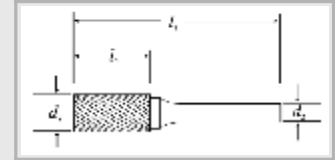


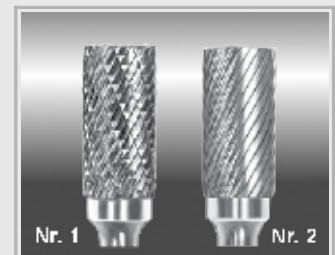
Hartmetall-Frässtifte

Zylinderform - FA

d_2 Kopf Ø	l_2 Kopflänge	l_1 Gesamt	d_1 Schaft Ø	Typ Nr. 1	Typ Nr. 2
1,5	6	50	3	FA-3002	FA-3033
1,5	6	75	3	FA-3003	FA-3034
2,5	11	50	3	FA-3005	FA-3036
2,5	11	75	3	FA-3006	FA-3037
3	14	50	3	FA-3008	FA-3039
3	14	75	3	FA-3009	FA-3040

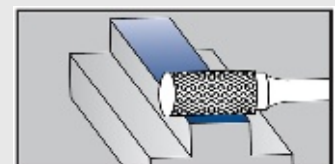


d_2 Kopf Ø	l_2 Kopflänge	l_1 Gesamt	d_1 Schaft Ø	Typ Nr. 1	Typ Nr. 2
6	12,7	162	6	FA-3018	FA-3049
9,5	19	169	6	FA-3023	FA-3054
12,7	25	175	6	FA-3028	FA-3059

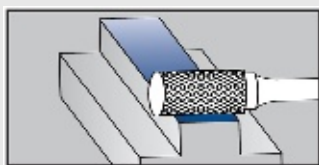
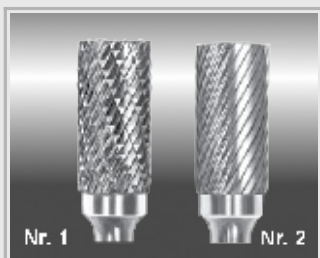
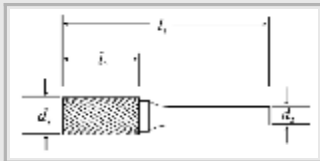


Aluminiumverzahnung

d_2 Kopf Ø	l_2 Kopflänge	l_1 Gesamt	d_1 Schaft Ø	Nr. 3.
6	19	50	6	FA-3063
9,5	19	63	6	FA-3064
12,7	25	69	6	FA-3065
16	25	69	6	FA-3066
19	25	69	6	FA-3068



Hartmetall-Frässtifte



Zylinderform - FA

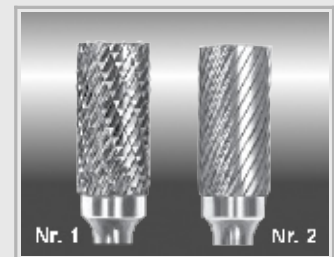
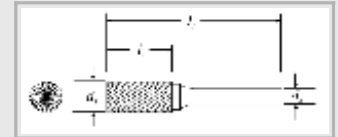
d_k Kopf Ø	l_k Kopf- länge	l_g Gesamt	d_s Schaft Ø	Typ Nr. 1	Typ Nr. 2
1,5	6	38	3	FA - 3001	FA - 3032
2,5	11	38	3	FA - 3004	FA - 3035
3	14	38	3	FA - 3007	FA - 3038
4	12,7	38	3	FA - 3012	FA - 3043
5	12,7	38	3	FA - 3014	FA - 3045
6,3	12,7	50	3	FA - 3019	FA - 3050

d_k Kopf Ø	l_k Kopf- länge	l_g Gesamt	d_s Schaft Ø	Typ Nr. 1	Typ Nr. 2
3	12	56	6	FA - 3010	FA - 3041
3	12,7	60	6	FA - 3011	FA - 3042
4	16	50	6	FA - 3013	FA - 3044
5	16	50	6	FA - 3015	FA - 3046
6	16	50	6	FA - 3016	FA - 3047
6	25	50	6	FA - 3017	FA - 3048
8	19	63	6	FA - 3020	FA - 3051
9,5	19	63	6	FA - 3021	FA - 3052
9,5	25	69	6	FA - 3022	FA - 3053
10	20	60	6	FA - 3024	FA - 3055
11	25	69	6	FA - 3025	FA - 3056
12	25	65	6	FA - 3026	FA - 3057
12,7	25	69	6	FA - 3027	FA - 3058
16	25	69	6	FA - 3029	FA - 3060
19	25	69	6	FA - 3030	FA - 3061
25	25	69	6	FA - 3031	FA - 3062

Hartmetall-Frässtifte

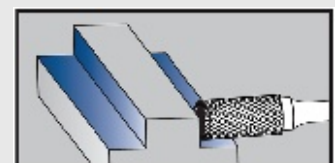
Zylinderform mit Stirnverzahnung - FB

d_2 Kopf Ø	l_2 Kopf- länge	l_1 Gesamt	d_1 Schaft Ø	Typ Nr. 1	Typ Nr. 2
1,5	6	50	3	FB - 3070	FB - 3096
1,5	6	75	3	FB - 3071	FB - 3097
2,5	11	50	3	FB - 3073	FB - 3099
2,5	11	75	3	FB - 3074	FB - 3100
3	14	50	3	FB - 3076	FB - 3103
3	14	75	3	FB - 3077	FB - 3104



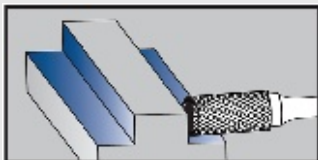
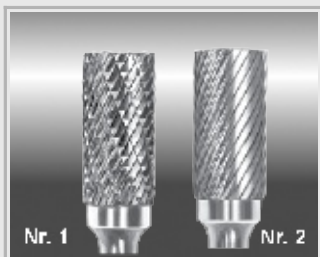
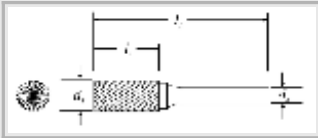
Aluminiumverzahnung

d_2 Kopf Ø	l_2 Kopf- länge	l_1 Gesamt	d_1 Schaft Ø	Nr. 3
6	16	50	6	FB - 3122
9,5	19	63	6	FB - 3123
12,7	25	69	6	FB - 3124
16	25	69	6	FB - 3125
19	25	69	6	FB - 3126



Hartmetall-Frässtifte

Zylinderform mit Stirnverzahnung



d_k Kopf Ø	l_k Kopf- länge	l_g Gesamt	d_s Schaft Ø	Typ Nr. 1	Typ Nr. 2
1,5	6	38	3	FB – 3069	FB – 3095
2,5	11	38	3	FB – 3072	FB – 3098
3		38	3		FB – 3101
3	14	38	3	FB – 3075	FB – 3102
6,3	4,7	43	3	FB – 3084	FB – 3111

d_k Kopf Ø	l_k Kopf- länge	l_g Gesamt	d_s Schaft Ø	Typ Nr. 1	Typ Nr. 2
3	12	56	6	FB – 3078	FB – 3105
3	12,7	60	6	FB – 3079	FB – 3106
4	16	50	6	FB – 3080	FB – 3107
5	16	50	6	FB – 3081	FB – 3108
6	16	50	6	FB – 3082	FB – 3109
6	25	50	6	FB – 3083	FB – 3110
8	19	63	6	FB – 3085	FB – 3112
9,5	19	63	6	FB – 3086	FB – 3113
9,5	25	69	6	FB – 3087	FB – 3114
10	20	60	6	FB – 3088	FB – 3115
11	25	69	6	FB – 3089	FB – 3116
12	25	65	6	FB – 3090	FB – 3117
12,7	25	69	6	FB – 3091	FB – 3118
16	25	69	6	FB – 3092	FB – 3119
19	25	69	6	FB – 3093	FB – 3120
25	25	69	8	FB – 3094	FB – 3121

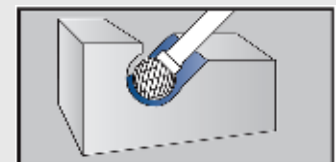
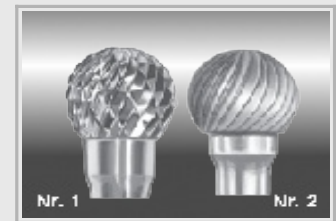
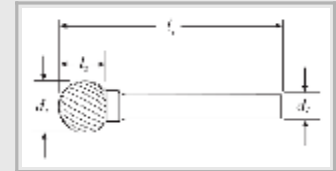
Hartmetall-Frässtifte

Kugelform - FD

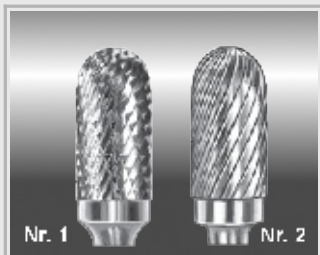
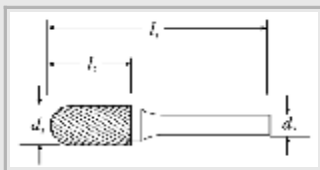
d_1 Kopf Ø	l_1 Kopf- länge	l_2 Gesamt	d_2 Schaft Ø	Typ Nr. 1	Typ Nr. 2
2,5	2,3	38	3	FD - 3185	FD - 3207
3	2,5	38	3	FD - 3186	FD - 3208
4	3,4	38	3	FD - 3190	FD - 3212
5	4,7	38	3	FD - 3191	FD - 3213
6,3	5	44	3	FD - 3195	FD - 3217
<hr/>					
3	2,5	50	6	FD - 3189	FD - 3211
5	4	50	6	FD - 3192	FD - 3214
6	4,7	50	6	FD - 3193	FD - 3215
8	6,4	50	6	FD - 3196	FD - 3218
9,5	8	52	3	FD - 3197	FD - 3219
10	9	49	6	FD - 3199	FD - 3221
11	9,5	54	3	FD - 3200	FD - 3222
12	10,8	51	6	FD - 3201	FD - 3223
12,7	11	55	6	FD - 3202	FD - 3224
16	14	58	6	FD - 3204	FD - 3226
19	16	62	6	FD - 3205	FD - 3227
25	21	72	6	FD - 3206	FD - 3228
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3	2,5	50	3	FD - 3187	FD - 3209
3	2,5	75	3	FD - 3188	FD - 3210
<hr/>					
6	5	155	6	FD - 3194	FD - 3216
9,5	8	158	6	FD - 3198	FD - 3220
12,7	11	161	6	FD - 3203	FD - 3225

Aluminiumverzahnung

d_1 Kopf Ø	l_1 Kopf- länge	l_2 Gesamt	d_2 Schaft Ø	Nr. 3
6	5	50	6	FD - 3229
9,5	8	52	6	FD - 3230
12,7	11	55	6	FD - 3231
16	14	58	6	FD - 3232
19	16	62	6	FD - 3233



Hartmetall-Frässtifte



Walzenrundform - FC

d_1 Kopf Ø	l_1 Kopfl.	l_2 Gesamt	d_2 Schaft	Typ Nr. 1	Typ Nr. 2
2,5	11	38	3	FC - 3128	FC - 3154
3	14	38	3	FC - 3129	FC - 3155
4	12,7	38	3	FC - 3134	FC - 3160
5	12,7	38	3	FC - 3136	FC - 3162
6,3	12,7	50	3	FC - 3141	FC - 3167
3	12	56	6	FC - 3132	FC - 3158
3	16	60	6	FC - 3133	FC - 3159
4	16	50	6	FC - 3135	FC - 3161
5	16	50	6	FC - 3137	FC - 3163
6	16	50	6	FC - 3138	FC - 3164
6	25	50	6	FC - 3139	FC - 3165
8	19	63	6	FC - 3142	FC - 3168
9,5	19	63	6	FC - 3143	FC - 3169
9,5	25	69	6	FC - 3144	FC - 3170
10	20	60	6	FC - 3146	FC - 3172
11	25	69	6	FC - 3147	FC - 3173
12	25	65	6	FC - 3148	FC - 3174
12,7	25	69	6	FC - 3149	FC - 3175
16	25	69	6	FC - 3151	FC - 3177
19	25	69	6	FC - 3152	FC - 3178
25	25	69	6	FC - 3153	FC - 3179
3	14	50	3	FC - 3130	FC - 3156
3	14	75	3	FC - 3131	FC - 3157
6	12,7	162	6	FC - 3140	FC - 3166
9,5	19	169	6	FC - 3145	FC - 3171
12,7	25	175	6	FC - 3150	FC - 3176

d_1 Kopf Ø	l_1 Kopfl.	l_2 Gesamt	d_2 Schaft	Nr. 3	
6	19	50	6	FC - 3180	
9,5	19	63	6	FC - 3181	
12,7	25	69	6	FC - 3182	
19	25	69	6	FC - 3183	

Aluminiumverzahnung

Hartmetall-Frässtifte

Rundbogenform - FF

d_1 Kopf Ø	l_1 Kopf- länge	l_2 Gesamt	d_2 Schaft Ø	Typ Nr. 1	Typ Nr. 2
3	6	38	3	FF – 3266	FF – 3286
3	12,7	38	3	FF – 3267	FF – 3287
5	12,7	38	3	FF – 3271	FF – 3291
6,3	12,7	50	3	FF – 3274	FF – 3294

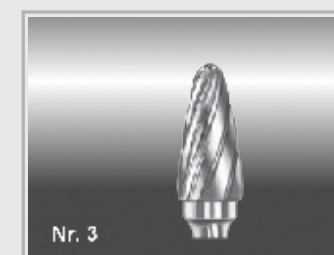
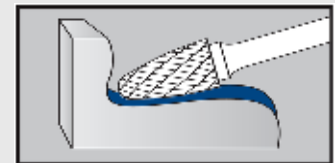
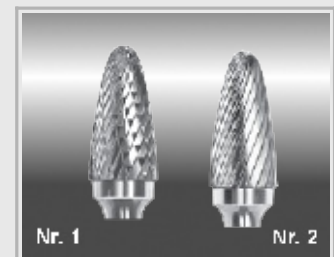
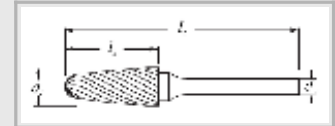
3	12,7	56	6	FF – 3268	FF – 3288
6	16	50	6	FF – 3272	FF – 3292
9,5	19	63	6	FF – 3275	FF – 3295
11	25	69	6	FF – 3277	FF – 3297
12	25	65	6	FF – 3278	FF – 3298
12,7	19	63	6	FF – 3279	FF – 3299
12,7	25	69	6	FF – 3280	FF – 3300
16	25	69	6	FF – 3282	FF – 3302
19	25	69	6	FF – 3283	FF – 3303
19	32	76	6	FF – 3284	FF – 3304
19	38	82	6	FF – 3285	FF – 3305

3	12,7	50	3	FF – 3269	FF – 3289
3	12,7	75	3	FF – 3270	FF – 3290

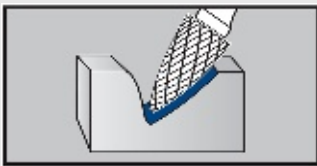
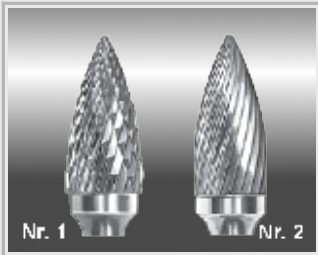
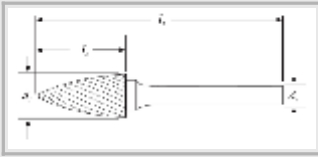
6	12,7	163	6	FF – 3273	FF – 3293
9,5	19	169	6	FF – 3276	FF – 3296
12,7	25	175	6	FF – 3281	FF – 3301

Non-ferro / Aluminium

d_1 Kopf Ø	l_1 Kopf- länge	l_2 Gesamt	d_2 Schaft Ø	Nr. 3
6	19	50	6	FF – 3306
9,5	19	63	6	FF – 3307
12,7	25	69	6	FF – 3308
16	25	69	6	FF – 3309
19	32	76	6	FF – 3310



Harmetall-Frässtifte



Spitzbogenform - FG

d_2 Kopf Ø	l_2 Kopflänge	l_1 Gesamt	d_1 Schaft Ø	Typ Nr. 1	Typ Nr. 2
3	6	38	3	FG - 3312	FG - 3332
3	9,5	38	3	FG - 3313	FG - 3333
3	12,7	38	3	FG - 3314	FG - 3334
5	12,7	38	3	FG - 3317	FG - 3337
6,3	12,7	50	3	FG - 3320	FG - 3340

6	16	50	6	FG - 3318	FG - 3338
8	19	63	6	FG - 3321	FG - 3341
9,5	19	63	6	FG - 3322	FG - 3342
10	20	60	6	FG - 3324	FG - 3344
12	25	65	6	FG - 3325	FG - 3345
12,7	19	63	6	FG - 3326	FG - 3346
12,7	25	69	6	FG - 3327	FG - 3347
16	25	69	6	FG - 3329	FG - 3349
19	25	69	6	FG - 3330	FG - 3350
19	38	82	6	FG - 3331	FG - 3351

3	12,7	50	3	FG - 3315	FG - 3335
3	12,7	75	3	FG - 3316	FG - 3336

6	12,7	163	6	FG - 3319	FG - 3339
9,5	19	169	6	FG - 3323	FG - 3343
12,7	25	175	6	FG - 3328	FG - 3348

Hartmetall-Frässtifte

Rundkegelform - FL

d_1 Kopf Ø	l_1 Kopf- länge	l_2 Gesamt	d_2 Schaft Ø	a	Nr. 1	Nr. 2
3	9,5	38	3	8°	FL – 3400	FL – 3414
3	12,7	38	3	8°	FL – 3401	FL – 3415
5	12,7	38	3	14°	FL – 3404	FL – 3418

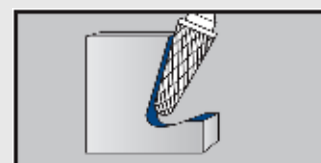
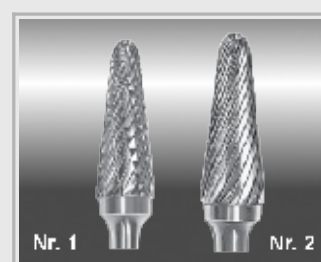
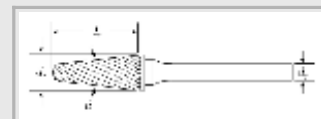
6	16	50	6	14°	FL – 3405	FL – 3419
8	22	69	6	14°	FL – 3407	FL – 3421
9,5	27	74	6	14°	FL – 3408	FL – 3422
12,7	28	76	6	14°	FL – 3410	FL – 3424
16	30	77	6	14°	FL – 3412	FL – 3426
19	38	85	6	14°	FL – 3413	FL – 3427

3	12,7	50	3	8°	FL – 3402	FL – 3416
3	12,7	75	3	8°	FL – 3403	FL – 3417

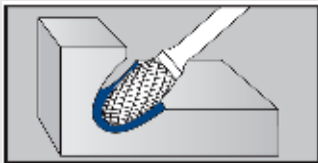
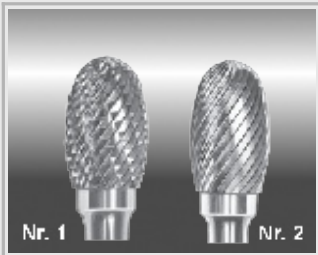
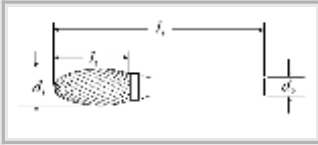
6	16	166	6	14°	FL – 3406	FL – 3420
9,5	27	177	6	14°	FL – 3409	FL – 3423
12,7	28	178	6	14°	FL – 3411	FL – 3425

Non-ferro / Aluminium

d_1 Kopf Ø	l_1 Kopf- länge	l_2 Gesamt	d_2 Schaft Ø	a	Nr. 3
9,5	27	74	6	14°	FL – 3428
12,7	28	76	6	14°	FL – 3429
16	30	77	6	14°	FL – 3430
19	38	85	6	14°	FL – 3431



Hartmetall-Frässtifte



Tropenform - FE

d_1 Kopf Ø	l_1 Kopf- länge	l Gesamt	d_2 Schaft Ø	Typ Nr. 1	Typ Nr. 2
3	5,5	38	3	FE - 3235	FE - 3248
5	7,1	38	3	FE - 3238	FE - 3251
6,3	9,5	47	3	FE - 3241	FE - 3254

6	9,5	50	6	FE - 3239	FE - 3252
9,5	16	60	6	FE - 3242	FE - 3255
12,7	22	66	6	FE - 3244	FE - 3257
16	25	69	6	FE - 3246	FE - 3259
19	25	69	6	FE - 3247	FE - 3260

3	5,5	50	3	FE - 3236	FE - 3249
3	5,5	75	3	FE - 3237	FE - 3250

Non-ferro / Aluminium

d_1 Kopf Ø	l_1 Kopf- länge	l Gesamt	d_2 Schaft Ø	Nr. 3
9,5	16	60	6	FE - 3261
12,7	22	66	6	FE - 3262
16	25	69	6	FE - 3263
19	25	69	6	FE - 3264

Hartmetall-Frässtifte

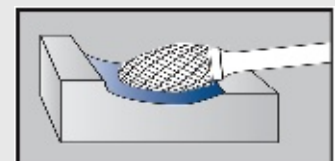
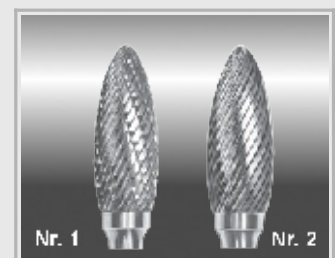
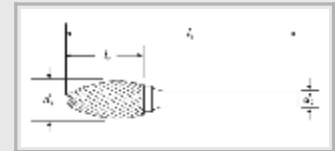
Flammenform - FH

d_1 Kopf Ø	l_1 Kopf- länge	l Gesamt	d_2 Schaft Ø	Typ Nr. 1	Typ Nr. 2
3	6,3	38	3	FH - 3352	FH - 3362
5	9,5	38	3	FH - 3355	FH - 3365

8	19	63	6	FH - 3356	FH - 3366
12,7	32	76	6	FH - 3358	FH - 3368
16	36	80	6	FH - 3360	FH - 3370
19	41	85	6	FH - 3361	FH - 3371

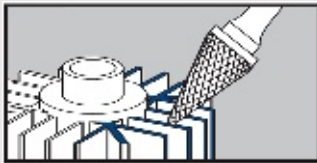
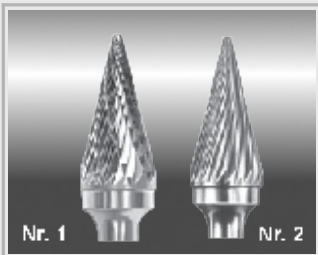
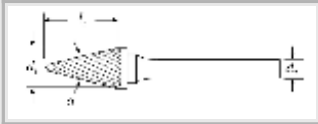
3	6,3	50	3	FH - 3353	FH - 3363
3	6,3	75	3	FH - 3354	FH - 3364

8	19	169	6	FH - 3357	FH - 3367
12,7	32	182	6	FH - 3359	FH - 3369



Hartmetall-Frässtifte

Spitzkegelform - FM



d_1 Kopf Ø	l_1 Kopf- länge	l_2 Gesamt	d_2 Schaft Ø	a	Nr. 1	Nr. 2
3	8,9	38	3	12°	FM - 3433	FM - 3446
3	11	38	3	14°	FM - 3434	FM - 3447
3	16	38	3	7°	FM - 3437	FM - 3450
5	12,7	38	3	16°	FM - 3438	FM - 3451
6,3	12,7	54	3	22°	FM - 3442	FM - 3455

6	12,7	50	6	22°	FM - 3439	FM - 3452
6	19	50	6	14°	FM - 3440	FM - 3453
6	25	50	6	10°	FM - 3441	FM - 3454
9,5	16	63	6	28°	FM - 3443	FM - 3456
12,7	22	69	6	28°	FM - 3444	FM - 3457
16	25	73	6	31°	FM - 3445	FM - 3458

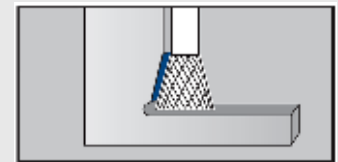
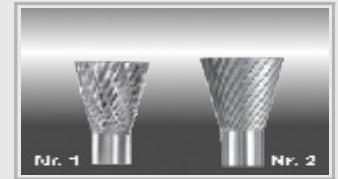
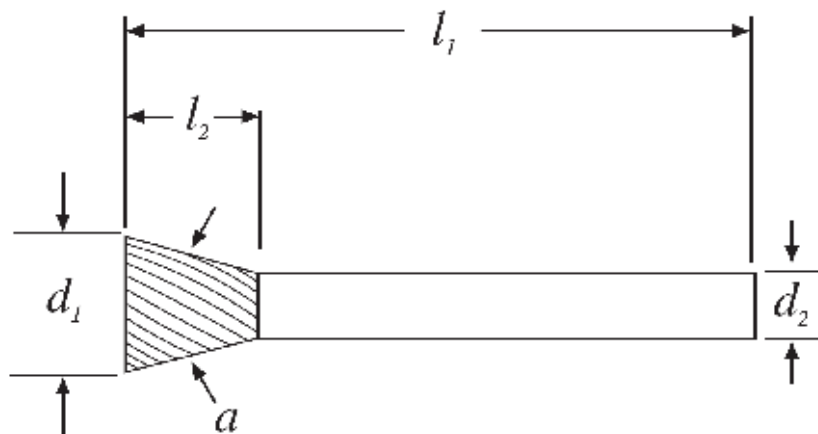
3	11	50	3	14°	FM - 3435	FM - 3448
3	11	75	3	14°	FM - 3436	FM - 3449

Hartmetall-Frässtifte

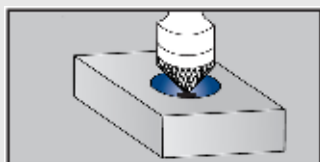
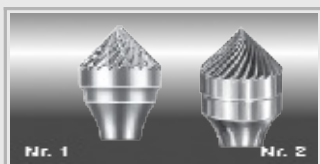
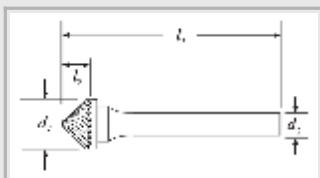
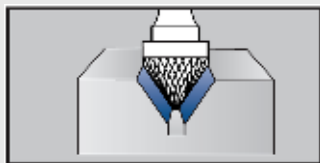
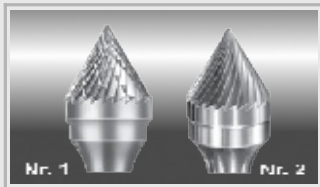
Winkelform - FN

d_1 Kopf Ø	l_2 Kopf- länge	l_1 Gesamt	d_2 Schaft Ø	a	Nr. 1	Nr. 2
2,5	3	38	3	10°	FN – 3459	FN – 3468
3	4	38	3	10°	FN – 3460	FN – 3469
5	6,3	38	3	10°	FN – 3461	FN – 3470
6,3	6	44	3	10°	FN – 3463	FN – 3472

6	8	50	6	10°	FN – 3462	FN – 3471
9,5	9,5	53	6	13°	FN – 3464	FN – 3473
12,7	12,7	57	6	28°	FN – 3465	FN – 3474
16	19	63	6	18°	FN – 3466	FN – 3475
19	16	60	6	30°	FN – 3467	FN – 3476



Hartmetall-Frässtifte



Kegelsenkform 60° - FJ

d_2 Kopf Ø	l_2 Kopf- länge	l_1 Gesamt	d_1 Schaft Ø	Typ Nr. 1	Typ Nr. 2
3	2,5	38	3	FJ - 3372	FJ - 3379
6	4	50	6	FJ - 3373	FJ - 3380
9,5	8	55	6	FJ - 3374	FJ - 3381
12,7	11	58	6	FJ - 3375	FJ - 3382
16	14,5	61	6	FJ - 3376	FJ - 3383
19	17,5	65	6	FJ - 3377	FJ - 3384
25	24,5	68	6	FJ - 3378	FJ - 3385

Kegelsenkform 90° - FK

d_2 Kopf Ø	l_2 Kopf- länge	l_1 Gesamt	d_1 Schaft Ø	Typ Nr. 1	Typ Nr. 2
3	1,5	38	3	FK - 3386	FK - 3393
6	3	50	6	FK - 3387	FK - 3394
9,5	4,7	52	6	FK - 3388	FK - 3395
12,7	6,3	54	6	FK - 3389	FK - 3396
16	8	57	6	FK - 3390	FK - 3397
19	9,5	58	6	FK - 3391	FK - 3398
25	12,7	60	6	FK - 3392	FK - 3399