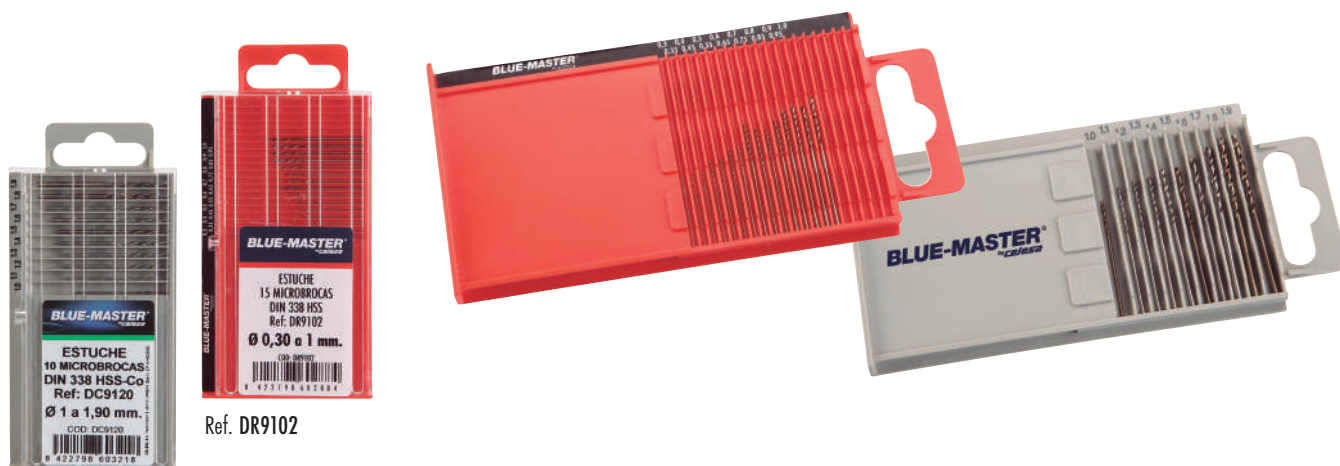
Ref. BC5



Ref. BC18



Ref. BC58


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


Ref. DR9102

Ref. DC9120

			Ref.	U.	CONTENT	€
DR9120	DIN 338	HSS	DR9120	10	Ø 1-1,90 x 0,10 mm	25,16
DC9120	DIN 338	HSSCo 5%	DC9120	10	Ø 1-1,90 x 0,10 mm	37,95
DR9102	DIN 338	HSS	DR9102	15	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	50,47

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 mm x 2	Ø 4 - 6 - 8 mm x 3	Ø 5 - 6 - 8 mm x 3
PRICE €	24,08	25,66	26,16

* Till end of stock

PROFESSIONAL SERIES

HSSCo 5% (Ref. BC5) CARBIDE TIPPED (Ref. BW6) HSS (Ref. BMRP)		   		
				
				
REFERENCE	M9330	M9331	M9332	M9382
QUANTITY	8	9	9	18
QUALITY	 	  	  	  
CONTENT	Ø 4 - 5 - 6 - 8 mm x 2	Ø 4 - 6 - 8 mm x 3	Ø 5 - 6 - 8 mm x 3	Ø 3 - 4 - 5 - 6 - 8 - 10 mm x 3
PRICE €	41,60	40,85	41,68	81,50*

* Till end of stock

EXTRA PROFESSIONAL SERIES

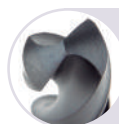
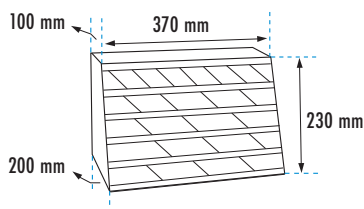
HSSCo 5% (Ref. BC5) CARBIDE TIPPED (Ref. BW15) HSS (Ref. BMRP)		   		
				
				
REFERENCE	P9330	P9331	P9332	P9382
QUANTITY	8	9	9	18
QUALITY	 	  	  	  
CONTENT	Ø 4 - 5 - 6 - 8 mm x 2	Ø 4 - 6 - 8 mm x 3	Ø 5 - 6 - 8 mm x 3	Ø 3 - 4 - 5 - 6 - 8 - 10 mm x 3
PRICE €	61,76*	56,36*	57,41*	114,71*

* 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

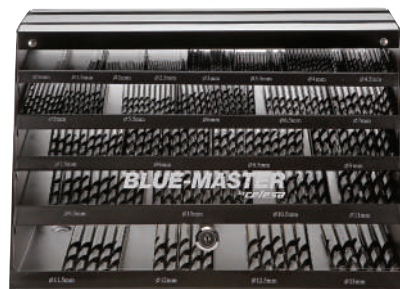


HSS

CONTENT 400 DRILLS

BC2 Drills

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



EXPBROCASBC2

1.287,80 €



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

EXPBROCASBC02

1.370,60 €

DISPLAY CABINET FOR TWIST DRILLS DIN 338



EXPBROCASBC5
1.782,40 €



Ref. BC5

DIN 338

HSSCo 5%



135°



30°



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°



TiN



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
1.323,45 €



EXPBROCASBC95
1.145,60 €



Ref. BC95

DIN 338

HSSCo 5%



130°



Ø ≥ 3

OX GOLD

INOX



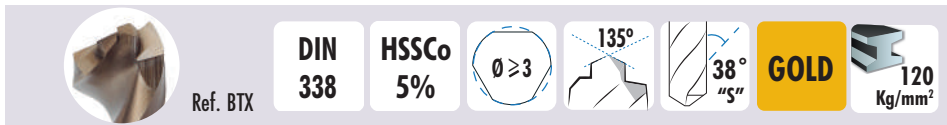
HSSCo 5%



CONTENT 176 DRILLS

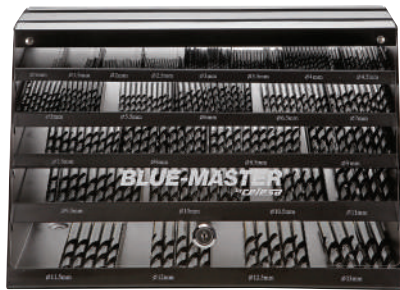
BC95 Drills

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


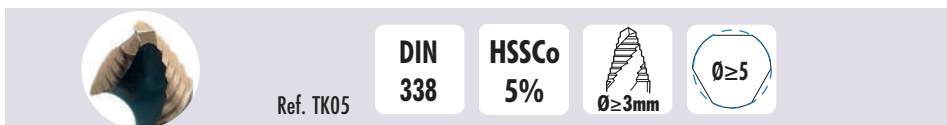
(Ø1-2,5mm) BC5 Drills (Ø3-13mm) BTX Drills

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

EXPBROCASBTX
103,90 €
EXPBROCASBTX
970,91 €

EXPBROCASTK02
1.724,78 €


TK02 Drills

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



TK05 Drills

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


EXPBROCASTK05
2.181,38 €

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	Plus	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 €	410,78	460,47	679,99	563,93	159,26



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
Units	10	5	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	Plus	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 €	825,10	917,07	1.464,21	1.148,89	368,78

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 €	722,49	1.007,94

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;

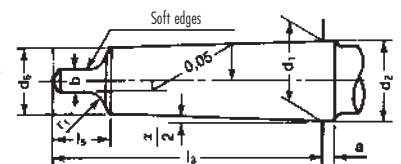
Material: Aluminium

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	$\frac{d_2}{d_1}$	a	b h ₁₃	d_1	d_2 Ø max =	d_6 Ø min =	d_7 Dimen. min.	l_3 -1	l_4 Dimen. min.	l_5 Dimen. min.	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