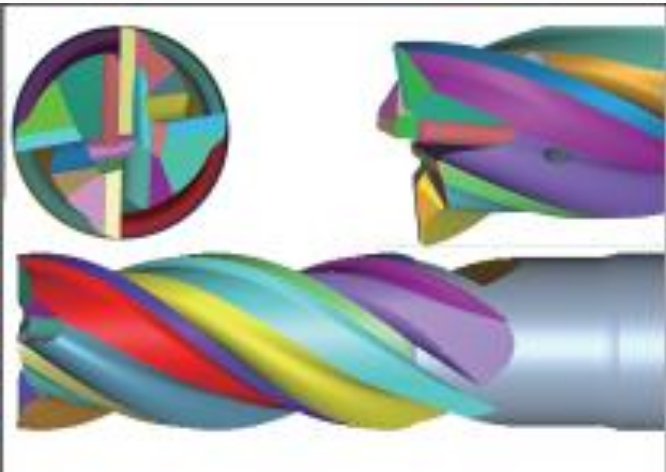


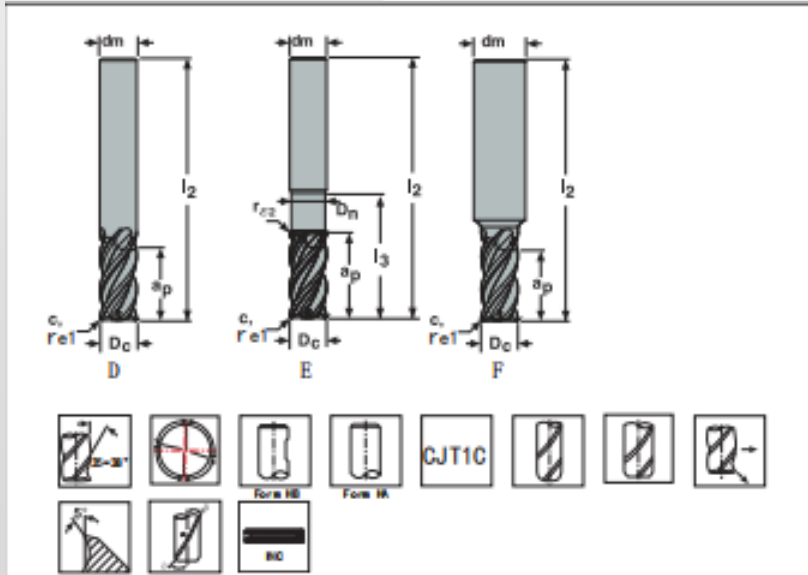


H.BILZ-HPM-8521SA/SB/LA/LB-P/K-Z4P/R/C - 1-12mm

H. BILZ-high-efficiency processing of steel, cast iron rough/fine integration



公差
 $dm=h5$
 $Dc=e7$
 $re1=+-0.02mm$

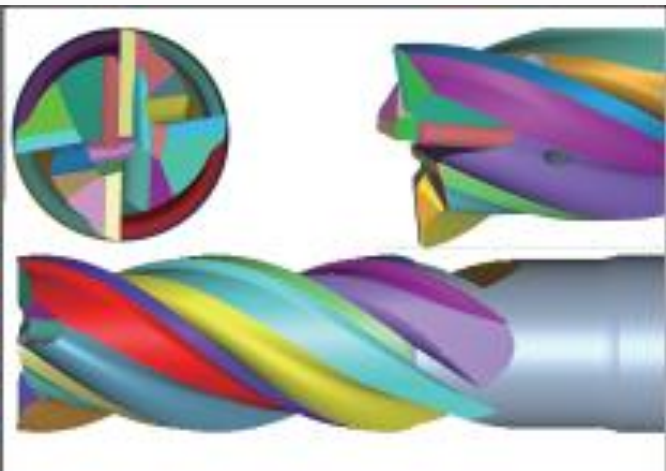


刀具序列号	刀具形状	尺寸 mm								Form HB/HA	Z
		Dc	dm	Dn	l2	l3	ap	re1	c x 45°		
8521S-4X40-1X1.5-Z4T	F	1	4	-	40	2	1.5	-	0.025		4
8521L-4X40-1X2.5-Z4T	F	1	4	-	40	3	2.5	-	0.025		4
8521S-4X40-2X3 -Z4T	F	2	4	-	40	4	3	-	0.05		4
8521L-4X40-2X4 -Z4T	F	2	4	-	40	6	4	-	0.05		4
8521L-6X50-2X4 -Z4T	F	2	6	-	50	6	4	0.2	0.05		4
8521S-4X40-3X4 -Z4T	E	3	4	2.8	40	6	4	0.2	0.075		4
8521L-4X40-3X6 -Z4T	E	3	4	2.8	40	9	6	0.2	0.075		4
8521L-6X50-3X6 -Z4T	E	3	6	2.8	50	9	6	0.5	0.075		4
8521S-6X50-4X5 -Z4T	E	4	6	3.8	50	8	5	0.5	0.1		4
8521L-6X50-4X8 -Z4T	F	4	6	3.8	50	12	8	0.15	0.1		4
8521L-6X50-4X8 -Z4T	F	4	6	3.8	50	12	8	0.2	0.1		4
8521L-6X54-4X8 -Z4T	E	4	6	3.8	54	12	8	0.2	0.1		4
8521L-6X54-4X8 -Z4T	E	4	6	3.8	54	12	8	0.5	0.1		4
8521S-6X50-5X6 -Z4T	E	5	6	4.8	50	10	6	0.2	0.15		4
8521S-6X50-5X6 -Z4T	E	5	6	4.8	50	10	6	0.5	0.15		4
8521L-6X54-5X10 -Z4T	E	5	6	4.8	54	15	10	0.2	0.15		4
8521L-6X54-5X10 -Z4T	E	5	6	4.8	54	15	10	0.5	0.15		4
8521S-6X54-6X7 -Z4T	E	6	6	5.7	54	16	7	0.3	0.2		4
8521L-6X54-6X13 -Z4T	E	6	6	5.7	54	19	13	0.3	0.2		4
8521L-6X54-6X13 -Z4T	E	6	6	5.7	54	19	13	0.5	0.2		4
8521S-8X58-8X9 -Z4T	E	8	8	7.7	58	20	9	0.3	0.2		4
8521S-8X58-8X9 -Z4T	E	8	8	7.7	58	20	9	0.5	0.2		4
8521L-8X63-8X19 -Z4T	E	8	8	7.7	63	27	19	0.3	0.2		4
8521L-8X63-8X19 -Z4T	E	8	8	7.7	63	27	19	0.5	0.2		4
8521L-8X63-8X19 -Z4T	E	8	8	7.7	63	27	19	1	0.2		4
8521S-10X65-10X11-Z4T	E	10	10	9.7	65	24	11	0.3	0.2		4
8521S-10X65-10X11-Z4T	E	10	10	9.7	65	24	11	0.5	0.2		4
8521L-10X72-10X22-Z4T	E	10	10	9.7	72	32	22	0.3	0.2		4
8521L-10X72-10X22-Z4T	E	10	10	9.7	72	32	22	0.5	0.2		4
8521L-10X72-10X22-Z4T	E	10	10	9.7	72	32	22	1	0.2		4
8521L-10X72-10X22-Z4T	E	10	10	9.7	72	32	22	1.5	0.2		4
8521L-10X72-10X22-Z4T	E	10	10	9.7	72	32	22	2	0.2		4
8521S-12X73-12X12-Z4T	E	12	12	11.7	72	26	12	0.3	0.2		4
8521S-12X73-12X12-Z4T	E	12	12	11.7	72	26	12	1	0.2		4
8521L-12X82-12X26-Z4T	E	12	12	11.7	82	38	26	0.3	0.2		4
8521L-12X82-12X26-Z4T	E	12	12	11.7	82	38	26	0.5	0.2		4
8521L-12X82-12X26-Z4T	E	12	12	11.7	82	38	26	1	0.2		4
8521L-12X82-12X26-Z4T	E	12	12	11.7	82	38	26	2	0.2		4
8521L-12X82-12X26-Z4T	E	12	12	11.7	82	38	26	3	0.2		4

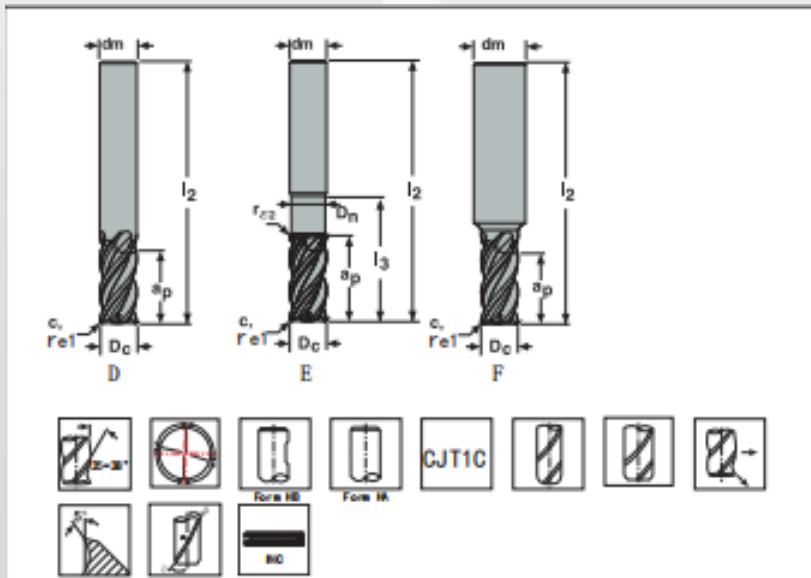


H.BILZ-HPM-8521SA/SB/LA/LB-P/K-Z4P/R/C - 14-25mm

H. BILZ-high-efficiency processing of steel, cast iron rough/fine integration



公差
 $dm=h5$
 $Dc=e7$
 $re1=+-0.02mm$



刀具序列号	刀具形状	尺寸 mm								Form HB/HA	Z
		Dc	dm	Dn	l2	l3	ap	re1	c x 45°		
8521S-14X75-14X14-Z4T	E	14	14	13.7	75	28	14	0.3	0.3		4
8521S-14X75-14X14-Z4T	E	14	14	13.7	75	28	14	0.5	0.3		4
8521S-14X75-14X14-Z4T	E	14	14	13.7	75	28	14	1	0.3		4
8521L-14X82-14X26-Z4T	E	14	14	13.7	82	38	26	0.3	0.3		4
8521L-14X82-14X26-Z4T	E	14	14	13.7	82	38	26	0.5	0.3		4
8521L-14X82-14X26-Z4T	E	14	14	13.7	82	38	26	1	0.3		4
8521S-16X82-16X16-Z4T	E	16	16	15.7	82	32	16	0.5	0.3		4
8521S-16X82-16X16-Z4T	E	16	16	15.7	82	32	16	1	0.3		4
8521L-16X92-16X32-Z4T	E	16	16	15.7	92	44	32	0.5	0.3		4
8521L-16X92-16X32-Z4T	E	16	16	15.7	92	44	32	1	0.3		4
8521L-16X92-16X32-Z4T	E	16	16	15.7	92	44	32	2	0.3		4
8521L-16X92-16X32-Z4T	E	16	16	15.7	92	44	32	3	0.3		4
8521L-16X92-16X32-Z4T	E	16	16	15.7	92	44	32	4	0.3		4
8521S-18X82-18X18-Z4T	E	18	18	17.7	82	32	18	0.5	0.3		4
8521S-18X82-18X18-Z4T	E	18	18	17.7	82	32	18	1	0.3		4
8521L-18X92-18X32-Z4T	E	18	18	17.7	92	44	32	0.5	0.3		4
8521L-18X92-18X32-Z4T	E	18	18	17.7	92	44	32	1	0.3		4
8521S-20X92-20X20-Z4T	E	20	20	19.7	92	40	20	0.5	0.3		4
8521S-20X92-20X20-Z4T	E	20	20	19.7	92	40	20	1	0.3		4
8521S-20X92-20X20-Z4T	E	20	20	19.7	92	40	20	2	0.3		4
8521L-20X100-20X38-Z4T	E	20	20	19.7	92	50	38	0.5	0.3		4
8521L-20X100-20X38-Z4T	E	20	20	19.7	92	50	38	1	0.3		4
8521L-20X100-20X38-Z4T	E	20	20	19.7	92	50	38	2	0.3		4
8521L-20X100-20X38-Z4T	E	20	20	19.7	92	50	38	3	0.3		4
8521L-20X100-20X38-Z4T	E	20	20	19.7	92	50	38	4	0.3		4
8521L-25X125-25X52-Z4T	E	25	25	24.7	125	65	52	0.5	0.3		4
8521L-25X125-25X52-Z4T	E	25	25	24.7	125	65	52	1	0.3		4
8521L-25X125-25X52-Z4T	E	25	25	24.7	125	65	52	2	0.3		4
8521L-25X125-25X52-Z4T	E	25	25	24.7	125	65	52	3	0.3		4
8521L-25X125-25X52-Z4T	E	25	25	24.7	125	65	52	4	0.3		4

H.BILZ-HPM-8521SA/SB/LA/LB-P/K-Z4P/R/C - Processing parameter

H. BILZ-efficient processing of steel, cast iron, milling groove

ISO		apxDc	aexDc	Vc		刃径 Dc										
						3	4	5	6	8	10	12	16	20	25	
P1/2	E/M/A	1.5	1	160		n	16980	12730	10190	8490	6370	5090	4240	3180	2550	2040
						fz	0.024	0.032	0.04	0.048	0.064	0.08	0.096	0.128	0.16	0.2
						Vf	1225	1630	1630	1630	1630	1630	1630	2035	2040	2040
P3/4	E/M/A	1.5	1	140		n	14850	11140	8910	7430	5570	4460	3710	2790	2230	1780
						fz	0.024	0.032	0.04	0.048	0.064	0.08	0.096	0.128	0.16	0.2
						Vf	1070	1425	1425	1425	1425	1425	1425	1785	1785	1780
P5/6	E/M/A	1.5	1	120		n	12730	9550	7640	6370	4770	3820	3180	2390	1910	1530
						fz	0.018	0.024	0.03	0.036	0.048	0.06	0.072	0.096	0.12	0.15
						Vf	685	915	915	915	915	915	915	1145	1145	1150
k12/13	E/M/A	1.5	1	180		n	19100	14320	11460	9550	7160	5730	4770	3580	2860	2290
						fz	0.024	0.032	0.04	0.048	0.064	0.08	0.096	0.128	0.16	0.2
						Vf	1375	1835	1835	1835	1835	1835	1835	2290	2290	2290
k14/15	E/M/A	1.5	1	160		n	16980	12730	10190	8490	6370	5090	4240	3180	2550	2040
						fz	0.021	0.028	0.035	0.042	0.056	0.07	0.084	0.112	0.14	0.175
						Vf	1070	1425	1425	1425	1425	1425	1425	1780	1785	1785

Herbierz-efficient machining of steel, cast iron, side milling

ISO		apxDc	aexDc	Vc		刃径 Dc										
						3	4	5	6	8	10	12	16	20	25	
P1/2	E/M/A	1.50	0.40	200		n	21220	15920	12730	10610	7960	6370	5310	3980	3180	2550
						fz	0.03	0.04	0.05	0.06	0.08	0.1	0.12	0.16	0.2	0.25
						Vf	1910	2545	2545	2545	2545	2550	2550	3185	3180	3190
P3/4	E/M/A	1.50	0.40	190		n	20160	15120	12100	10080	7560	6050	5040	3780	3020	2420
						fz	0.03	0.04	0.05	0.06	0.08	0.1	0.12	0.16	0.2	0.25
						Vf	1815	2420	2420	2420	2420	2420	2420	3025	3020	3025
P5/6	E/M/A	1.50	0.40	170		n	18040	13530	10820	9020	6760	5410	4510	3380	2710	2160
						fz	0.027	0.036	0.045	0.054	0.072	0.09	0.108	0.144	0.18	0.225
						Vf	1460	1950	1950	1950	1945	1950	1950	2435	2440	2430
k12/13	E/M/A	1.50	0.40	200		n	21220	15920	12730	10610	7960	6370	5310	3980	3180	2550
						fz	0.03	0.04	0.05	0.06	0.08	0.1	0.12	0.16	0.2	0.25
						Vf	1910	2545	2545	2545	2545	2550	2550	3185	3180	3190
k14/15	E/M/A	1.50	0.40	180		n	19100	14320	11460	9550	7160	5730	4770	3580	2860	2290
						fz	0.024	0.032	0.04	0.048	0.064	0.08	0.096	0.128	0.16	0.2
						Vf	1375	1835	1835	1835	1835	1835	1835	2290	2290	2290

ISO Material Group

Cooling mode = a = Air Cooling d

= Dry

E = emulsion m = spray

n = REV/MIN

FZ = MM

DC = MM

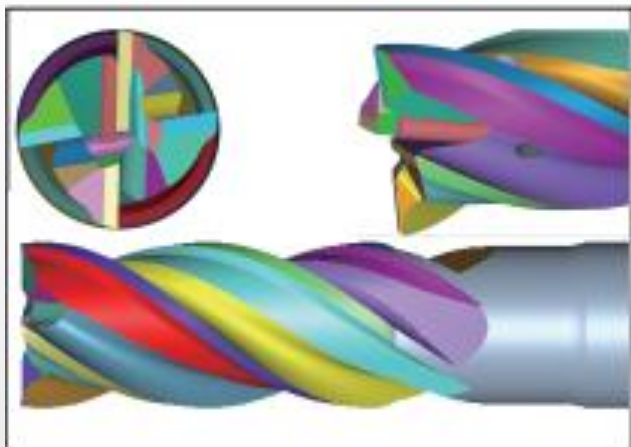
VF = mm/min

all cutting parameters are the target values

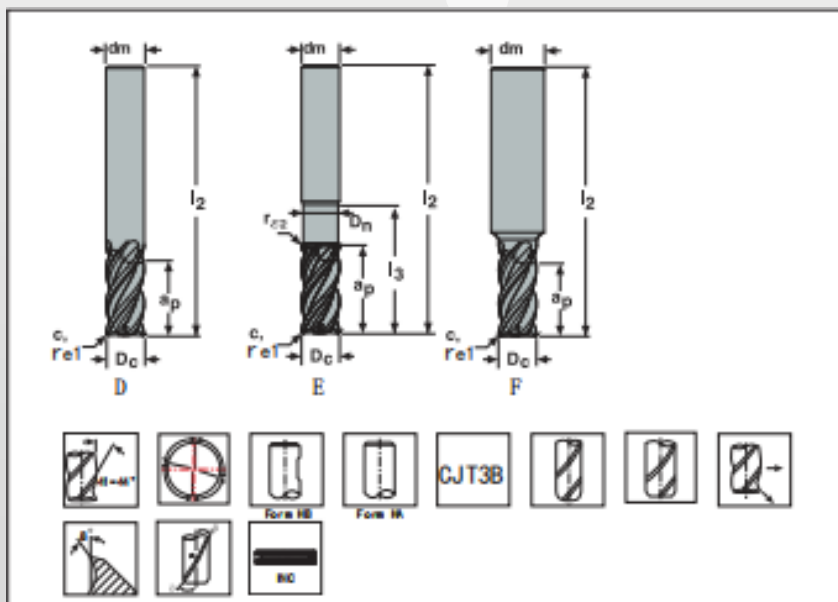


H.BILZ-HPM-8526SA/SB/LA/LB-M/S/T-Z4P/R/C – 2-12mm

H. BILZ-high efficiency processing of stainless steel/superalloy/titanium alloy rough/fine



Tolerance
 $dm=h5$
 $Dc=e7$
 $re1=+-0.02mm$

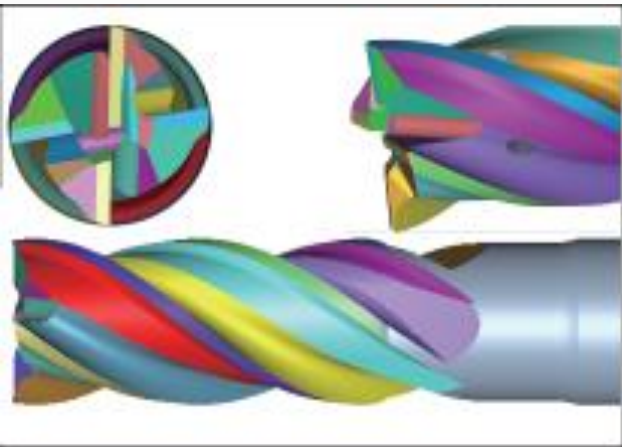


刀具序列号	刀具形状	尺寸 mm								Form H/HA	Z
		Dc	dm	Dn	l2	l3	ap	re1	c x 45°		
8526S-4X40-2X3 -Z4T	F	2	4	-	40	4	3	-	0.05		4
8526L-4X40-2X4 -Z4T	F	2	4	-	40	6	4	-	0.05		4
8526L-6X50-2X4 -Z4T	F	2	6	-	50	6	4	0.2	0.05		4
8526S-4X40-3X4 -Z4T	E	3	4	2.8	40	6	4	0.2	0.075		4
8526L-4X40-3X6 -Z4T	E	3	4	2.8	40	9	6	0.2	0.075		4
8526L-6X50-3X6 -Z4T	E	3	6	2.8	50	9	6	0.2	0.075		4
8526S-6X50-4X5 -Z4T	E	4	6	3.8	50	8	5	0.15	0.1		4
8526L-6X50-4X8 -Z4T	F	4	6	3.8	50	12	8	0.15	0.1		4
8526L-6X50-4X8 -Z4T	F	4	6	3.8	50	12	8	0.2	0.1		4
8526L-6X54-4X8 -Z4T	E	4	6	3.8	54	12	8	0.2	0.1		4
8526L-6X54-4X8 -Z4T	E	4	6	3.8	54	12	8	0.5	0.1		4
8526S-6X50-5X6 -Z4T	E	5	6	4.8	50	10	6	0.3	0.15		4
8526S-6X50-5X6 -Z4T	E	5	6	4.8	50	10	6	0.5	0.15		4
8526L-6X54-5X10 -Z4T	E	5	6	4.8	54	15	10	0.2	0.15		4
8526L-6X54-5X10 -Z4T	E	5	6	4.8	54	15	10	0.3	0.15		4
8526L-6X54-5X10 -Z4T	E	5	6	4.8	54	15	10	0.5	0.15		4
8526L-6X54-5X15 -Z4T	F	5	6	4.8	54	18	15	0.5	0.15		4
8526S-6X54-6X7 -Z4T	E	6	6	5.7	54	16	7	0.3	0.2		4
8526L-6X54-6X13 -Z4T	E	6	6	5.7	54	19	13	0.3	0.2		4
8526L-6X54-6X13 -Z4T	E	6	6	5.7	54	19	13	0.5	0.2		4
8526L-6X65-6X19 -Z4T	E	6	6	5.7	65	29	19	0.3	0.2		4
8526L-6X65-6X19 -Z4T	E	6	6	5.7	65	29	19	0.5	0.2		4
8526S-8X54-8X12 -Z4T	D	8	8	-	54	-	12	0.3	0.2		4
8526S-8X54-8X12 -Z4T	D	8	8	-	54	-	12	0.5	0.2		4
8526S-8X58-8X9 -Z4T	E	8	8	7.7	58	20	9	0.3	0.2		4
8526S-8X58-8X9 -Z4T	E	8	8	7.7	58	20	9	0.5	0.2		4
8526L-8X63-8X19 -Z4T	E	8	8	7.7	63	27	19	0.3	0.2		4
8526L-8X63-8X19 -Z4T	E	8	8	7.7	63	27	19	0.5	0.2		4
8526L-8X63-8X19 -Z4T	E	8	8	7.7	63	27	19	1	0.2		4
8526S-10X65-10X11 -Z4T	E	10	10	9.7	65	24	11	0.3	0.2		4
8526S-10X65-10X11 -Z4T	E	10	10	9.7	65	24	11	0.5	0.2		4
8526L-10X72-10X22 -Z4T	E	10	10	9.7	72	32	22	0.3	0.2		4
8526L-10X72-10X22 -Z4T	E	10	10	9.7	72	32	22	0.5	0.2		4
8526L-10X72-10X22 -Z4T	E	10	10	9.7	72	32	22	0.8	0.2		4
8526L-10X72-10X22 -Z4T	E	10	10	9.7	72	32	22	1	0.2		4
8526L-10X72-10X22 -Z4T	E	10	10	9.7	72	32	22	1.5	0.2		4
8526L-10X72-10X22 -Z4T	E	10	10	9.7	72	32	22	2	0.2		4
8526S-12X73-12X12 -Z4T	E	12	12	11.7	72	26	12	0.3	0.2		4
8526S-12X73-12X12 -Z4T	E	12	12	11.7	72	26	12	1	0.2		4

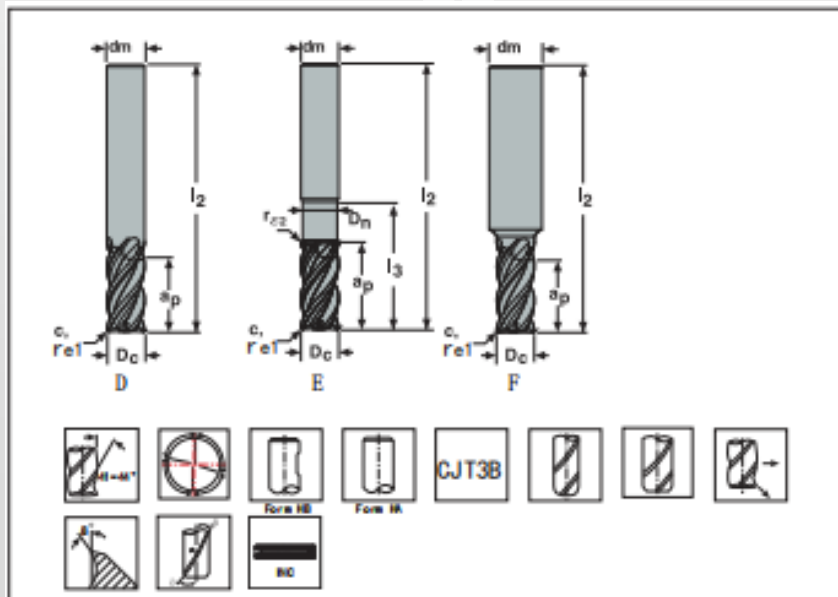


H.BILZ-HPM-8526SA/SB/LA/LB-M/S/T-Z4P/R/C – 12-25mm

H. BILZ-high efficiency processing of stainless steel/superalloy/titanium alloy rough/fine



Tolerance
 $dm=h5$
 $Dc=e7$
 $re1=+-0.02mm$











刀具序列号	刀具形状	尺寸 mm								Form H/HA	Z
		Dc	dm	Dn	l2	l3	ap	re1	c x 45°		
8526L-12X75-12X26-Z4T	E	12	12	11.7	75	32	26	0.3	0.2		4
8526L-12X75-12X26-Z4T	E	12	12	11.7	75	32	26	0.5	0.2		4
8526L-12X75-12X26-Z4T	E	12	12	11.7	75	32	26	1	0.2		4
8526L-12X75-12X26-Z4T	E	12	12	11.7	75	32	26	2	0.2		4
8526L-12X75-12X26-Z4T	E	12	12	11.7	75	32	26	3	0.2		4
8526L-12X82-12X26-Z4T	E	12	12	11.7	82	38	26	0.3	0.2		4
8526L-12X82-12X26-Z4T	E	12	12	11.7	82	38	26	0.5	0.2		4
8526L-12X82-12X26-Z4T	E	12	12	11.7	82	38	26	1	0.2		4
8526L-12X82-12X26-Z4T	E	12	12	11.7	82	38	26	2	0.2		4
8526L-12X82-12X26-Z4T	E	12	12	11.7	82	38	26	3	0.2		4
8526S-14X75-14X14-Z4T	E	14	14	13.7	75	28	14	0.3	0.3		4
8526S-14X75-14X14-Z4T	E	14	14	13.7	75	28	14	0.5	0.3		4
8526S-14X75-14X14-Z4T	E	14	14	13.7	75	28	14	1	0.3		4
8526L-14X82-14X26-Z4T	E	14	14	13.7	82	38	26	0.3	0.3		4
8526L-14X82-14X26-Z4T	E	14	14	13.7	82	38	26	0.5	0.3		4
8526L-14X82-14X26-Z4T	E	14	14	13.7	82	38	26	1	0.3		4
8526S-16X82-16X16-Z4T	E	16	16	15.7	82	32	16	0.5	0.3		4
8526S-16X82-16X16-Z4T	E	16	16	15.7	82	32	16	1	0.3		4
8526L-16X92-16X32-Z4T	E	16	16	15.7	92	44	32	0.5	0.3		4
8526L-16X92-16X32-Z4T	E	16	16	15.7	92	44	32	1	0.3		4
8526L-16X92-16X32-Z4T	E	16	16	15.7	92	44	32	2	0.3		4
8526L-16X92-16X32-Z4T	E	16	16	15.7	92	44	32	3	0.3		4
8526L-16X92-16X32-Z4T	E	16	16	15.7	92	44	32	4	0.3		4
8526S-18X82-18X18-Z4T	E	18	18	17.7	82	32	18	0.5	0.3		4
8526S-18X82-18X18-Z4T	E	18	18	17.7	82	32	18	1	0.3		4
8526L-18X92-18X32-Z4T	E	18	18	17.7	92	44	32	0.5	0.3		4
8521L-18X92-18X32-Z4T	E	18	18	17.7	92	44	32	1	0.3		4
8521S-20X92-20X20-Z4T	E	20	20	19.7	92	40	20	0.5	0.3		4
8521S-20X92-20X20-Z4T	E	20	20	19.7	92	40	20	1	0.3		4
8521S-20X92-20X20-Z4T	E	20	20	19.7	92	40	20	2	0.3		4
8521L-20X100-20X38-Z4T	E	20	20	19.7	92	50	38	0.5	0.3		4
8521L-20X100-20X38-Z4T	E	20	20	19.7	92	50	38	1	0.3		4
8521L-20X100-20X38-Z4T	E	20	20	19.7	92	50	38	2	0.3		4
8521L-20X100-20X38-Z4T	E	20	20	19.7	92	50	38	3	0.3		4
8521L-20X100-20X38-Z4T	E	20	20	19.7	92	50	38	4	0.3		4
8521L-25X125-25X52-Z4T	E	25	25	24.7	125	65	52	0.5	0.3		4
8521L-25X125-25X52-Z4T	E	25	25	24.7	125	65	52	1	0.3		4
8521L-25X125-25X52-Z4T	E	25	25	24.7	125	65	52	3	0.3		4
8521L-25X125-25X52-Z4T	E	25	25	24.7	125	65	52	4	0.3		4











H.BILZ-HPM-8526SA/SB/LA/LB-M/S/T-Z4P/R/C - Processing parameter

H. BILZ-high efficiency processing of stainless steel/superalloy/titanium alloy rough/fine

ISO	粗加工	$a_p \times D_c$	$a_e \times D_c$	v_c (m/min)		铣槽 D_c (mm)											
						2	3	4	6	8	10	12	14	16	18	20	
S19	E/WA	0,40	1,00	30 (20-40)		n (rev/min)	4770	3180	2390	1590	1190	950	800	680	600	530	480
						f_z (mm)	0,014	0,021	0,028	0,042	0,056	0,07	0,084	0,098	0,112	0,126	0,14
						v_f (mm/min)	135	135	135	200	265	265	270	265	270	265	270
S20	E/WA	0,40	1,00	30 (20-40)		n (rev/min)	4770	3180	2390	1590	1190	950	800	680	600	530	480
						f_z (mm)	0,014	0,021	0,028	0,042	0,056	0,07	0,084	0,098	0,112	0,126	0,14
						v_f (mm/min)	135	135	135	200	265	265	270	265	270	265	270
S21	E/WA	0,30	1,00	17,5 (15-20)		n (rev/min)	2790	1860	1390	930	700	560	460	400	350	310	280
						f_z (mm)	0,012	0,018	0,024	0,036	0,048	0,06	0,072	0,084	0,096	0,108	0,12
						v_f (mm/min)	65	65	65	100	135	135	130	135	135	135	135
T22	E/WA	0,60	1,00	70 (60-80)		n (rev/min)	11140	7430	5570	3710	2790	2230	1860	1590	1390	1240	1110
						f_z (mm)	0,01	0,015	0,02	0,03	0,04	0,05	0,06	0,07	0,08	0,09	0,1
						v_f (mm/min)	225	225	225	335	445	445	445	445	445	445	445

ISO	粗加工	$a_p \times D_c$	$a_e \times D_c$	v_c (m/min)		铣槽 D_c (mm)										
						4	5	6	8	10	12	16	20	25		
M8/9	E	1,00	1,00	85 (70-100)		n (rev/min)	6760	5410	4510	3380	2710	2250	1690	1350	1080	
						f_z (mm)	0,016	0,02	0,024	0,032	0,04	0,048	0,064	0,08	0,1	
						v_f (mm/min)	215	215	435	435	435	430	435	430	430	
M10/11	E	0,80	1,00	65 (50-80)		n (rev/min)	5170	4140	3450	2590	2070	1720	1290	1030	830	
						f_z (mm)	0,012	0,015	0,018	0,024	0,03	0,036	0,048	0,06	0,075	
						v_f (mm/min)	125	125	250	250	250	250	250	250	245	250

ISO	粗加工	$a_p \times D_c$	$a_e \times D_c$	v_c (m/min)		侧铣粗加工 D_c (mm)											
						2	3	4	6	8	10	12	14	16	18	20	
S19	E/WA	1,25	0,05	30 (20-40)		n (rev/min)	4770	3180	2390	1590	1190	950	800	680	600	530	480
						f_z (mm)	0,012	0,018	0,024	0,036	0,048	0,06	0,072	0,084	0,096	0,108	0,12
						v_f (mm/min)	115	115	115	170	230	230	230	230	230	230	230
S20	E/WA	1,25	0,05	30 (20-40)		n (rev/min)	4770	3180	2390	1590	1190	950	800	680	600	530	480
						f_z (mm)	0,012	0,018	0,024	0,036	0,048	0,06	0,072	0,084	0,096	0,108	0,12
						v_f (mm/min)	115	115	115	170	230	230	230	230	230	230	230
S21	E/WA	1,25	0,03	17,5 (15-20)		n (rev/min)	2790	1860	1390	930	700	560	460	400	350	310	280
						f_z (mm)	0,01	0,015	0,02	0,03	0,04	0,05	0,06	0,07	0,08	0,09	0,1
						v_f (mm/min)	55	55	55	85	110	110	110	110	110	110	110
T22	E/WA	1,25	0,07	85 (70-100)		n (rev/min)	13530	9020	6760	4510	3380	2710	2250	1930	1690	1500	1350
						f_z (mm)	0,014	0,021	0,028	0,042	0,056	0,07	0,084	0,098	0,112	0,126	0,14
						v_f (mm/min)	380	380	380	570	755	780	755	755	755	755	755

ISO	粗加工	$a_p \times D_c$	$a_e \times D_c$	v_c (m/min)		侧铣粗加工 D_c (mm)										
						4	5	6	8	10	12	16	20	25		
M8/9	E	1,50	0,30	95 (80-110)		n (rev/min)	7560	6050	5040	3780	3020	2520	1890	1510	1210	
						f_z (mm)	0,032	0,04	0,048	0,064	0,08	0,096	0,128	0,16	0,2	
						v_f (mm/min)	485	485	970	970	965	970	970	965	970	
M10/11	E	1,50	0,30	85 (70-100)		n (rev/min)	6760	5410	4510	3380	2710	2250	1690	1350	1080	
						f_z (mm)	0,026	0,0325	0,039	0,052	0,065	0,078	0,104	0,13	0,1625	
						v_f (mm/min)	350	350	705	705	705	700	705	700	700	