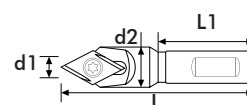
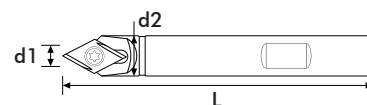
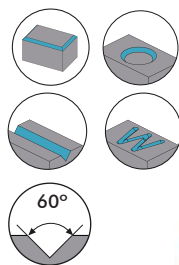


DC11



Ref.	Plaquita Inserts	d1	d2	L	L1
DC11-010M01R	DCEX11T3..	10	12	60	30
DC11-12M01R	DCEX11T3..	12	12	100	-

Complementos Spare parts	
Tornillo de inserción Insert screw	3520

DCEX11

	Ref.	Material					
		P	M	K	N	S	H
	DCEX11T301-XF KS3100	●	●	●	●	●	
	DCEX11T302-XF KS3100	●	●	●	●	●	
	DCEX11T304-XF KS3100	●	●	●	●	●	
	DCEX11T301-XR KS3100	●	●	●		●	●
	DCEX11T302-XR KS3100	●	●	●		●	●
	DCEX11T304-XR KS3100	●	●	●		●	●
	DCEX11T308-XR KS3100	●	●	●		●	●

Condiciones de corte

Recommended cutting conditions

DTS 60° Biselado / Avellanado

DTS 60° Chamfering / Countersinking

MATERIAL	Vc	fr
Acero al carbono Carbon steel	12 ~ 180	0.05 ~ 0.15
Aleación de acero Alloy steel	12 ~ 180	0.05 ~ 0.15
Inoxidable Stainless	12 ~ 180	0.05 ~ 0.15
Hierro fundido Cast iron	12 ~ 180	0.05 ~ 0.15
Aluminio Aluminum Alloy	12 ~ 180	0.10 ~ 0.20
Acero endurecido Hardened steel	12 ~ 180	0.03 ~ 0.10

DTS 60° Ranurado / Grabado

DTS 60° Grooving / Engraving

MATERIAL	Vc	fr
Acero al carbono Carbon steel	10 ~ 170	0.005 ~ 0.05
Aleación de acero Alloy steel	10 ~ 170	0.005 ~ 0.03
Inoxidable Stainless	10 ~ 170	0.005 ~ 0.05
Hierro fundido Cast iron	10 ~ 170	0.005 ~ 0.03
Aluminio Aluminum Alloy	10 ~ 170	0.005 ~ 0.08
Acero endurecido Hardened steel	10 ~ 170	0.005 ~ 0.02

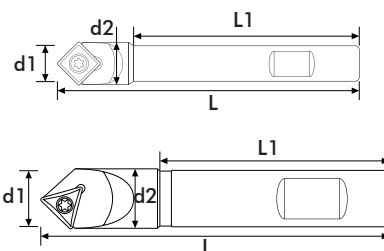
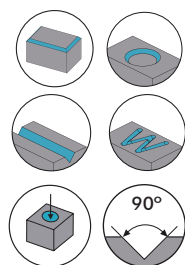
DTS 60° Profundidad de corte

DTS 60° Cutting Depth of Passes

No. de pasadas No. of passes	ap una pasada (mm) ap of one pass (mm)					
	Aluminio Aluminum	Hierro fundido Cast iron	Acero al carbono Carbon steel	Aleación de acero Alloy steel	Inoxidable Stainless	Acero endurecido Hardened steel
1	1.0	0.8	0.8	0.6	0.5	0.2
2	0.8	0.7	0.6	0.5	0.4	0.2
3	0.2	0.3	0.3	0.3	0.3	0.15
4	-	0.2	0.2	0.3	0.3	0.15
5	-	-	0.1	0.2	0.2	0.1
6	-	-	-	0.1	0.2	0.1
7	-	-	-	-	0.1	0.1

FRESADO
MILLING

SC09
TC16



Ref.	Plaquita Inserts	d1	d2	L	L1	Complementos Spare parts
SC09-010M01R	SCGX09T3.. SCMX09T3..	10	12,2	100	71	Tornillo de inserción Insert screw 3520 3521
SC09-012M01R	SCGX09T3.. SCMX09T3..	12	12,2	100	71	
TC16-020M01R	TCGX16T3.. TCMX16T3..	20	21,2	120	78	

SC/TC

	Ref.	Material					
		P	M	K	N	S	H
	SCGX09T304-FG KS2100	●	●	●	●	●	
	SCMX09T304-SM KS3100	●	●	●		●	●
	TCGX16T308-FG KS2100	●	●	●	●	●	
	TCMX16T308-SM KS3100	●	●	●		●	●

Condiciones de corte

Recommended cutting conditions

DTS 90° Biselado / Avellanado

DTS 90° Chamfering / Countersinking

MATERIAL	Vc	fr
Acero al carbono Carbon steel	60 ~ 270	0.15 ~ 0.24
Aleación de acero Alloy steel	50 ~ 220	0.12 ~ 0.20
Inoxidable Stainless	35 ~ 120	0.10 ~ 0.20
Hierro fundido Cast iron	60 ~ 220	0.15 ~ 0.25
Acero endurecido Hardened steel	20 ~ 60	0.03 ~ 0.08

DTS 90° Ranurado / Grabado

DTS 90° Grooving / Engraving

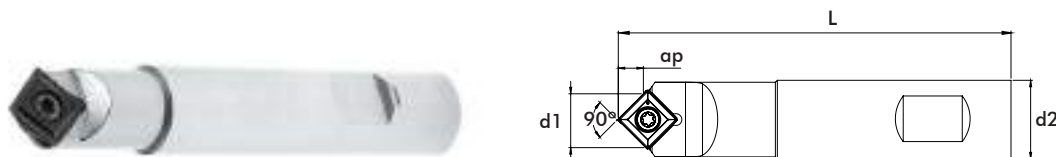
MATERIAL	Vc	fr
Acero al carbono Carbon steel	40 ~ 140	0.12 ~ 0.18
Aleación de acero Alloy steel	35 ~ 120	0.10 ~ 0.14
Inoxidable Stainless	25 ~ 70	0.08 ~ 0.12
Hierro fundido Cast iron	30 ~ 100	0.12 ~ 0.18
Acero endurecido Hardened steel	20 ~ 50	0.02 ~ 0.04

DTS 90° Punteado

DTS 90° Spotting

MATERIAL	Vc		fr	
	Ød = 2 ~ 4.9 mm	Ød ≥ 5 mm	Ød = 2 ~ 4.9 mm	Ød ≥ 5 mm
Acero al carbono Carbon steel	60 ~ 120	90 ~ 220	0.04 ~ 0.08	0.06 ~ 0.10
Aleación de acero Alloy steel	50 ~ 100	75 ~ 180	0.03 ~ 0.06	0.05 ~ 0.08
Inoxidable Stainless	30 ~ 60	45 ~ 120	0.02 ~ 0.04	0.04 ~ 0.06
Hierro fundido Cast iron	40 ~ 80	60 ~ 130	0.04 ~ 0.08	0.06 ~ 0.10
Acero endurecido Hardened steel	20 ~ 40	30 ~ 60	0.02 ~ 0.04	0.04 ~ 0.08

SO11



Ref.	Plaquita Inserts	d1	d2	L	z	ap	Complementos Spare parts
SO11-013M01R	SOMT11T308	13	16	100	1	6,5	Tornillo de inserción Insert screw P04008
SO11-013M01RL	SOMT11T308	13	16	150	1	6,5	

SOMT11

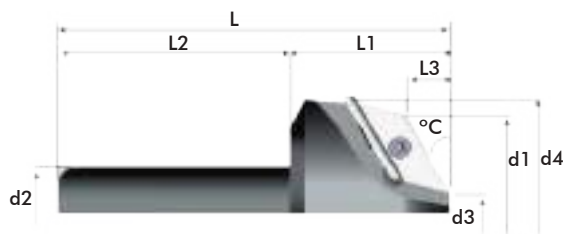
Ref.	Material					
	P	M	K	N	S	H
SOMT11T308 KS3100	●	●	●			

Condiciones de corte
Recommended cutting conditions

MATERIAL	Vc (m/min)	fz
	KS3100	SOMT11T308
Acero sin aleación Unloyed steel (HB125-220)	150 - 230	0,04 - 0,08
Acero de baja aleación Low-alloyed steel (HB220-280)	140 - 220	0,03 - 0,07
Acero de alta aleación High-alloyed steel (HB280-380)	130 - 180	0,03 - 0,06
Ferrítico/Martensítico Ferritic/Martensitic (HB200-330)	-	0,04 - 0,07
Austenítico/Duplex Austenitic/Duplex (HB 200-330)	-	0,03 - 0,06
Dúplex Duplex (HB230-260)	-	0,03 - 0,06
Hierro fundido maleable Malleable cast iron (HB130-230)	150 - 280	0,05 - 0,10
Fundición de hierro gris Grey cast iron (HB160-250)	130 - 230	0,05 - 0,08
Fundición de hierro nodular Nodular cast iron (HB180-245)	80 - 190	0,04 - 0,08

FRESADO
MILLING

ECC



Ref.	Plaquita Inserts	d1	d2	d3	d4	L	L1	L2	L3	°C	z	Complementos Spare parts
ECC057415	XCET310404	74,8	32	15	102,8	135	55	80	2,6	5°	3	Tornillo de inserción Insert screw CSTB-55
ECC107415	XCET310404	74,5	32	15	99,5	135	55	80	5,2	10°	3	
ECC157315	XCET310404	73,3	32	15	95,2	135	55	80	7,8	15°	3	
ECC207115	XCET310404	71,8	32	15	90,3	135	55	80	10,3	20°	3	
ECC256915	XCET310404	69,8	32	15	84,9	135	55	80	12,8	25°	3	
ECC306715	XCET310404	67,4	32	15	79,0	135	55	80	15,1	30°	3	
ECC356415	XCET310404	64,6	32	15	72,8	135	55	80	17,4	35°	3	
ECC406115	XCET310404	61,4	32	15	66,3	135	55	80	19,5	40°	3	
ECC455715	XCET310404	57,9	32	15	-	135	55	80	21,4	45°	3	
ECC505718	XCET310404	57,0	32	18	-	135	55	80	23,2	50°	3	
ECC555622	XCET310404	56,8	32	22	-	135	55	80	24,8	55°	3	
ECC605424	XCET310404	54,3	32	24	-	135	55	80	26,3	60°	3	
ECC655328	XCET310404	53,6	32	28	-	145	65	80	27,5	65°	3	
ECC705232	XCET310404	52,8	32	32	-	145	65	80	28,5	70°	3	
ECC755035	XCET310404	50,7	32	35	-	145	65	80	29,3	75°	3	
ECC804838	XCET310404	48,5	32	38	-	145	65	80	29,9	80°	3	
ECC854742	XCET310404	47,3	32	42	-	145	65	80	30,3	85°	3	

XCET

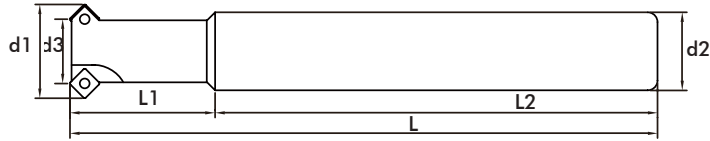
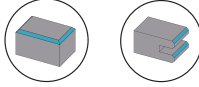
Ref.	Material					
	P	M	K	N	S	H
XCET310404	●	●	●			


Condiciones de corte

Recommended cutting conditions

MATERIAL	Nº de revoluciones (min ⁻¹) Nº of revolution n (min ⁻¹)	fz
Aceros al carbono C55, etc. Aceros aleados 42CrMo4, etc. < 300 HB Carbon steels C55, etc. Alloy steels 42CrMo4, etc. < 300 HB	1000 - 3000 - 7000 700 - 2000 - 4900	0.1 - 0.25
Aceros para troqueles X40CrMoV5-1, etc. < 300 HB Die steels X40CrMoV5-1, etc. < 300 HB	1000 - 3000 - 7000	0.1 - 0.2
Aceros inoxidables X5CrNi18-1 O, etc. < 250 HB Stainless steels X5CrNi18-1 O, etc. < 250 HB	1000 - 3000 - 7000	0.1 - 0.25
Hierros fundidos 250, etc. Cast Irons 250, etc.	1000 - 3000 - 7000	0.1 - 0.25




SP06/07



Ref.	Plaquita Inserts	d1	d2	d3	L	L1	L2	z	Complementos Spare parts
SP05-011M01R	SPMG0502..	11	10	6	100	17	83	1	Tornillo de inserción Insert screw 
SP05-015M02R	SPMG0502..	15	12	10	120	20	100	2	
SP05-017M03R	SPMG0502..	17	16	11	150	25	125	3	
SP05-019M03R	SPMG0502..	19	16	13	150	30	120	3	
SP05-024M04R	SPMG0502..	24	20	18	150	35	115	4	
SP06-022M03R	SPMG0602..	22	16	16	120	30	80	3	
SP07-027M03R	SPMG07T3..	27	20	17	120	30	80	3	
SP09-030M02R	SPMG0904..	30	20	19	150	40	110	2	
SP09-040M03R	SPMG0904..	40	25	29	150	40	110	3	
SP09-050M04R	SPMG0904..	50	25	39	150	40	110	4	

2003
2205
2003
2511
3504

SPMG

	Ref.	Material					
		P	M	K	N	S	H
	SPMG050204-MG KS4100	●	●	●		●	
	SPMG060204-MG KS4100	●	●	●		●	
	SPMG07T308-MG KS4100	●	●	●		●	
	SPMG090408-MG KS4100	●	●	●		●	
	SPMG090408-RG KS4100	●	●	●		●	

Condiciones de corte

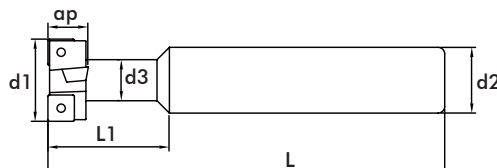
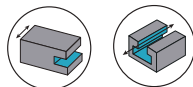
Recommended cutting conditions


	Vc	fz				
		Ø11 ~ Ø15	Ø16 ~ Ø22	Ø23 ~ Ø33	Ø34 ~ Ø41	Ø42 ~ Ø50
Acero al carbono Carbon steel	120 ~ 250	0.06 ~ 0.12	0.06 ~ 0.12	0.06 ~ 0.12	0.12 ~ 0.24	0.12 ~ 0.25
Inoxidable Stainless	100 ~ 180	0.05 ~ 0.10	0.05 ~ 0.10	0.05 ~ 0.10	0.10 ~ 0.17	0.10 ~ 0.17
Hierro fundido Cast iron	120 ~ 250	0.06 ~ 0.12	0.06 ~ 0.12	0.06 ~ 0.12	0.12 ~ 0.24	0.12 ~ 0.25
Aleación de alta temperatura High temperature Alloy	40 ~ 100	0.03 ~ 0.06	0.03 ~ 0.06	0.03 ~ 0.06	0.05 ~ 0.10	0.05 ~ 0.10
Acero endurecido Hardened steel	50 ~ 100	0.03 ~ 0.06	0.03 ~ 0.06	0.03 ~ 0.06	0.05 ~ 0.10	0.05 ~ 0.10



FRESADO
MILLING

SP06/07






Ref.	Plaquita Inserts	d1	d2	d3	L	L1	z	ap	Complementos Spare parts
SP06-021M04R	SPMG0602..	21	16	11	100	27	4	9	Tornillo de inserción Insert screw 
SP05-022M04R	SPMG0502..	22	20	15	90	15	4	6,3	
SP07-025M04R	SPMG07T3..	25	20	12	110	31	4	11	
SP09-032M04R	SPMG0904..	32	25	17	110	39	4	14	

2003
2205
2003
2511
3504

FRESADO

SPMG

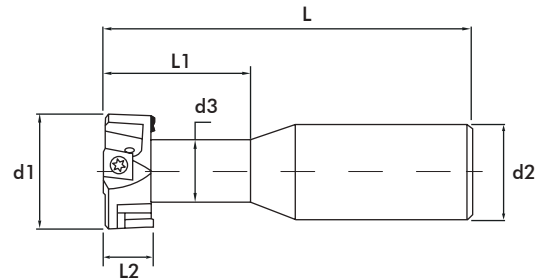
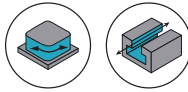
	Ref.	Material					
		P	M	K	N	S	H
	SPMG050204-MG KS4100	●	●	●		●	
	SPMG060204-MG KS4100	●	●	●		●	
	SPMG07T308-MG KS4100	●	●	●		●	
	SPMG090408-MG KS4100	●	●	●		●	
	SPMG090408-RG KS4100	●	●	●		●	

Condiciones de corte

Recommended cutting conditions

	Vc	fz
Acero al carbono Carbon steel	120 ~ 250	0.08 ~ 0.12
Inoxidable Stainless	100 ~ 180	0.07 ~ 0.10
Hierro fundido Cast iron	120 ~ 250	0.08 ~ 0.12
Aleación de alta temperatura High temperature Alloy	40 ~ 100	0.05 ~ 0.08
Acero endurecido Hardened steel	50 ~ 100	0.05 ~ 0.08

ET09



Ref.	Plaquita Inserts	d1	d2	d3	L	L1	L2	z	zz	Complementos Spare parts
15E.3213.010	EN..08T3.R/L	32	32	16,8	115	39	13	2	2*2	Tornillo de inserción P03009 Insert screw P35009
15E.4017.010	EN..0904.R/L	40	32	20,8	125	50	17	2	2*2	
15E.4821.010	EN..08T3.R/L	48	32	26,0	135	60	21	2	2*3	

ENHQ

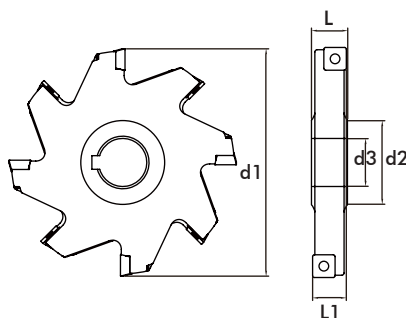
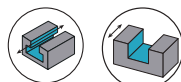
Ref.	Material					
	P	M	K	N	S	H
ENHQ08T30601209SL28W SKY77	●		●			
ENHQ08T30601209SL28W NERO26	●		●			
ENHQ08T30601409SR28W SKY77	●		●			
ENHQ08T30601409SR28W NERO26	●		●			
ENHQ08T30601626SR28V SKY77	●		●			
ENHQ08T30601626SR28V NERO26	●		●			
ENHQ08T30600254SR30 SKY77	●		●			
ENHQ09040802312SL28W SKY77	●		●			
ENHQ09040802212SR28W SKY77	●		●			
ENHQ09040801626SR28V SKY77	●		●			
ENHQ09040801626SR28V NERO26	●		●			
ENHQ09040800254SR30 SKY77	●		●			



Condiciones de corte
Recommended cutting conditions

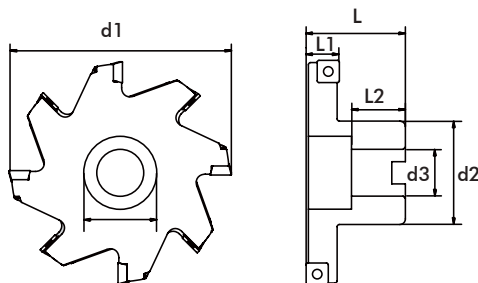
			Hierro fundido Cast iron			Acero Steel					
			D20	D18	D17	A22	A20	A18	A16	B15	B14
ENHQ08T30601209SL28W	SKY77	h _{max}	0,15	0,12	0,1	0,15	0,15	0,12	0,1	-	-
		V _c	240	230	220	240	240	230	220	-	-
	NERO26	h _{max}	0,15	0,12	0,1	-	-	-	-	-	-
		V _c	280	270	260	-	-	-	-	-	-
ENHQ08T30601409SR28W	SKY77	h _{max}	0,15	0,12	0,1	0,15	0,15	0,12	0,1	-	-
		V _c	240	230	220	240	240	230	220	-	-
	NERO26	h _{max}	0,15	0,12	0,1	-	-	-	-	-	-
		V _c	280	270	260	-	-	-	-	-	-
ENHQ08T30601726SL28V	SKY77	h _{max}	0,15	0,12	0,1	0,15	0,15	0,12	0,1	-	-
		V _c	240	230	220	240	240	230	220	-	-
	NERO26	h _{max}	0,15	0,12	0,1	-	-	-	-	-	-
		V _c	280	270	260	-	-	-	-	-	-
ENHQ08T30601626SR28V	SKY77	h _{max}	0,15	0,12	0,1	0,15	0,15	0,12	0,1	-	-
		V _c	240	230	220	240	240	230	220	-	-
	NERO26	h _{max}	0,15	0,12	0,1	-	-	-	-	-	-
		V _c	280	270	260	-	-	-	-	-	-
ENHQ08T30600154SL30	SKY77	h _{max}	0,1	0,09	0,08	0,1	0,1	0,09	0,08	-	-
		V _c	240	230	220	240	240	230	220	-	-
ENHQ08T30600254SR30	SKY77	h _{max}	0,1	0,09	0,08	0,1	0,1	0,09	0,08	-	-
		V _c	240	230	220	240	240	230	220	-	-
ENHQ09040802312SL28W	SKY77	h _{max}	0,18	0,15	0,12	0,18	0,15	0,13	0,11	-	-
		V _c	240	230	220	240	240	230	220	-	-
	NERO26	h _{max}	0,18	0,15	0,12	-	-	-	-	-	-
		V _c	280	270	260	-	-	-	-	-	-
ENHQ09040802212SR28W	SKY77	h _{max}	0,18	0,15	0,12	0,18	0,15	0,13	0,11	-	-
		V _c	240	230	220	240	240	230	220	-	-
	NERO26	h _{max}	0,18	0,15	0,12	-	-	-	-	-	-
		V _c	280	270	260	-	-	-	-	-	-
ENHQ09040801726SL28V	SKY77	h _{max}	0,18	0,15	0,12	0,18	0,15	0,13	0,11	-	-
		V _c	240	230	220	240	240	230	220	-	-
	NERO26	h _{max}	0,18	0,15	0,12	-	-	-	-	-	-
		V _c	280	270	260	-	-	-	-	-	-
ENHQ09040801626SR28V	SKY77	h _{max}	0,18	0,15	0,12	0,18	0,15	0,13	0,11	-	-
		V _c	240	230	220	240	240	230	220	-	-
	NERO26	h _{max}	0,18	0,15	0,12	-	-	-	-	-	-
		V _c	280	270	260	-	-	-	-	-	-
ENHQ09040800354SL30	SKY77	h _{max}	-	-	-	0,13	0,12	0,1	0,08	0,08	0,07
		V _c	-	-	-	180	160	130	100	90	80
ENHQ09040800254SR30	SKY77	h _{max}	-	-	-	0,13	0,12	0,1	0,08	0,08	0,07
		V _c	-	-	-	180	160	130	100	90	80

ET09



Ref.	Plaquita Inserts	d1	d2	d3	L	L1	z
SP05-080A02R	SPMG0502..	80	44	22	12	6	2x4
SP06-080A02R	SPMG0602..	80	44	22	12	8	2x4
SP06-080A02RL	SPMG0602..	80	44	22	12	10	2x4
SP07-080A02R	SPMG07T3..	80	44	22	12	12	2x4
SP05-100A02R	SPMG0502..	100	50	27	12	6	2x5
SP05-100A02RL	SPMG0502..	100	50	27	12	7	2x5
SP06-100A02R	SPMG0602..	100	50	27	12	8	2x5
SP07-100A02R	SPMG07T3..	100	50	27	12	10	2x5
SP07-100A02RL	SPMG07T3..	100	50	27	12	12	2x5
SP09-100A02R	SPMG0904..	100	50	27	16	16	2x5
SP09-125A02R	SPMG0904..	125	65	32	16	16	2x6
SP07-160A02R	SPMG07T3..	160	75	40	12	12	2x8
SP09-160A02R	SPMG0904..	160	75	40	16	16	2x8
SP11-160A02R	SPMG1104..	160	75	40	20	20	2x6
SP09-200A02R	SPMG0904..	200	80	40	16	16	2x9

Complementos Spare parts	
Tornillo de inserción Insert screw	<p>2003</p> <p>2205</p> <p>2511</p> <p>3504</p> <p>4006</p>






Ref.	Plaquita Inserts	d1	d2	d3	L	L1	L2	z
SP05-080A02RC	SPMG0502..	80	42	22	40	6	22	2x4
SP05-080A02RLC	SPMG0502..	80	42	22	40	7	22	2x4
SP06-080A02RC	SPMG0602..	80	42	22	40	8	22	2x4
SP06-080A02RLC	SPMG0602..	80	42	22	40	10	22	2x4
SP07-080A02RC	SPMG07T3..	80	42	22	40	12	22	2x4
SP06-100A02RC	SPMG0602..	100	50	27	40	8	22	2x5
SP06-100A02RLC	SPMG0602..	100	50	27	40	9	22	2x5
SP07-100A02RC	SPMG07T3..	100	50	27	40	10	22	2x5
SP07-100A02RLC	SPMG07T3..	100	50	27	40	12	22	2x5
SP06-125A02RC	SPMG0602..	125	70	32	45	10	25	2x6
SP07-125A02RC	SPMG07T3..	125	70	32	45	11	25	2x6
SP07-125A02RLC	SPMG07T3..	125	70	32	45	12	25	2x6

Complementos Spare parts	
Tornillo de inserción Insert screw	<p>2003</p> <p>2205</p> <p>2511</p>

FRESADO
MILLING

SPMG

	Ref.	Material					
		P	M	K	N	S	H
	SPMG050204-MG KS4100	●	●	●		●	
	SPMG060204-MG KS4100	●	●	●		●	
	SPMG07T308-MG KS4100	●	●	●		●	
	SPMG090408-MG KS4100	●	●	●		●	
	SPMG090408-RG KS4100	●	●	●		●	

Condiciones de corte

Recommended cutting conditions

MATERIAL	Vc	fz
Acero al carbono Carbon steel	100 ~ 220	0.10 ~ 0.35
Inoxidable Stainless	130 ~ 200	0.12 ~ 0.30
Hierro fundido Cast iron	100 ~ 210	0.10 ~ 0.20