

## Drill Thread Milling Tool BGF



### Drilling, chamfering and thread milling in a single pass

The BGF drill thread milling tool rear chamfer is a standard tool for defined thread lengths of  $1.5 \times D$ ;  $2.0 \times D$  and  $2.5 \times D$ .

The patented drill thread milling tool produces a complete thread, including drill hole and chamfer, in a single pass.

This offers the following main advantages compared to the conventional methods of tapping and roll form tapping:

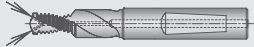






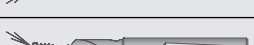
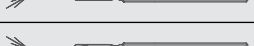
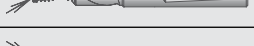
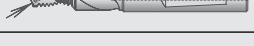


- Only one tool instead of 2 or 3
- Shorter cycle times

- One and the same tool for blind and through holes
- One and the same tool for different materials
- Exact and repeatable drill and thread depth from 1st to last thread
- No chip root remaining in the thread
- High speed cutting (HSC) possible

# Drill Thread Milling Tool BGF with 2 cutting edges with coolant supply



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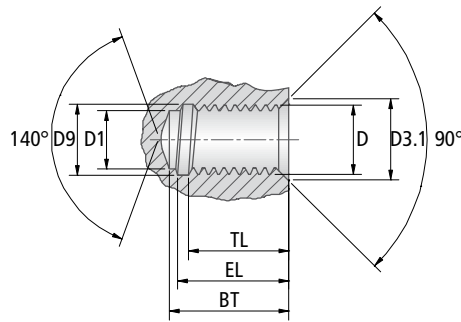


CNC programs can be configured on line at <http://tpt.kometgroup.com>  
or can be obtained on request from tel.: +49 (0) 711 78891-0

# Thread engagements for BGF

For metric ISO thread DIN 13, for EG metric ISO thread DIN 8140 for helical wire inserts and for metric fine ISO thread DIN 13

- BT = Drill depth
- EL = Thread engagement
- TL = Full thread length



M	1,5xD						2,0xD						2,5xD					
	D1	BT	D3.1	D9	EL	TL	D1	BT	D3.1	D9	EL	TL	D1	BT	D3.1	D9	EL	TL
M3	2,50	4,90	3,30	3,10	4,40	3,80	2,50	6,90	3,30	3,10	6,40	5,80						
M4	3,30	6,80	4,30	4,12	6,10	5,25	3,30	8,90	4,30	4,12	8,20	7,30	3,30	11,00	4,30	4,12	10,30	9,40
M5	4,20	8,58	5,30	5,19	7,80	6,80	4,20	11,00	5,30	5,19	10,20	9,20	4,20	13,38	5,30	5,19	12,58	11,57
M6	5,00	10,70	6,30	6,25	9,70	8,40	5,00	13,70	6,30	6,25	12,70	11,40	5,00	15,70	6,30	6,25	14,70	13,40
M8	6,75	13,35	8,30	8,41	12,15	10,45	6,75	17,10	8,30	8,41	15,90	14,20	6,75	22,10	8,30	8,41	20,90	19,20
M10	8,50	17,60	10,30	10,54	16,06	14,00	8,50	22,10	10,30	10,54	20,60	18,50	8,50	26,60	10,30	10,54	25,10	23,00
M12	10,30	20,25	12,30	12,65	18,45	16,35	10,30	25,50	12,30	12,65	23,70	21,60	10,30	32,50	12,30	12,65	30,70	28,60
M14	12,00	22,90	14,30	14,81	20,90	18,60	12,00	30,90	14,30	14,81	28,90	26,60	12,00	36,90	14,30	14,81	34,90	32,60
M16	14,00	27,00	16,30	16,88	25,00	22,60	14,00	35,00	16,30	16,88	33,00	30,60	14,00	43,00	16,30	16,88	41,00	38,60

EG	1,5xD						2,0xD						2,5xD					
	D1	BT	D3.1	D9	EL	TL	D1	BT	D3.1	D9	EL	TL	D1	BT	D3.1	D9	EL	TL
EG-M6	6,30	11,78	7,60	7,70	10,80	9,40	6,30	15,78	7,60	7,70	14,80	13,40	6,30	19,78	7,60	7,70	18,80	17,40
EG-M8	8,37	15,99	9,92	10,21	14,70	12,90	8,37	20,99	9,92	10,21	19,70	17,90	8,37	25,99	9,92	10,21	24,70	22,90
EG-M10	10,45	19,18	12,25	12,68	17,70	15,50	10,50	25,18	12,25	12,68	23,70	21,50	10,50	31,18	12,25	12,68	29,70	27,50
EG-M12	12,52	23,85	14,57	15,14	22,10	19,80	12,50	30,85	14,57	15,14	29,10	26,80	12,50	37,85	14,57	15,14	36,10	33,80

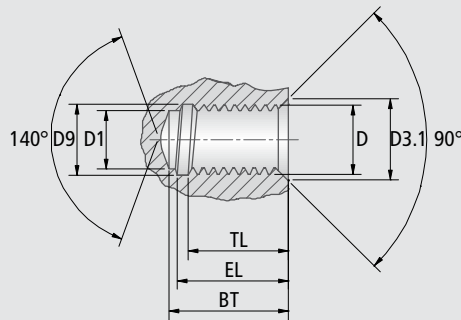
MF	1,5xD						2,0xD						2,5xD					
	D1	BT	D3.1	D9	EL	TL	D1	BT	D3.1	D9	EL	TL	D1	BT	D3.1	D9	EL	TL
M6x0,75	5,25	10,30	6,30	6,18	9,60	8,60	5,25	14,05	6,30	6,18	13,30	12,30	5,25	16,30	6,30	6,18	15,60	14,60
M8x1	7,00	13,70	8,30	8,31	12,70	11,40	7,00	17,70	8,30	8,31	16,70	15,40	7,00	21,70	8,30	8,31	20,70	19,40
M10x1	9,00	16,80	10,30	10,35	15,80	14,40	9,00	21,80	10,30	10,35	20,80	19,40	9,00	25,80	10,30	10,35	24,80	23,40
M12x1,5	10,50	20,60	12,30	12,35	19,08	17,01	10,50	26,60	12,30	12,35	25,08	23,01	10,50	32,60	12,30	12,35	31,08	29,01
M12x1	11,00	19,75	12,30	12,35	18,80	17,40	11,00	24,75	12,30	12,35	23,80	22,40	11,00	31,75	12,30	12,35	30,80	29,40
M14x1,5	12,50	23,61	14,30	14,61	22,11	19,98	12,50	29,60	14,30	14,61	28,10	26,00	12,50	37,11	14,30	14,61	35,60	33,50
M16x1,5	14,50	26,62	16,30	16,64	25,12	22,97	14,50	34,10	16,30	16,64	32,60	30,50	14,50	41,62	16,30	16,64	40,10	38,00

We reserve the right to make technical alterations

# Thread engagements for BGF

For UNC thread ANSI B1.1, for UNF thread ANSI B1.1 and for Whitworth pipe thread DIN EN ISO 228 and DIN EN 10226 (previously DIN 2999)

BT = Drill depth  
 EL = Thread engagement  
 TL = Full thread length



UNC	1,5xD						2,0xD						2,5xD					
	D1	BT	D3.1	D9	EL	TL	D1	BT	D3.1	D9	EL	TL	D1	BT	D3.1	D9	EL	TL
<b>1/4-20 UNC</b>	5,08	11,09	6,65	6,83	9,82	8,06	5,08	14,90	6,65	6,83	13,60	11,90	5,08	17,44	6,65	6,83	16,20	14,40
<b>5/16-18 UNC</b>	6,53	13,77	8,24	8,56	12,36	10,34	6,53	18,00	8,24	8,56	16,60	14,60	6,53	22,24	8,24	8,56	20,83	18,80
<b>3/8-16 UNC</b>	7,94	16,99	9,83	10,23	15,40	13,20	7,94	21,80	9,83	10,23	20,20	18,00	7,94	26,51	9,83	10,23	24,93	22,73
<b>1/2-13 UNC</b>	10,75	22,56	13,00	13,72	20,60	18,10	10,80	28,40	13,00	13,72	26,50	24,00	10,80	34,28	13,00	13,72	32,33	29,86

UNF	1,5xD						2,0xD						2,5xD					
	D1	BT	D3.1	D9	EL	TL	D1	BT	D3.1	D9	EL	TL	D1	BT	D3.1	D9	EL	TL
<b>1/4-28 UNF</b>	5,44	10,68	6,65	6,70	9,78	8,52	5,44	14,30	6,65	6,70	13,40	12,10	5,44	17,05	6,65	6,70	16,10	14,90
<b>5/16-24 UNF</b>	6,88	13,54	8,24	8,40	12,50	11,00	6,88	17,80	8,24	8,40	16,70	15,20	6,88	20,95	8,24	8,40	19,90	18,40
<b>3/8-24 UNF</b>	8,47	15,67	9,83	10,01	14,61	13,07	8,47	19,90	9,83	10,01	18,80	17,30	8,47	25,19	9,83	10,01	24,10	22,60
<b>1/2-20 UNF</b>	11,43	20,08	13,00	13,35	18,80	16,90	11,40	26,40	13,00	13,35	25,20	23,30	11,40	32,78	13,00	13,35	31,50	29,60

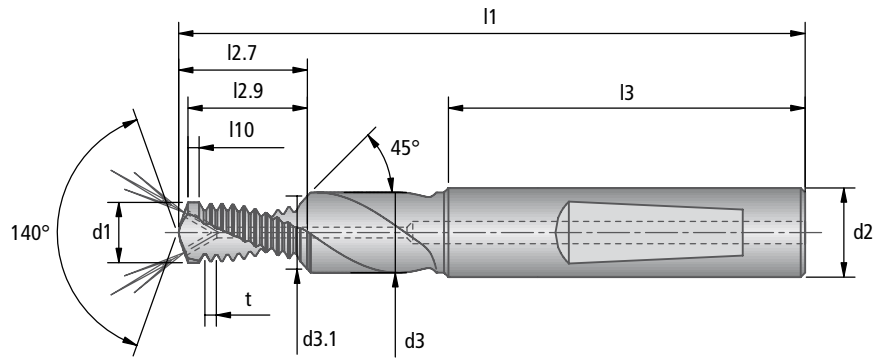
G	1,5xD						2,0xD						2,5xD					
	D1	BT	D3.1	D9	EL	TL	D1	BT	D3.1	D9	EL	TL	D1	BT	D3.1	D9	EL	TL
<b>G1/8-28</b>	8,82	15,25	10,03	10,12	14,34	13,04	8,82	20,70	10,03	10,12	19,80	18,50	8,82	25,23	10,03	10,12	24,30	23,00
<b>G1/4-19</b>	11,82	20,97	13,46	13,52	19,63	17,87	11,80	27,70	13,46	13,52	26,30	24,60	11,80	34,44	13,46	13,52	33,10	31,30

# M Drill Thread Milling Tool BGF

with 2 cutting edges with rear chamfer 1.5×D

For metric ISO thread DIN 13  
Shank Ø DIN 6535 Form HE/HA

Tools with internal coolant supply  
Cutting material: solid carbide



M-BGF 1,5×D													uncoated - HE	TiAlN - HE	uncoated - HA	TiAlN - HA
Nom. Ø	t	l1	l2.7	l2.9	l3	l10	d1	d2	d3	d3.1	AD	Z	Order No.	Order No.	Order No.	Order No.
M4	0,70	47,0	7,3	6,8	36	0,7	3,3	6	4,5	4,3	3,24	2	80945001000015	80934001000015	88945001000015	88934001000015
M5	0,80	52,6	9,3	8,6	36	0,8	4,2	6	5,5	5,3	4,10	2	80945001000017	80934001000017	88945001000017	88934001000017
M6	1,00	59,0	11,5	10,7	36	1,0	5,0	8	6,6	6,3	4,85	2	80945001000018	80934001000018	88945001000018	88934001000018
M8	1,25	70,3	14,4	13,4	40	1,3	6,8	10	9,0	8,3	6,45	2	80945001000020	80934001000020	88945001000020	88934001000020
M10	1,50	74,5	18,9	17,6	45	1,5	8,5	12	11,0	10,3	8,08	2	80945001000022	80934001000022	88945001000022	88934001000022
M12	1,75	83,8	21,8	20,2	45	1,5	10,3	14	13,5	12,3	9,74	2	80945001000024	80934001000024	88945001000024	88934001000024

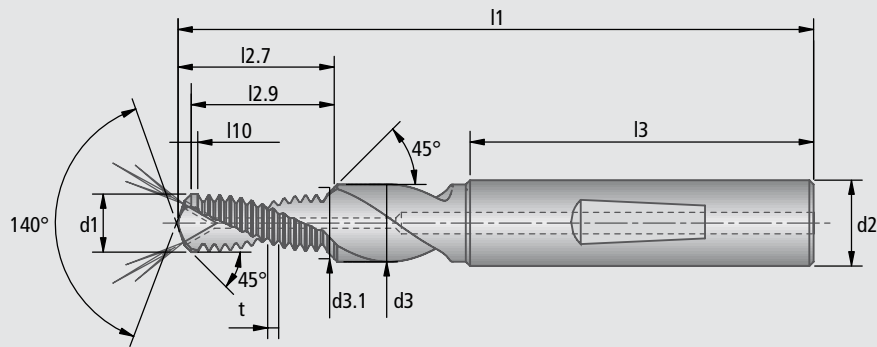
# M Drill Thread Milling Tool BGF



with 2 cutting edges with rear chamfer 1.5×D for Nodular Grey Cast Iron

For metric ISO thread DIN 13  
Shank Ø DIN 6535 Form HE/HA

Tools with internal coolant supply  
Cutting material: solid carbide



M-BGF 1,5xD													uncoated - HE	TiAlN - HE	uncoated - HA	TiAlN - HA
Nom. Ø	t	l1	l2.7	l2.9	l3	l10	d1	d2	d3	d3.1	AD	Z	Order No.	Order No.	Order No.	Order No.
M4	0,70	47,0	7,3	6,8	36	0,7	3,3	6	4,5	4,3	3,24	2				
M5	0,80	52,6	9,3	8,6	36	0,8	4,2	6	5,5	5,3	4,10	2				
M6	1,00	59,0	11,5	10,7	36	1,0	5,0	8	6,6	6,3	4,85	2		80949001000018		88949001000018
M8	1,25	70,3	14,4	13,4	40	1,3	6,8	10	9,0	8,3	6,45	2		80949001000020		88949001000020
M10	1,50	74,5	18,9	17,6	45	1,5	8,5	12	11,0	10,3	8,08	2		80949001000022		88949001000022
M12	1,75	83,8	21,8	20,2	45	1,5	10,3	14	13,5	12,3	9,74	2		80949001000024		88949001000024

Thread engagements see page 51 in table thread engagements for BGF NZ4 and BGF for Nodular Grey Cast Iron

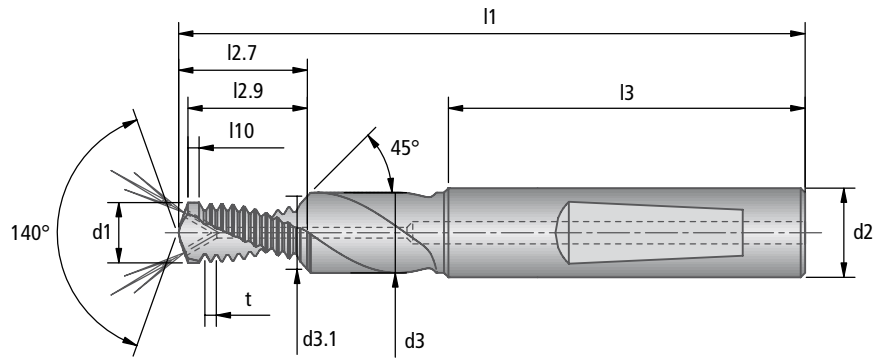


# M Drill Thread Milling Tool BGF

with 2 cutting edges with rear chamfer 2.0×D

For metric ISO thread DIN 13  
Shank Ø DIN 6535 Form HE/HA

Tools with internal coolant supply  
Cutting material: solid carbide



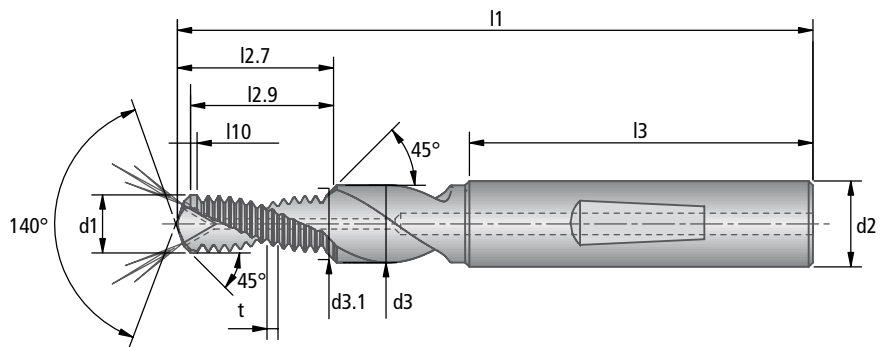
\* Tools without internal coolant supply

M-BGF 2,0×D													uncoated - HE	TiAlN - HE	uncoated - HA	TiAlN - HA
Nom. Ø	t	l1	l2.7	l2.9	l3	l10	d1	d2	d3	d3.1	AD	Z	Order No.	Order No.	Order No.	Order No.
*M3	0,50	49,0	6,8	7,3	36	0,5	2,5	6	4,5	3,3	2,45	2	80901001000013	80906001000013	88901001000013	88906001000013
M4	0,70	49,0	9,4	8,9	36	0,7	3,3	6	4,5	4,3	3,24	2	80941001000015	80935001000015	88941001000015	88935001000015
M5	0,80	55,0	11,7	11,0	36	0,8	4,2	6	5,5	5,3	4,10	2	80941001000017	80935001000017	88941001000017	88935001000017
M6	1,00	62,0	14,5	13,7	36	1,0	5,0	8	6,6	6,3	4,85	2	80941001000018	80935001000018	88941001000018	88935001000018
M8	1,25	74,0	18,2	17,1	40	1,3	6,8	10	9,0	8,3	6,45	2	80941001000020	80935001000020	88941001000020	88935001000020
M10	1,50	79,0	23,4	22,1	45	1,5	8,5	12	11,0	10,3	8,08	2	80941001000022	80935001000022	88941001000022	88935001000022
M12	1,75	89,0	27,1	25,5	45	1,5	10,3	14	13,5	12,3	9,74	2	80941001000024	80935001000024	88941001000024	88935001000024
M14	2,00	102,0	32,8	30,9	48	1,5	12,0	16	15,5	14,3	11,35	2	80941001000025	80935001000025	88941001000025	88935001000025
M16	2,00	102,0	37,1	35,0	48	1,5	14,0	18	17,5	16,3	13,28	2	80941001000026	80935001000026	88941001000026	88935001000026

## with 2 cutting edges with rear chamfer 2.0×D for Nodular Grey Cast Iron

For metric ISO thread DIN 13  
Shank Ø DIN 6535 Form HE/HA

Tools with internal coolant supply  
Cutting material: solid carbide



M-BGF 2,0×D													uncoated - HE	TiAlN - HE	uncoated - HA	TiAlN - HA
Nom. Ø	t	l1	l2.7	l2.9	l3	l10	d1	d2	d3	d3.1	AD	Z	Order No.	Order No.	Order No.	Order No.
M4	0,70	47,0	7,3	6,8	36	0,7	3,3	6	4,5	4,3	3,24	2				
M5	0,80	52,6	9,3	8,6	36	0,8	4,2	6	5,5	5,3	4,10	2				
M6	1,00	59,0	11,5	10,7	36	1,0	5,0	8	6,6	6,3	4,85	2		80943001000018		88943001000018
M8	1,25	70,3	14,4	13,4	40	1,3	6,8	10	9,0	8,3	6,45	2		80943001000020		88943001000020
M10	1,50	74,5	18,9	17,6	45	1,5	8,5	12	11,0	10,3	8,08	2		80943001000022		88943001000022
M12	1,75	83,8	21,8	20,2	45	1,5	10,3	14	13,5	12,3	9,74	2		80943001000024		88943001000024

Thread engagements see page 51 in table thread engagements for BGF NZ4 and BGF for Nodular Grey Cast Iron

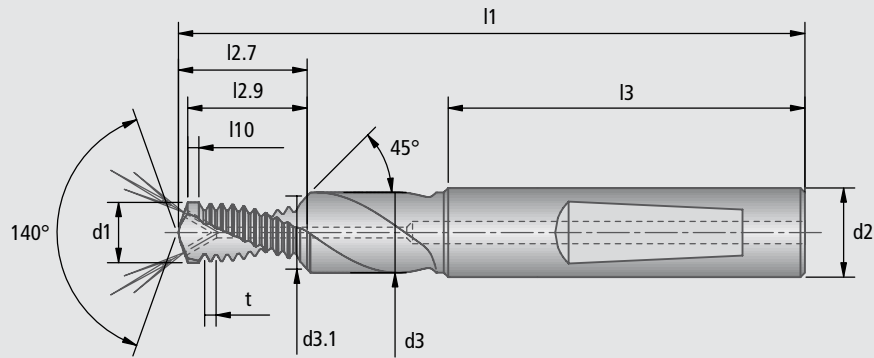
# M Drill Thread Milling Tool BGF



with 2 cutting edges with rear chamfer 2.5×D

For metric ISO thread DIN 13  
Shank Ø DIN 6535 Form HE/HA

Tools with internal coolant supply  
Cutting material: solid carbide



M-BGF 2,5xD												uncoated - HE	TiAlN - HE	uncoated - HA	TiAlN - HA	
Nom. Ø	t	l1	l2.7	l2.9	l3	l10	d1	d2	d3	d3.1	AD	Z	Order No.	Order No.	Order No.	Order No.
M4	0,70	49,0	11,5	11,0	36	0,7	3,3	6	4,5	4,3	3,24	2				
M5	0,80	55,0	14,1	13,4	36	0,8	4,2	6	5,5	5,3	4,10	2	80961001000017		88961001000017	
M6	1,00	62,0	16,5	15,7	36	1,0	5,0	8	6,6	6,3	4,85	2	80961001000018	80956001000018	88961001000018	88956001000018
M8	1,25	74,0	23,2	22,1	40	1,3	6,8	10	9,0	8,3	6,45	2	80961001000020	80956001000020	88961001000020	88956001000020
M10	1,50	79,0	27,9	26,6	45	1,5	8,5	12	11,0	10,3	8,08	2	80961001000022	80956001000022	88961001000022	88956001000022
M12	1,75	89,0	34,1	32,5	45	1,5	10,3	14	13,5	12,3	9,74	2	80961001000024	80956001000024	88961001000024	88956001000024
M14	2,00	102,0	38,8	36,9	48	1,5	12,0	16	15,5	14,3	11,35	2				
M16	2,00	102,0	45,1	43,0	48	1,5	14,0	18	17,5	16,3	13,28	2	80961001000026		88961001000026	



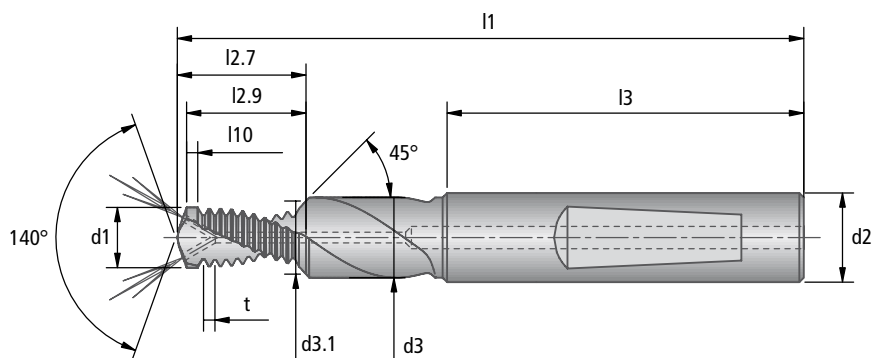


# EG Drill Thread Milling Tool BGF

with 2 cutting edges with rear chamfer 2.0×D

For EG metric ISO thread DIN 8140  
for helical wire inserts  
Shank Ø DIN 6535 Form HE/HA

Tools with internal coolant supply  
Cutting material: solid carbide



EG-BGF 2,0×D												uncoated - HE	TiAlN - HE	uncoated - HA	TiAlN - HA	
Nom. Ø	t	l1	l2.7	l2.9	l3	l10	d1	d2	d3	d3.1	AD	Z	Order No.	Order No.	Order No.	Order No.
EG-M6	1,00	74,0	16,8	15,8	40	1,0	6,3	10	9	7,6	5,98	2	80941051000018	80935051000018	88941051000018	88935051000018
EG-M8	1,25	78,0	22,3	21,0	45	1,3	8,4	12	11	9,9	7,89	2	80941051000020	80935051000020	88941051000020	88935051000020
EG-M10	1,50	87,5	26,8	25,2	45	1,5	10,5	14	14	12,3	9,83	2	80941051000022	80935051000022	88941051000022	88935051000022
EG-M12	1,75	102,0	32,8	30,9	48	1,5	12,5	16	16	14,6	11,80	2	80941051000024	80935051000024	88941051000024	88935051000024

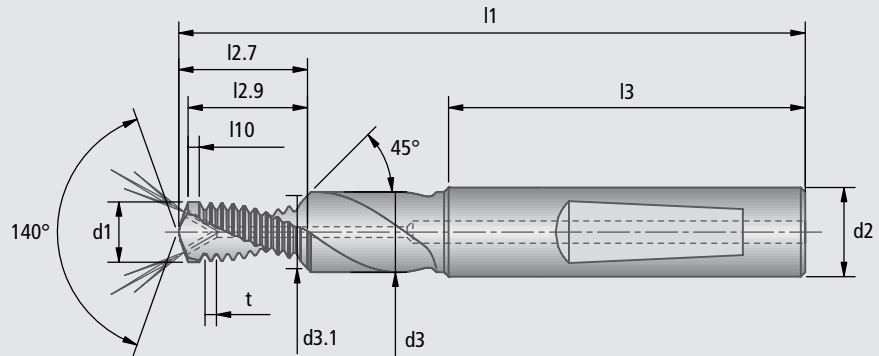
# MF Drill Thread Milling Tool BGF



with 2 cutting edges with rear chamfer 1.5×D

For metric fine ISO thread DIN 13  
Shank Ø DIN 6535 Form HE/HA

Tools with internal coolant supply  
Cutting material: solid carbide



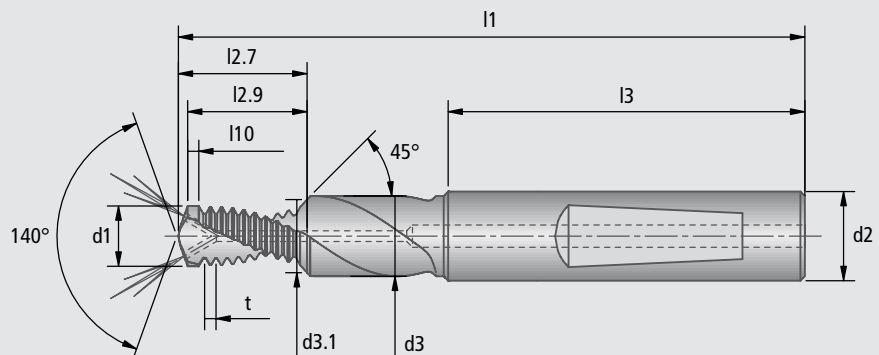
MF-BGF 1,5×D													uncoated - HE	TiAlN - HE	uncoated - HA	TiAlN - HA
Nom. Ø	t	l1	l2.7	l2.9	l3	l10	d1	d2	d3	d3.1	AD	Z	Order No.	Order No.	Order No.	Order No.
M8×1	1,0	70,0	14,8	13,7	40	1,0	7,0	10	9,0	8,3	6,79	2	80945002000070		88945002000070	
M10×1	1,0	74,0	18,2	16,8	45	1,0	9,0	12	11,0	10,3	8,75	2	80945002000094		88945002000094	
M12×1,5	1,5	83,0	22,2	20,6	45	1,5	10,5	14	13,5	12,3	10,06	2	80945002000113		88945002000113	

# MF Drill Thread Milling Tool BGF

with 2 cutting edges with rear chamfer 2.0×D

For metric fine ISO thread DIN 13  
Shank Ø DIN 6535 Form HE/HA

Tools with internal coolant supply  
Cutting material: solid carbide



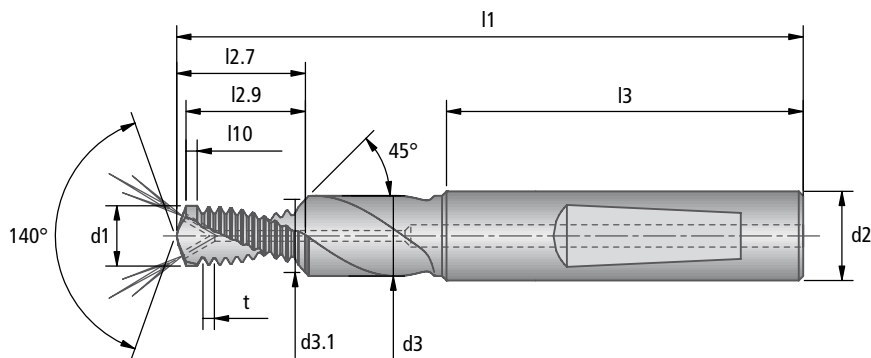
MF-BGF 2,0×D													uncoated - HE	TiAlN - HE	uncoated - HA	TiAlN - HA
Nom. Ø	t	l1	l2.7	l2.9	l3	l10	d1	d2	d3	d3.1	AD	Z	Order No.	Order No.	Order No.	Order No.
M6×0,75	0,75	62,0	14,9	13,3	36	0,8	5,25	8	6,6	6,3	5,14	2	80941002000048		88941002000048	
M8×1	1,00	74,0	18,8	17,7	40	1,0	7,00	10	9,0	8,3	6,79	2	80941002000070	80935002000070	88941002000070	88935002000070
M10×1	1,00	79,0	23,2	21,8	45	1,0	9,00	12	11,0	10,3	8,75	2	80941002000094	80935002000094	88941002000094	88935002000094
M12×1	1,00	89,0	26,4	24,8	45	1,0	11,00	14	13,5	12,3	10,74	2	80941002000111	80935002000111	88941002000111	88935002000111
M12×1,5	1,50	89,0	28,2	26,6	45	1,5	10,50	14	13,5	12,3	10,06	2	80941002000113	80935002000113	88941002000113	88935002000113
M14×1,5	1,50	102,0	31,5	29,6	48	1,5	12,50	16	15,5	14,3	12,01	2	80941002000131		88941002000131	
M16×1,5	1,5	102,0	36,3	34,1	48	1,5	14,50	18	17,5	16,3	13,95	2	80941002000147		88941002000147	

# UNC Drill Thread Milling Tool BGF

with 2 cutting edges with rear chamfer 1.5×D

For UNC thread ANSI B1.1  
Shank Ø DIN 6535 Form HE/HA

Tools with internal coolant supply  
Cutting material: solid carbide



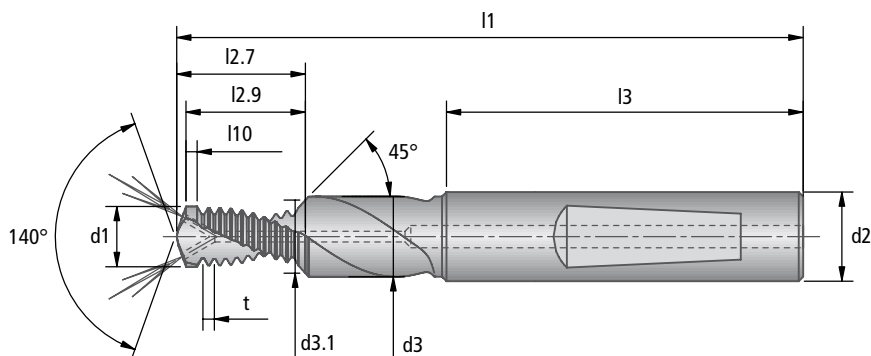
UNC-BGF 1,5×D													uncoated - HE	TiAlN - HE	uncoated - HA	TiAlN - HA
Nom. Ø	t	l1	l2.7	l2.9	l3	l10	d1	d2	d3	d3.1	AD	Z	Order No.	Order No.	Order No.	Order No.
1/4-20 UNC	1,270	58,2	11,9	11,1	36	1,3	5,1	8	7,8	6,7	4,70	2	80945010000011		88945010000011	
5/16-18 UNC	1,411	69,8	14,8	13,8	40	1,4	6,5	10	9,0	8,2	6,01	2	80945010000012		88945010000012	
3/8-16 UNC	1,588	74,2	18,2	17,0	45	1,5	7,9	12	11,0	9,8	7,36	2	80945010000013		88945010000013	
1/2-13 UNC	1,954	83,0	24,2	22,6	45	1,5	10,8	14	13,5	13,0	9,87	2	80945010000015		88945010000015	

# UNC Drill Thread Milling Tool BGF

with 2 cutting edges with rear chamfer 2.0×D

For UNC thread ANSI B1.1  
Shank Ø DIN 6535 Form HE/HA

Tools with internal coolant supply  
Cutting material: solid carbide



UNC-BGF 2,0×D													uncoated - HE	TiAlN - HE	uncoated - HA	TiAlN - HA
Nom. Ø	t	l1	l2.7	l2.9	l3	l10	d1	d2	d3	d3.1	AD	Z	Order No.	Order No.	Order No.	Order No.
1/4-20 UNC	1,270	62,0	15,7	14,9	36	1,3	5,1	8	7,8	6,7	4,70	2	80941010000011		88941010000011	
5/16-18 UNC	1,411	74,0	19,0	18,0	40	1,4	6,5	10	9,0	8,2	6,01	2	80941010000012		88941010000012	
3/8-16 UNC	1,588	79,0	23,0	21,8	45	1,5	7,9	12	11,0	9,8	7,36	2	80941010000013		88941010000013	
1/2-13 UNC	1,954	89,0	30,1	28,4	45	1,5	10,8	14	13,5	13,0	9,87	2	80941010000015		88941010000015	

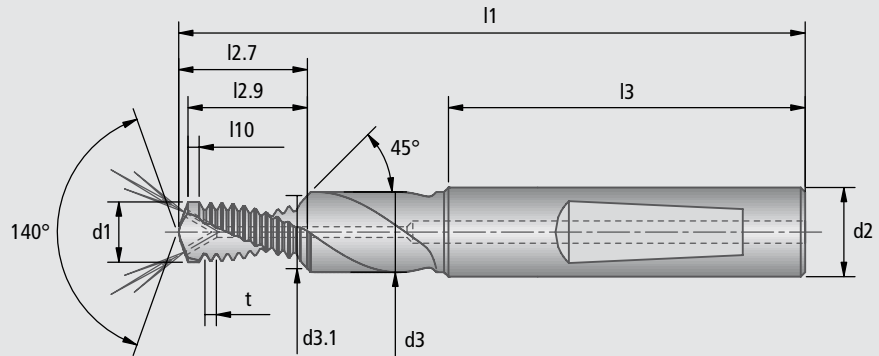
# UNF Drill Thread Milling Tool BGF



with 2 cutting edges with rear chamfer 1.5×D

For UNF thread ANSI B1.1  
Shank Ø DIN 6535 Form HE/HA

Tools with internal coolant supply  
Cutting material: solid carbide



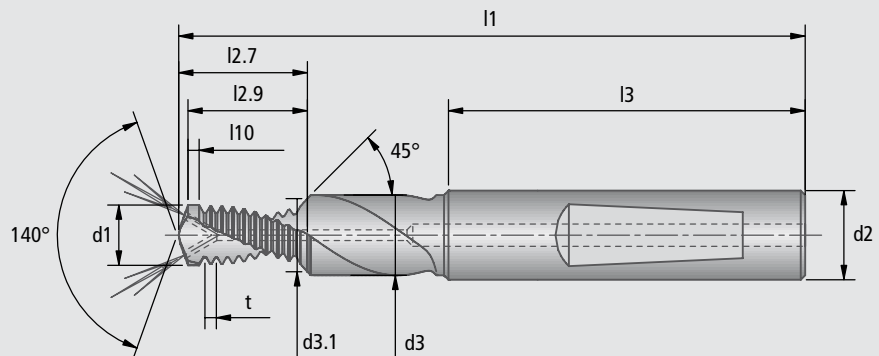
UNF-BGF 1,5×D													uncoated - HE	TiAlN - HE	uncoated - HA	TiAlN - HA
Nom. Ø	t	l1	l2.7	l2.9	l3	l10	d1	d2	d3	d3.1	AD	Z	Order No.	Order No.	Order No.	Order No.
1/4-28 UNF	0,907	58,4	11,5	10,7	36	0,9	5,4	8	7,8	6,7	5,17	2	80945011000011		88945011000011	
5/16-24 UNF	1,058	70,0	14,6	13,5	40	1,1	6,9	10	9,0	8,2	6,51	2	80945011000012		88945011000012	
3/8-24 UNF	1,058	74,8	17,0	15,7	45	1,1	8,5	12	11,0	9,8	8,07	2	80945011000013		88945011000013	
1/2-20 UNF	1,270	82,7	21,8	20,1	45	1,3	11,4	14	13,5	13,0	10,88	2	80945011000015		88945011000015	

# UNF Drill Thread Milling Tool BGF

with 2 cutting edges with rear chamfer 2.0×D

For UNF thread ANSI B1.1  
Shank Ø DIN 6535 Form HE/HA

Tools with internal coolant supply  
Cutting material: solid carbide



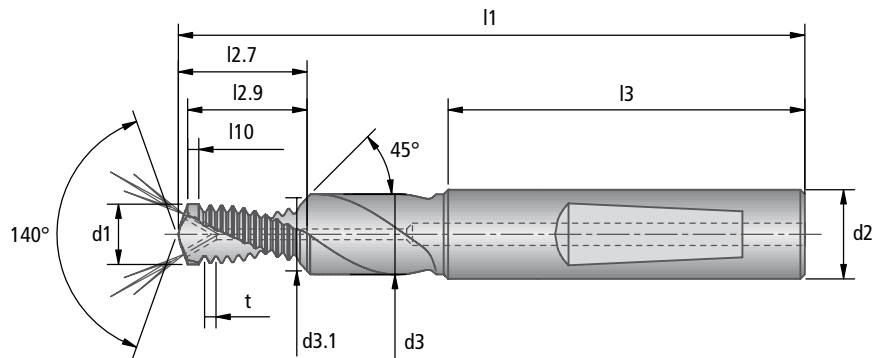
UNF-BGF 2,0×D													uncoated - HE	TiAlN - HE	uncoated - HA	TiAlN - HA
Nom. Ø	t	l1	l2.7	l2.9	l3	l10	d1	d2	d3	d3.1	AD	Z	Order No.	Order No.	Order No.	Order No.
1/4-28 UNF	0,907	62,0	15,2	14,3	36	0,9	5,4	8	7,8	6,7	5,17	2	80941011000011		88941011000011	
5/16-24 UNF	1,058	74,0	18,8	17,8	40	1,1	6,9	10	9,0	8,2	6,51	2	80941011000012		88941011000012	
3/8-24 UNF	1,058	79,0	21,2	19,9	45	1,1	8,5	12	11,0	9,8	8,07	2	80941011000013		88941011000013	
1/2-20 UNF	1,270	89,0	28,2	26,4	45	1,3	11,4	14	13,5	13,0	10,88	2	80941011000015		88941011000015	



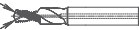

# G Drill Thread Milling Tool BGF

with 2 cutting edges with rear chamfer 2.0×D

For Whitworth pipe thread DIN EN ISO 228 and DIN EN 10226 (previously DIN 2999)  
Shank Ø DIN 6535 Form HE/HA

Tools with internal coolant supply  
Cutting material: solid carbide



G-BGF 2,0×D													uncoated - HE	TiAlN - HE	uncoated - HA	TiAlN - HA
Nom. Ø	t	l1	l2.7	l2.9	l3	l10	d1	d2	d3	d3.1	AD	Z				
													Order No.	Order No.	Order No.	Order No.
G1/8-28	0,907	79,0	22,1	20,7	45	0,9	8,8	12	11,0	10,0	8,40	2	80941025000001		88941025000001	
G1/4-19	1,337	102,0	29,5	27,7	48	1,3	11,8	16	13,5	13,5	11,44	2	80941025000002		88941025000002	

# Drill Thread Milling Tools

Drilling, chamfering and thread milling in a single pass

## Drill Thread Milling Tool BGF

BGF with rear chamfer as a standard tool for defined thread lengths of 1.5×D; 2.0×D and 2.5×D.  
UBGF with front and rear chamfer for different thread lengths.



*Cross section of threads manufactured with drill thread milling tools – here M6 and M10. BGF with profile correction are generating a precise part threads.*

BGF M12 2.0×D TiN

BGF M10 2.5×D TiAN

BGF, 3 fluted with spot face cutter

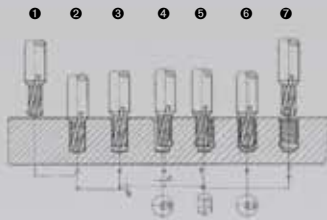
## BGF with 3 flutes

Advantages compared to 2 flutes

- Pre-cast holes can be drilled with maximum cutting values without problems
- Increased tool stability
- For angled bore exits

## Advantages

- More than 50% shorter cycle time and idle time reduction due to high cutting speeds and feed and saving on tool changing times and tool changes
- Excellent surface finish due to variation in cutting parameters
- Same tools for blind bores and through holes
- Can be used in cast iron, aluminium up to 2.5×D
- Nodular Grey Cast Iron up to 2.0×D



- 1 Approach
- 2 Drilling and chamfering
- 3 Withdraw
- 4 Radial setting to nominal thread diameter through entry loop
- 5 Forward feed by pitch with simultaneous interpolation of tool around the central thread axis-threading cycle
- 6 Radial movement back to the bore centre through exit loop
- 7 Exit bore

DBGF

## DBGF Direct Circular Drill Thread Milling Tool

To complete our product range we are including the DBGF direct circular drill thread milling tool in the diameter range from 6 to 16 mm with an achievable thread depth of up to 3.0×D. Also suitable for steel materials up to a thread depth of 2.0×D

- 1 Approach
- 2 Circular milling of the chamfer
- 3 Circular drilling and thread milling. The bore and the thread are manufactured simultaneously in one pass
- 4 Exit bore
- 5 If necessary circular deburring of first thread

