



TiefbohrSysteme[®] GmbH

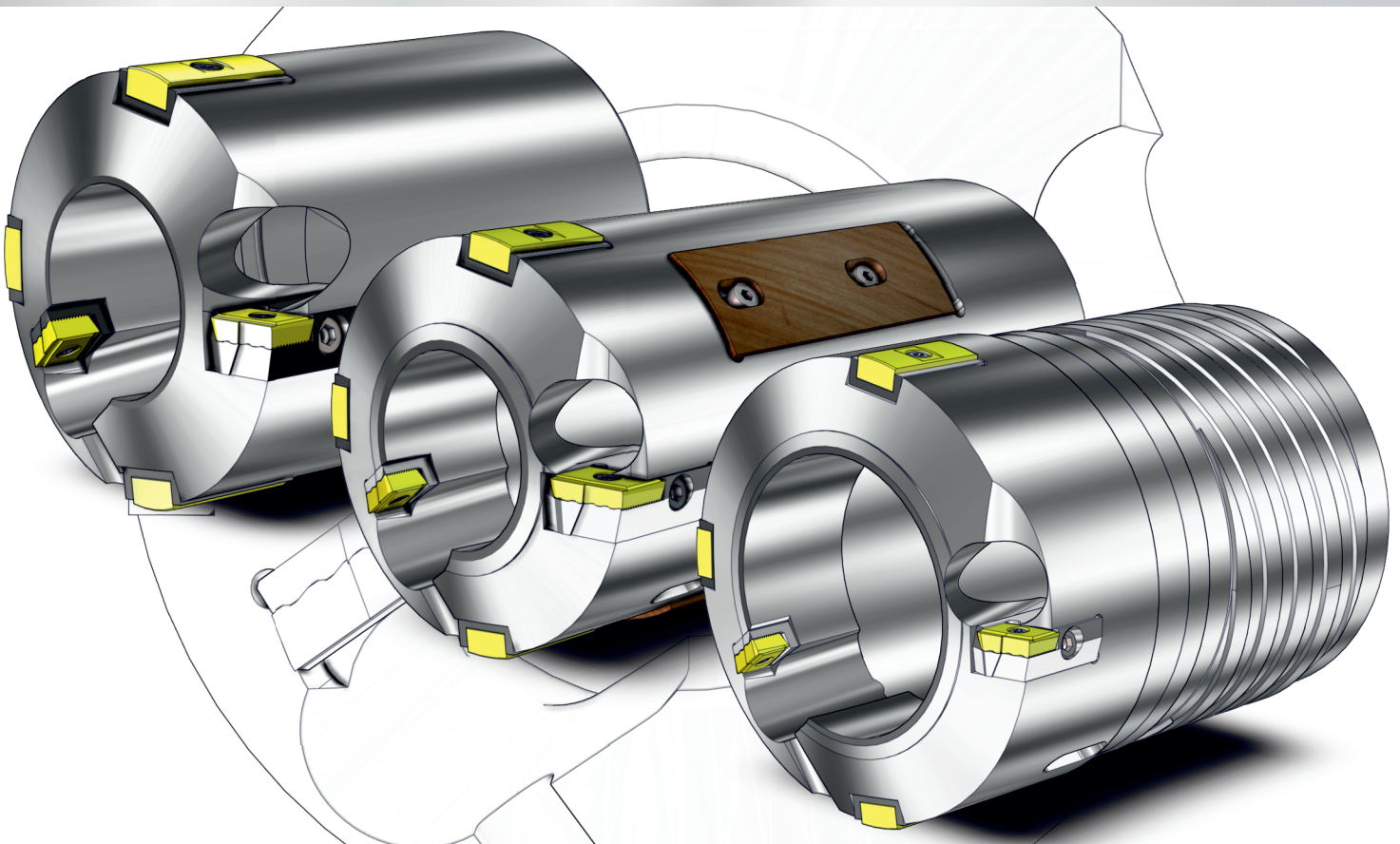
DEEP HOLE BORING TECHNOLOGY | EQUIPMENT

Trepanning Tools

Type 1030 / 1032

DEEP HOLE DRILLING TOOLS

BORING RANGE Ø57,00 - 305,99 mm



Deep Hole Boring - An Inaccessible World

In today's production world, precision and production strategies are a significant constituent for success. The more complex the production process, the more important are these two factors. Deep hole boring our company, **BTA-Tiefbohrsysteme GmbH**, is the essential partner for implementation even under difficult marginal conditions with high requirements. We are the only company in the world capable of offering our customers everything from inserts to complete, suitable equipment for deep hole boring machines. Our experienced experts are always at your side to ensure proper support from planning your deep hole boring project up to tool services. All this is aimed at your success.

In the company-owned application and research department we can test innovations and special designed tools, customize the tools to user-specific material and train their operators. You will receive tools customized for your application and benefit from our experience.

Our tool systems offer you the following advantages:

- Tools designed for various processes (solid boring, trepanning, counter boring and skiving) with the same effective elements, especially such as inserts and guides. This results in extremely low stocks and simple handling.
- Suitable selection possibilities for tools, corresponding to required boring quality, from simple solid boring to form boring.
- Custom layout of tools for various production requirements to straightness, surface, material and constant wall thickness.
- Equipment matched to the deep hole boring process - from workpiece clamping to vibration damping.
- Production-optimized machinery layout for reducing setup and conversion times.

Here are a few results from production boring with our tools:

- Surface $R_a < 0.1 \mu\text{m}$ e.g. by skiving and roller burnishing
- Mismatch of axes $< 0.1\text{mm/m}$ e.g. by pull counter boring
- Hole accuracy $< IT8$ e.g. by skiving

Benefit from these advantages by cooperating with a strong partner.

BTA-Tiefbohrsysteme GmbH





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Tool description

- Trepanning tools to reduce the machine performance when processing a solid-bore
- The version with the fibre pads is particularly suitable for the machining of long holes (type 1031)
- The remaining core can be further used

Tool characteristics

- drilling depth $\leq 300 \times$ tool diameter
- surface $\geq R_a 1,25 \mu\text{m}$
- mismatch of axes $\geq 0,2 \text{ mm/m}$
- drilling accuracy $\geq \text{IT9}$

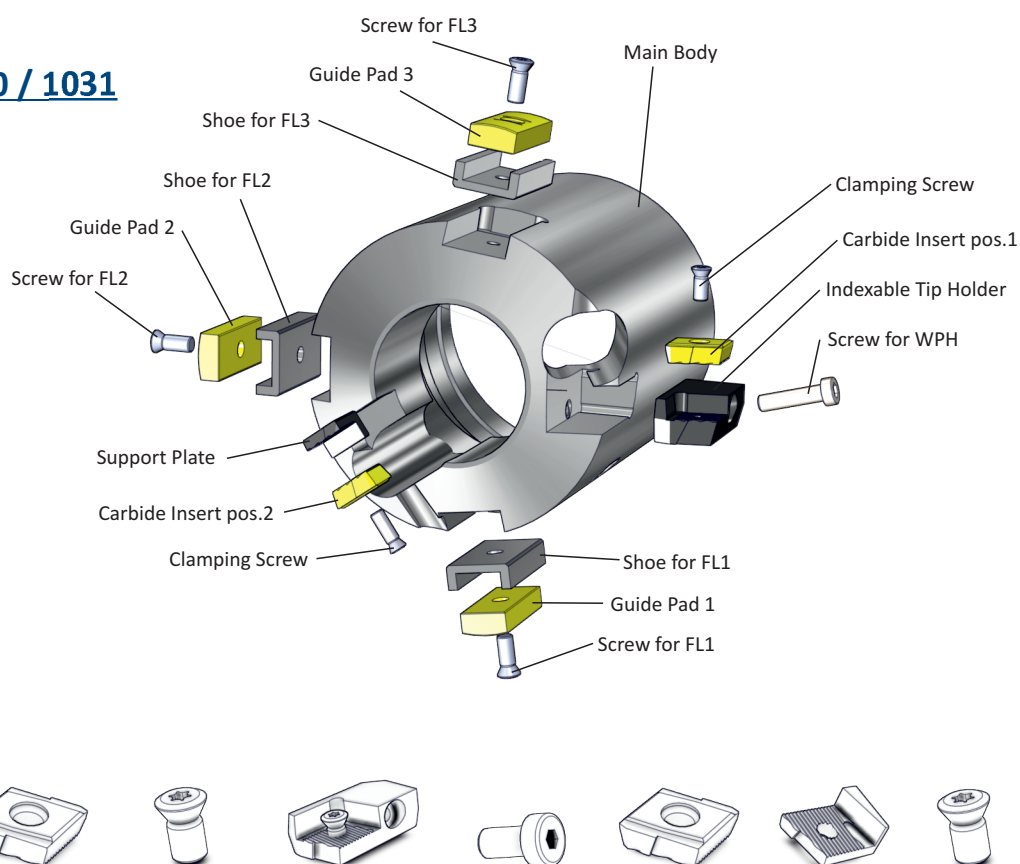
Trepanning Tools Type 1030 / 1031

Boring Range Ø 57,00 - 305,99 mm

Type 1030, standard design BTA

Type 1031, design with fibre pads

For difficult boring operations we recommend to use fibre pads to reduce any vibrations that may occur.



Boring Range	Drill Tube Connection	Carbide Insert pos.1	Clamping Screw	Indexable Tip Holder	Screw for WPH	Carbide Insert pos.2	Support Plate	Clamping Screw
Ø 57,00 - Ø 60,99	51			Size A2a 019.2214.J	M4x16 DIN6912			
Ø 61,00 - Ø 67,99	56	A2a	M4x8,2 T15			A2a	Size A2a 019.2210.E	M4x12,5 T15
Ø 68,00 - Ø 74,99	62							
Ø 75,00 - Ø 80,99	68			Size A3a 019.2222.S	M4x20 DIN6912			
Ø 81,00 - Ø 90,99	75	A3a	M5x9,5 T15			A3a	Size A3a 019.2236.G	
Ø 91,00 - Ø 98,99	82							
Ø 99,00 - Ø 110,99	94			Size A4a 019.2270.S	M6x25 DIN6912			
Ø 111,00 - Ø 122,99	106	A4a	M5x12 T15			A4a	Size A4a 019.2237.H	M5x16 T20
Ø 123,00 - Ø 134,99	118							
Ø 135,00 - Ø 148,99	130							
Ø 149,00 - Ø 161,99	142							
Ø 162,00 - Ø 173,99	154							
Ø 174,00 - Ø 185,99	166							
Ø 186,00 - Ø 197,99	178							
Ø 198,00 - Ø 209,99	190							
Ø 210,00 - Ø 221,99	202	A5a	M6x12 T20	Size A5a 019.2251.X	M6x30 DIN6912			
Ø 222,00 - Ø 233,99	214					A5a	Size A5a 019.2246.S	M6x16 T20
Ø 234,00 - Ø 245,99	226							
Ø 246,00 - Ø 257,99	238							
Ø 258,00 - Ø 269,99	250							
Ø 270,00 - Ø 281,99	262							
Ø 282,00 - Ø 293,99	274							
Ø 294,00 - Ø 305,99	286							

Additional diameters on request

See Page 5/7 for spare and wear parts ordering data

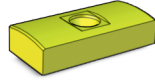
Tools for drill tube Ø226 or larger can be delivered with flange connection

Note: Please activate the two-sided view so that the table is displayed completely.



Spare and wear parts

Guide Pads



Description	Radius	Carbide		Shoe for Guide Pads
		TiN coated	ML coated	
FL 8	15	016.9217.B	019.6677.H	-
FL 10	28	016.9226.A	019.6680.L	
FL 14	30	016.9229.T	019.6681.M	
FL 18	40	014.4761.R	019.6682.N	015.2246.N
	65	016.9238.S	019.6683.P	
	90	019.2768.L	019.6684.Q	

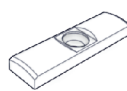
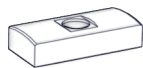
Fibre Pads RF 82 to RF 90



Description	Ident-No. Fibre	Washer	Screws for Fibre Pads
RF 82	018.4000.B	011.2044.C	M4x8 DIN7984
RF 83	018.4001.C		M4x10 DIN7984
RF 84	018.4002.D		
RF 85	018.4003.E	011.2043.E	M6x12 DIN7984
RF 86	018.4004.F		
RF 87	018.4005.G		
RF 88	018.4006.H	011.2042.G	M10x16 DIN7984
RF 89	011.9935.B		
RF 90	011.9936.Z		

Notice: The fibre pads are wear parts and are supplied oversize. To achieve the correct diameter they will have to be turned to size once mounted in the tool.

Standard placement: 3 pieces per tool.

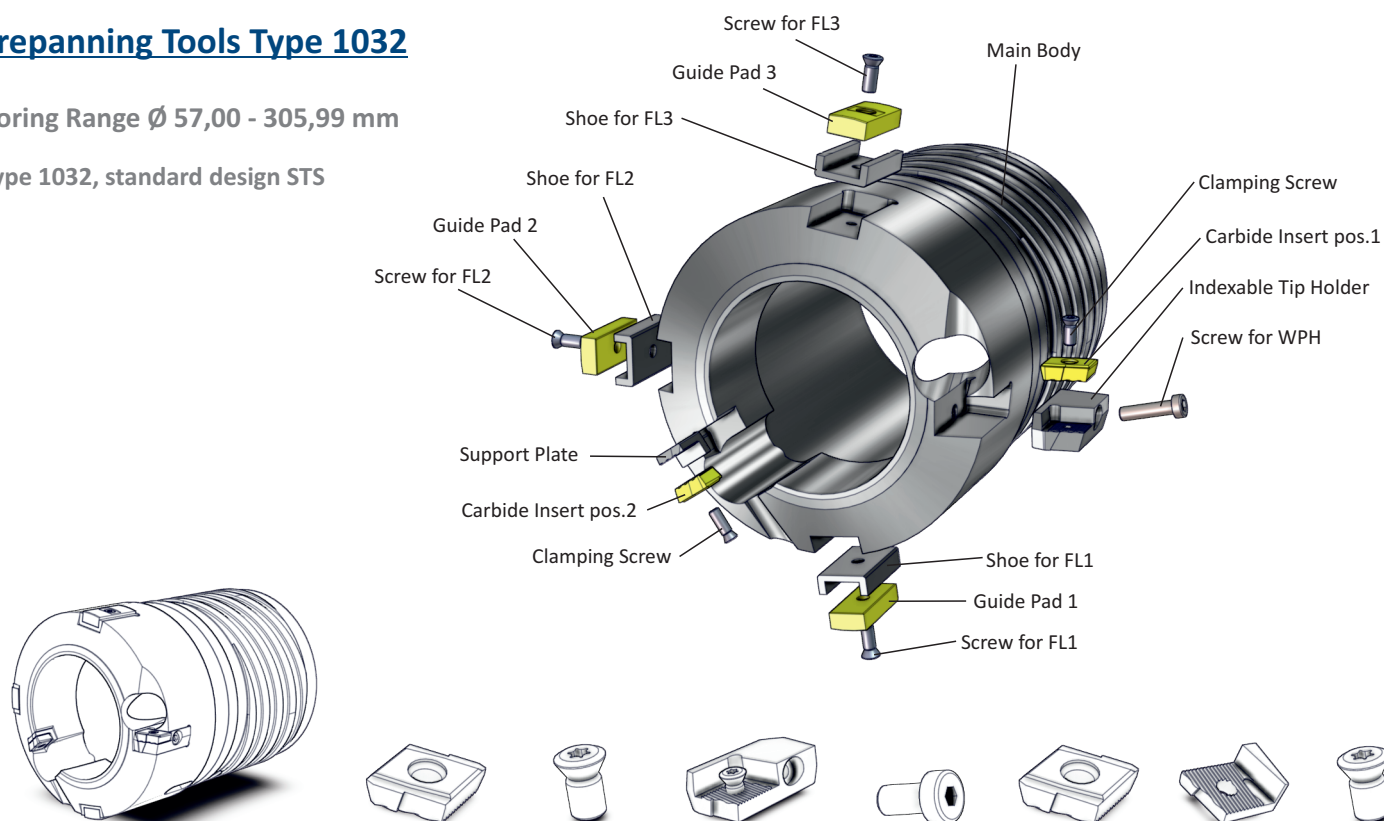


Guide Pads FL1 and FL2	Clamping Screw	Guide Pad FL3	Clamping Screw	Fibre Pad	Core Ø (selectable)
FL 10 R 28	M4x8,2 T15	FL 8 R 15	M3x7,4 T9	RF 83	17 - 22 24 - 26 31
FL 14 / R30	M6x12 T20	FL 10 R 28	M4x8,2 T15	RF 84	29 - 31 31 - 37 39 - 40
FL 18 R 40		FL 14 / R 30	M6x12 T20	RF 85	35 - 40 47 - 50 59 - 60
FL 18 / R 65		FL 18 R 40		RF 86	63 - 67 76 - 79
		FL 18 / R 65		RF 87	88 - 89 90 - 99 102 - 111
FL 18 / R 90	M6x16 T20	FL 18 / R 90	M6x16 T20	RF 88	114 - 121 126 - 133 138 - 145 150 - 157 162 - 169 174 - 181
				RF 89	186 - 193 198 - 205 210 - 217

Trepanning Tools Type 1032

Boring Range Ø 57,00 - 305,99 mm

Type 1032, standard design STS



Boring Range	Drill Tube Connection	Carbide Insert	Clamping Screw	Indexable Tip Holder	Screw for WPH	Carbide Insert pos.2	Support Plate	Clamping Screw
Ø 57,00 - Ø 60,99	51	A2a	M4x8,2 T15	Size A2a 019.2214.J	M4x16 DIN6912	A2a	Size A2a 019.2210.E	M4x12,5 T15
Ø 60,00 - Ø 67,99	56							
Ø 66,00 - Ø 74,99	62							
Ø 72,00 - Ø 80,99	68							
Ø 80,00 - Ø 90,99	75	A3a	M5x9,5 T15	Size A3a 019.2222.S	M4x20 DIN6912	A3a	Size A3a 019.2236.G	
Ø 87,00 - Ø 98,99	82							
Ø 99,00 - Ø 110,99	94							
Ø 111,00 - Ø 122,99	106							
Ø 123,00 - Ø 134,99	118	A4a	M5x12 T15	Size A4a 019.2270.S	M6x25 DIN6912	A4a	Size A4a 019.2237.H	M5x16 T20
Ø 135,00 - Ø 148,99	130							
Ø 147,00 - Ø 161,99	142							
Ø 159,00 - Ø 173,99	154							
Ø 171,00 - Ø 185,99	166	A5a	M6x12 T20	Size A5a 019.2251.X	M6x30 DIN6912	A5a	Size A5a 019.2246.S	M6x16 T20
Ø 183,00 - Ø 197,99	178							
Ø 195,00 - Ø 209,99	190							
Ø 207,00 - Ø 221,99	202							
Ø 219,00 - Ø 233,99	214							
Ø 232,00 - Ø 245,99	226							
Ø 244,00 - Ø 257,99	238							
Ø 256,00 - Ø 269,99	250							
Ø 268,00 - Ø 281,99	262							
Ø 280,00 - Ø 293,99	274							
Ø 292,00 - Ø 305,99	286							

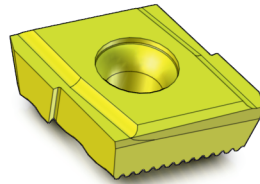
Additional diameters on request

See Page 5/7 for spare and wear parts ordering data

Note: Please activate the two-sided view so that the table is displayed completely.



Spare and wear parts



Indexable Inserts Size A2a - A5a

Description	Chip Breaker	Carbide		
		P25 TiN	P40 TiN	K20 TiN
A2a	Size 1 - 2,2x0,5	018.9896.T	019.2603.P	019.2541.Z
	Size 2 - 2,5x0,7	019.2337.M	019.2607.T	019.2545.D
A3a	Size 1 - 2,5x0,7	018.9897.U	019.2604.Q	019.2542.A
	Size 2 - 2,7x0,8	019.2338.N	019.2608.U	019.2546.E
A4a	Size 1 - 2,5x0,7	018.9898.V	019.2605.R	019.2543.B
	Size 2 - 2,7x0,8	019.2348.Y	019.2609.V	019.2547.F
A5a	Size 1 - 2,7x0,8	018.9899.W	019.2606.S	019.2544.C
	Size 2 - 3,0x1,0	019.2349.Z	019.2610.W	019.2548.G

Chip breaker size 1 for unalloyed steels C > 0.2, alloyed steels, heat-treated steels, tool steel

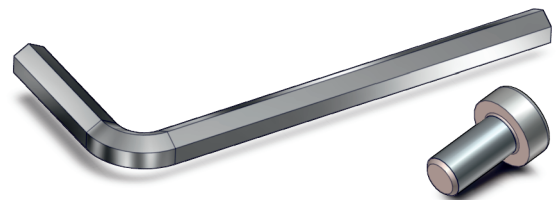
Chip breaker size 2 for unalloyed steels C < 0.2, long chipping special purpose steel, stainless and acid-resistant steel

Additional chip breakers and coatings on request



Torx-Screws

Size	Length	Ident-No. Clamping Screw	Torx Size	Ident-No. Torx-Wrench
M3	7,4	008.1065.L	T9	008.1104.D
M4	8,2	008.1066.J	T15	008.7219.C
	12,5	010.8172.R		
	9,5	014.4779.V		
M5	12	008.1067.G	T20	008.7220.T
	16	008.5807.U		
M6	12	008.1068.E	T20	008.7220.T
	16	010.7708.F		



Socket Head Cap Screws

Size	Length	Ident-No. Clamping Screw	SW Size	Ident-No. Hexagon-Wrench
M4 / DIN 7984	8	008.7044.M	SW 2,5	008.5836.M
	10	008.5000.U		
	16	008.5002.Q	SW 3	008.7213.Q
M4 / DIN 6912	20	008.5003.N		
M6 / DIN 7984	12	008.5020.N	SW 4	008.5837.K
M6 / DIN 6912	25	008.5023.G	SW 5	008.6948.U
	30	008.5024.E		
M10 / DIN 7984	16	008.5042.C	SW 7	008.5840.W



Guide Pads FL1 and FL2	Clamping Screw	Guide Pad FL3	Clamping Screw	Core Ø (selectable)
FL 10 R 28	M4x8,2 T15	FL 8 R 15	M3x7,4 T9	17 - 22
				24 - 26
				31
FL 14 / R30	M6x12 T20	FL 10 R 28	M4x8,2 T15	29 - 31
				31 - 37
				39 - 40
		FL 14 / R 30	M6x12 T20	35 - 40
FL 18 R 40		FL 18 R 40		47 - 50
				59 - 60
				63 - 67
FL 18 / R 65		FL 18 / R 65		76 - 79
				88 - 89
				90 - 99
				102 - 111
	M6x16 T20		M6x16 T20	114 - 121
				126 - 133
				138 - 145
FL 18 / R 90		FL 18 / R 90		150 - 157
				162 - 169
				174 - 181
				186 - 193
				198 - 205
				210 - 217



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