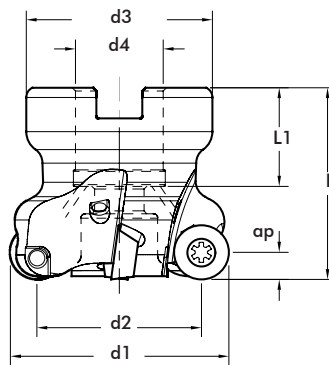


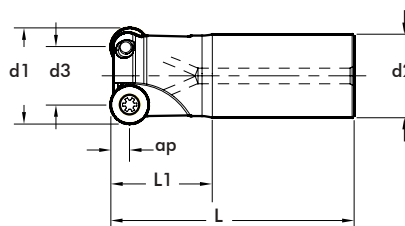
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RD08/10/12

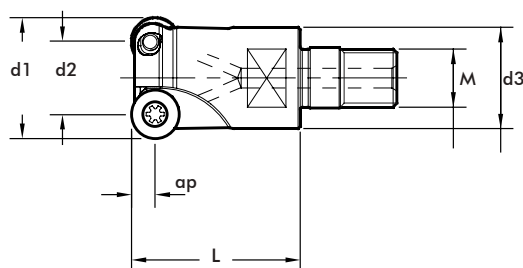


Ref.	Plaquita Inserts	d1	d2	d3	d4	L	L1	z	ap	Ref. Coolant
RD10-040A05R	RDKT10.. RDKW10..	40	30	34	16	40	18	5	5	●
RD10-050A05R	RDKT10.. RDKW10..	50	40	42	22	50	22	5	5	●
RD10-040A05R	RDKT10.. RDKW10..	40	40	42	22	50	22	6	5	●
RD10-063A05R	RDKT10.. RDKW10..	63	53	48	22	50	22	6	5	●
RD12-040A04R	RDKT12.. RDKW12..	40	28	32	16	40	18	4	6	●
RD12-050A05R	RDKT12.. RDKW12..	50	38	40	22	50	20	5	6	●
RD12-052A05R	RDKT12.. RDKW12..	52	40	42	22	50	22	5	6	●
RD12-063A06R	RDKT12.. RDKW12..	63	51	48	22	50	20	6	6	●
RD12-080A07R	RDKT12.. RDKW12..	80	68	58	27	50	25	7	6	●
RD12-100A07R	RDKT12.. RDKW12..	100	88	65	32	50	26	7	6	●
RD12-100A08R	RDKT12.. RDKW12..	100	88	65	32	50	26	8	6	●



Ref.	Plaquita Inserts	d1	d2	d3	L	L1	z	ap	Ref. Coolant
RD08-016M02R	RDKT08.. RDKW08..	16	8	10	160	-	2	4	●
RD08-020M02R	RDKT08.. RDKW08..	20	12	15	180	-	2	4	●
RD08-025M03R	RDKT08.. RDKW08..	25	17	25	180	-	3	4	●
RD10-020M02RR	RDKT10.. RDKW10..	20	20	10	180	-	2	5	●
RD10-025M02RR	RDKT10.. RDKW10..	25	25	15	180	-	2	5	●
RD12-025M02R	RDKT12.. RDKW12..	25	25	25	180	80	2	6	●
RD12-032M02R	RDKT12.. RDKW12..	32	32	32	200	60	2	6	●
RD12-032M03RR	RDKT12.. RDKW12..	32	32	32	160	60	3	6	●

RD08/10/12



Ref.	Plaquita Inserts	d1	d2	d3	L	M	z	ap	Refrigeración Coolant
RD08-016R02R	RDKT08.. RDKW08..	16	8	13	23	8	2	4	●
RD08-020R02R	RDKT08.. RDKW08..	20	12	18	30	10	2	4	●
RD08-025R03R	RDKT08.. RDKW08..	25	17	21	35	12	3	4	●
RD12-025R03R	RDKT12.. RDKW12..	25	13	21	35	12	2	6	●
RD12-020R02R	RDKT12.. RDKW12..	20	10	18	30	10	2	5	●
RD12-025R03R	RDKT12.. RDKW12..	25	15	21	35	12	3	5	●

RDKT08/10/12/16
RDKW08/10/12

	Ref.	Material					
		P	M	K	N	S	H
	RDKT0802M0 KS4100	●	●	●		●	●
	RDKT10T03M0 KS4100	●	●	●		●	●
	RDKT1204M0 KS4100	●	●	●		●	●
	RDKT1604M0 KS4100	●	●	●		●	●
	RDKT0802M0-ST KS4100	●	●	●		●	●
	RDKT10T3M0-ST KS2100	●	●				
	RDKT10T3M0-ST KS4100	●	●	●		●	●
	RDKT1204M0-ST KS2100	●	●				
	RDKT1204M0-ST KS4100	●	●	●		●	●
	RDKT0802M0-TR KS4100	●	●	●		●	●
	RDKT10T3M0-TR KS4100	●	●	●		●	●
	RDKT1204M0- TR KS4100	●	●	●		●	●
	RDKW0802M0 KS4100	●	●	●		●	●
	RDKW10T3M0 KS4100	●	●	●		●	●
	RDKW1204M0 KS4100	●	●	●		●	●

Condiciones de corte

Recommended cutting conditions

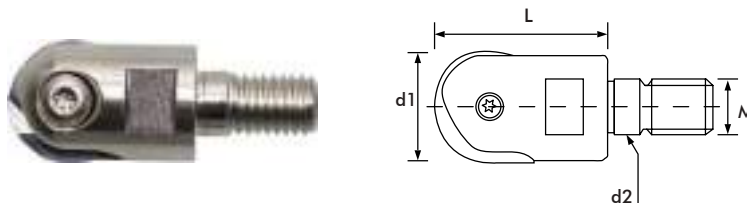
MATERIAL	Vc	Vc
	KS2100	KS4100
Acero sin aleación Non-Alloyed Steel (VDI 1~5)	100 - 210	180 - 380
Acero de aleación baja Low-Alloyed Steel (VDI 6~9)	70 - 180	120 - 300
Acero de aleación alta High-Alloyed Steel (VDI 10~11)	40 - 90	70 - 150
Ferrítico y Martensítico Ferritic & Martensitic (VDI 12~13)	70 - 180	120 - 200
Acero inoxidable austenítico Austenitic Stainless Steel (VDI 14)	70 - 200	130 - 250
Fundición de hierro gris Grey Cast Iron (VDI 15~16)	-	120 - 250
Hierro fundido nodular Nodular Cast Iron (VDI 17~18)	-	130 - 220
Titanio y superaleaciones Titanium & Superalloys (VDI 31~37)	-	25 - 45
Material duro Hard materials (VDI 38~41)	-	40 - 80

Ref.	fz
RDKT0802M0	0.15 ~ 0.25
RDKT10T03M0	0.15 ~ 0.25
RDKT1204M0	0.20 ~ 0.30
RDKT1604M0	0.30~0.60
RDKT0802M0-ST	0.08 ~ 0.25
RDKT10T3M0-ST	0.08 ~ 0.28
RDKT1204M0-ST	0.10 ~ 0.30
RDKT0802M0-TR	0.18 ~ 0.35
RDKT10T3M0-TR	0.22 ~ 0.40
RDKT1204M0- TR	0.22 ~ 0.40
RDKW0802M0	0.13 ~ 0.25
RDKW10T3M0	0.16 ~ 0.30
RDKW1204M0	0.16 ~ 0.35

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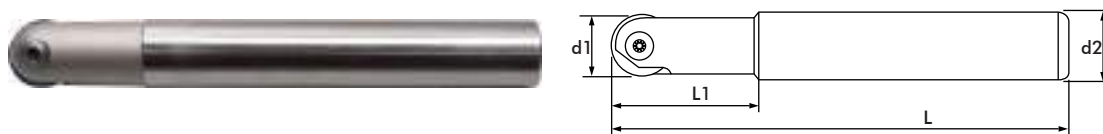
SPW



Ref.	Plaquita Inserts	d1	d2	L	M
SPW10-M05	SPWE100-50R	10	5,5	20	5
SPW12-M06	SPWE120-60R	12	6,5	22	6
SPW16-M08	SPWE160-80R	16	8,5	28	8
SPW20-M10	SPWE200-100R	20	10,5	30	10
SPW25-M12	SPWE250-125R	25	12,5	40	12
SPW32-M16	SPWE320-160R	32	17	43	16

Complementos Spare parts	
Tornillo de inserción Insert screw	P03240 P03250 P03260 P03280

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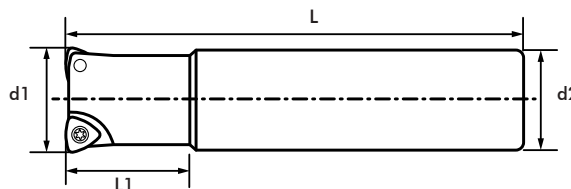
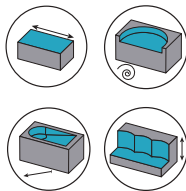
Ref.	Plaquita Inserts	d1	d2	L	L1
SPWC100-L130	SPWE100-50R	10	10	130	30
SPWC100-L160	SPWE100-50R	10	10	160	35
SPWC120-L130	SPWE120-60R	12	12	130	30
SPWC120-L160	SPWE120-60R	12	12	160	30
SPWC160-L120	SPWE160-80R	16	16	120	30
SPWC160-L160	SPWE160-80R	16	16	160	30
SPWC160-L200	SPWE160-80R	16	16	200	45
SPWC200-L160	SPWE200-100R	20	20	160	30
SPWC200-L200	SPWE200-100R	20	20	200	35
SPWC250-L160	SPWE250-125R	25	25	160	35
SPWC250-L200	SPWE250-125R	25	25	200	40
SPWC250-L250	SPWE250-125R	25	25	250	60
SPWC320-L200	SPWE320-160R	32	32	200	55
SPWC320-L250	SPWE320-160R	32	32	250	70
SPWC320-L300	SPWE320-160R	32	32	300	80

Complementos Spare parts	
Tornillo de inserción Insert screw	P03240 P03250 P03260 P03280

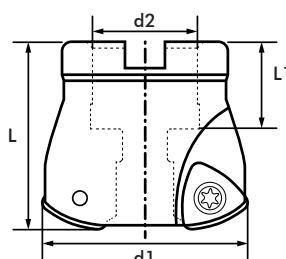
SPWE

Ref.	Material					
	P	M	K	N	S	H
SPWE100-50R KS3100	●	●	●		●	
SPWE120-60R KS3100	●	●	●		●	
SPWE160-80R KS3100	●	●	●		●	
SPWE200-100R KS3100	●	●	●		●	
SPWE250-125R KS3100	●	●	●		●	
SPWE200-100R KS3100	●	●	●		●	

WP26



Ref.	Plaquita Inserts	d1	d2	L	z	Complementos Spare parts
WP26-035M03R	WP26339R14..	35	32	230	3	Tornillo de inserción Insert screw 4005



Ref.	Plaquita Inserts	d1	d2	L	L1	z	Complementos Spare parts
WP26-050A03R	WP26379R25..	50	22	50	21	3	Tornillo de inserción Insert screw 5002
WP26-100A06R	WP26379R25..	100	32	50	26	6	
WP26-160A08R	WP26379R25..	160	40	63	38	8	

WP2633/37

	Ref.	Material					
		P	M	K	N	S	H
	WP26339R14-RG KS2100	●	●	●			●
	WP26339R14-RG KS4100	●	●	●		●	
	WP26379R25-RG KS2100	●	●	●			●
	WP26379R25-RG KS4100	●	●	●		●	

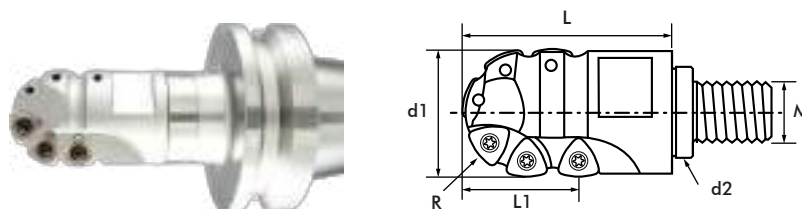
Condiciones de corte


Recommended cutting conditions

MATERIAL	WP26339R14			WP26379R25		
	Vc	fz	ap	Vc	fz	ap
Acero al carbono Carbon steel	120 ~ 250	0.4 ~ 1.5	0.4 ~ 1.5	120 ~ 250	0.4 ~ 3.0	0.4 ~ 2.0
Inoxidable Stainless	100 ~ 180	0.4 ~ 1.2	0.4 ~ 1.0	100 ~ 180	0.4 ~ 2.0	0.4 ~ 1.4
Hierro fundido Cast iron	120 ~ 250	0.4 ~ 1.5	0.4 ~ 1.5	120 ~ 250	0.4 ~ 3.0	0.4 ~ 2.0
Aleación de alta temperatura High temperature Alloy	40 ~ 100	0.4 ~ 1.0	0.4 ~ 1.0	40 ~ 100	0.4 ~ 1.6	0.4 ~ 1.2



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WP26



Ref.	Plaquita Inserts	d1	d2	L	L1	R	M	z	Complementos Spare parts
WP26-025R02R	WP26339R14..	25	12,5	42	21	12,5	12	2	Tornillo de inserción Insert screw 4023 
WP26-030R02R	WP26339R14..	30	12,5	50	23	15	12	2	
WP26-032R02R	WP26339R14..	32	17	50	23	16	16	2	

WP2633/37

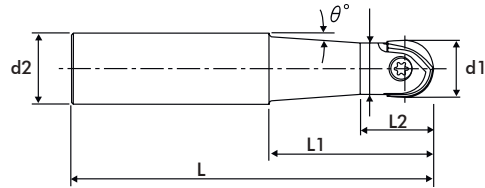
	Ref.	Material					
		P	M	K	N	S	H
	WP26339R14-RG KS2100	●	●	●			●
	WP26339R14-RG KS4100	●	●	●		●	
	WP26379R25-RG KS2100	●	●	●			●
	WP26379R25-RG KS4100	●	●	●		●	

Condiciones de corte

Recommended cutting conditions

MATERIAL	WP26339R14			WP26379R25		
	Vc	aw1 = (0.5D, 0.5D) aw2 = (0.25D, 0.25D) fz		Vc	aw1 = (0.5D, 0.5D) aw2 = (0.25D, 0.25D) fz	
Acero al carbono Carbon steel	120 ~ 250	0.16 ~ 0.30	0.2 ~ 0.39	120 ~ 250	0.20 ~ 0.36	0.26 ~ 0.46
Inoxidable Stainless	100 ~ 180	0.08 ~ 0.14	0.1 ~ 0.18	100 ~ 180	0.08 ~ 0.14	0.10 ~ 0.18
Hierro fundido Cast iron	120 ~ 250	0.16 ~ 0.30	0.2 ~ 0.39	120 ~ 250	0.20 ~ 0.36	0.26 ~ 0.46
Aleación de alta temperatura High temperature Alloy	40 ~ 100	0.08 ~ 0.12	0.1 ~ 0.18	40 ~ 100	0.08 ~ 0.12	0.10 ~ 0.18

ZBT/S



Ref.	d1	d2	d3	L	L1	L2	θ°
ZBT0801120	8	12	7,2	90	35	12	4° 43'
ZBT0802120	8	12	7,2	110	55	25	3° 37'
ZBT1001120	10,11	12	9	90	35	15	2° 51'
ZBT1002120	10,11	12	9	110	55	130	2° 17'
ZBT1201160	12,13	16	10,5	110	55	17	3° 23'
ZBT1601200	16,17	20	14,5	125	65	20	2° 51'
ZBT2001250	20,21	25	18	145	75	25	3° 26'
ZBT2501320	25,26	32	22,5	170	90	30	4° 03'
ZBT3001320	30,32,33	32	27	195	110	40	1° 38'
ZBS1202120	12,13	12	10,5	110	55	-	-
ZBS1601160	16,17	16	14,5	95	35	-	-
ZBS1602160	16,17	16	14,5	125	65	-	-
ZBS2001200	20,21	20	18	110	40	-	-
ZBS2002200	20,21	20	18	145	75	-	-
ZBS2501250	25,26	25	22,5	125	45	-	-
ZBS2502250	25,26	25	22,5	170	90	-	-
ZBS3001320	30,32,33	32	27	140	55	-	-
ZBS3002320	30,32,33	32	27	195	100	-	-

Complementos Spare parts	
Tornillo de inserción Insert screw	3512 4016 5020 6025 8030

XMB

Ref.	Material					
	P	M	K	N	S	H
XMB080 KS2100	●			●		
XMB80 KS3100	●	●				
XMB080 KS4100	●					●
XMB100 KS2100	●			●		
XMB100 KS3100	●	●				
XMB100 KS4100	●					●
XMB120 KS2100	●			●		
XMB120 KS3100	●	●				
XMB120 KS4100	●					●
XMB160 KS2100	●			●		
XMB160 KS3100	●	●				
XMB160 KS4100	●					●
XMB00 KS2100	●			●		
XMB200 KS3100	●	●				
XMB200 KS4100	●					●
XMB250 KS2100	●			●		
XMB250 KS3100	●	●				
XMB250 KS4100	●			●		
XMB320 KS2100	●			●		
XMB320 KS3100	●	●				
XMB320 KS4100	●					●



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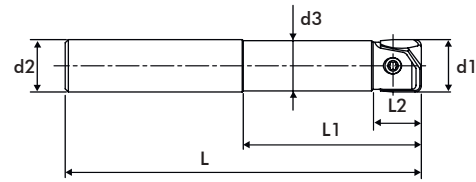
Condiciones de corte
 Recommended cutting conditions

Ø	ACEROS NO ALEADOS/ALEADOS HIERRO FUNDIDO NON-ALLOYED/ALLOY STEELS CAST IRON (HB ~280 / HRC ~30 / N/mm ² ~100)				ACEROS ALEADOS ACEROS RESISTENTES AL CALOR ALLOY STEELS HEAT RESISTANT STEELS (HB 280~380 / HRC 30~40 / N/mm ² 1000~1250)			
	KS2100				KS2100			
	RPM	Vf	Vc	fz	RPM	Vf	Vc	fz
8	6370~12730	2550~5090	160~320	0.20~0.20	4770~11140	1910~4460	120~280	0.20~0.20
10, 11	5090~11460	2040~4580	160~360	0.20~0.20	3820~9550	1530~3820	120~300	0.20~0.20
12, 13	4240~10080	1700~4030	160~380	0.20~0.20	3180~9280	1270~3710	120~350	0.20~0.20
16, 17	3180~9550	1590~5730	160~480	0.25~0.30	2390~7560	1190~45 40	120~380	0.25~0.30
20, 21	2550~9230	1270~7380	160~580	0.25~0.40	1910~6680	950~5350	120~420	0.25~0.40
25, 26	2040~7640	1020~7640	160~600	0.25~0.50	1530~6110	760~6110	120~480	0.25~0.50
30, 32, 33	1700~7430	850~8910	160~700	0.25~0.60	1270~5840	640~7000	120~550	0.25~0.60

Ø	TROQUELES DE ACEROS PARA HERRAMIENTAS PRETEMPLADO DIE TOOL STEELS PRE-HARDENED (HB 380~480 / HRC 40~50 / N/mm ² 1250~1500)				ACEROS INOXIDABLES STAINLESS STEELS			
	KS2100				KS2100			
	RPM	Vf	Vc	fz	RPM	Vf	Vc	fz
8	3980~8750	1190~3500	100~220	0.15~0.20	3580~5170	720~1290	90~130	0.10~0.12
10, 11	3180~8280	950~3310	100~260	0.15~0.20	2860~4140	720~1240	90~130	0.13~0.15
12, 13	2650~7430	800~2970	100~280	0.15~0.20	2390~3450	720~1380	90~130	0.15~0.20
16, 17	1990~6960	800~4180	100~350	0.20~0.30	1790~2590	540~1030	90~130	0.15~0.20
20, 21	1590~6370	640~5090	100~400	0.20~0.40	1430~2070	430~830	90~130	0.15~0.20
25, 26	1270~5730	510~5730	100~450	0.20~0.50	1150~1660	460~830	90~130	0.20~0.25
30, 32, 33	1060~5310	420~6370	100~500	0.20~0.60	950~1380	380~690	90~130	0.20~0.25

Ø	RADIO COMPLETO FULL RADIUS TYPE (HB ~280 / HRC ~30 / N/mm ² ~100)				ACEROS DE ALTA DUREZA HIGH HARDENED STEELS (HB 55 550~740 / HRC 55~65 / N/mm ² 1500~)			
	KS4100				KS4100			
	RPM	Vf	Vc	fz	RPM	Vf	Vc	fz
8	6370~12730	2550~5090	160~320	0.20~0.20	5090~11460	640~2150	80~180	0.10~0.15
10, 11	5090~11460	2040~4580	160~360	0.20~0.20	2550~6370	510~1910	80~200	0.10~0.15
12, 13	4240~10080	1700~4030	160~380	0.20~0.20	2120~5840	420~1750	80~220	0.10~0.15
16, 17	3180~9550	1590~5730	160~480	0.25~0.30	1590~5170	480~2590	80~260	0.15~0.25
20, 21	2550~9230	1270~7380	160~580	0.25~0.40	1270~5090	480~2590	80~320	0.15~0.25
25, 26	2040~7640	1020~7640	160~600	0.25~0.50	1020~4580	310~2290	80~360	0.15~0.25
30, 32, 33	1700~7430	850~8910	160~700	0.25~0.60	850~4240	250~2550	80~400	0.15~0.30

ZRS



Ref.	d1	d2	d3	L	L1	L2
ZRS1201120	12, 13	12	11	110	30	13
ZRS1601160	16, 17	16	15	130	50	15
ZRS1602160	16, 17	16	15	165	65	15
ZRS2001200	20, 21	20	19	140	60	18
ZRS2002200	20, 21	20	19	180	80	18
ZRS2501250	25, 26	25	24	150	70	23
ZRS2502250	25, 26	25	24	200	90	23
ZRS3001320	30, 32, 33	32	29	160	80	27
ZRS3002320	30, 32, 33	32	29	220	100	27

Complementos Spare parts	
Tornillo de inserción Insert screw	3512 4016 5020 6025 8030

XMR



Ref.	Material					
	P	M	K	N	S	H
XMR080 10 KS2100	●	●		●		
XMR080 10 KS4100	●					●
XMR100 10 KS2100	●	●		●		
XMR100 10 KS4100	●					●
XMR100 20 KS2100	●	●		●		
XMR100 20 KS4100	●					●
XMR120 10 KS2100	●	●		●		
XMR120 10 KS4100	●					●
XMR120 20 KS2100	●	●		●		
XMR120 20 KS4100	●					●
XMR160 10 KS2100	●	●		●		
XMR160 10 KS4100	●					●
XMR160 20 KS2100	●	●		●		
XMR160 20 KS4100	●					●
XMR200 10 KS2100	●	●		●		
XMR200 10 KS4100	●					●
XMR200 20 KS2100	●	●		●		
XMR200 20 KS4100	●					●

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SAUDA
Condiciones de corte
 Recommended cutting conditions

Ø	ACEROS NO ALEADOS/ALEADOS HIERRO FUNDIDO NON-ALLOYED/ALLOY STEELS CAST IRON (HB ~280 / HRC ~30 / N/mm ² ~100)				ACEROS NO ALEADOS/ALEADOS HIERRO FUNDIDO NON-ALLOYED/ALLOY STEELS CAST IRON (HB ~280 / HRC ~30 / N/mm ² ~100)			
	KS2100				KS4100			
	RPM	Vf	Vc	fz	RPM	Vf	Vc	fz
8	6370~11940	2550~3580	160~300	0.20~0.15	5970~7960	7160~6370	150~200	0.60~0.40
10, 11	5090~9550	2040~2860	160~300	0.20~0.15	4770~6370	7160~6370	150~200	0.75~0.50
12, 13	4240~7960	1700~2390	160~300	0.20~0.15	3980~5310	7160~6370	150~200	0.90~0.60
16, 17	3180~5970	1590~2390	160~300	0.25~0.20	2980~3980	7160~6370	150~200	1.20~0.80
20, 21	2550~4770	1270~1910	160~300	0.25~0.20	2390~3180	7160~6370	150~200	1.50~1.00
25, 26	2040~3820	1020~1530	160~300	0.25~0.20	1910~2550	7640~7640	150~200	2.00~1.50
30, 32, 33	1700~3180	850~1270	160~300	0.25~0.20	1590~2120	7320~7640	150~200	2.30~1.80

Ø	ACEROS ALEADOS ACEROS RESISTENTES AL CALOR ALLOY STEELS HEAT RESISTANT STEELS (HRC 30~40 / N/mm ² 1000~1250)				TROQUELES DE ACEROS PARA HERRAMIENTAS PRETEMPLADO DIE TOOL STEELS PRE-HARDENED (HB 380~480 / HRC 40~50 / N/mm ² 1250~1500)			
	KS2100				KS2100			
	RPM	Vf	Vc	fz	RPM	Vf	Vc	fz
8	4770~11140	1910~3340	120~280	0.20~0.15	3980~11140	990~1340	100~280	0.12~0.06
10, 11	3820~8910	1530~2670	120~280	0.20~0.15	3180~8910	800~1070	100~280	0.13~0.06
12, 13	3180~7430	1270~2230	120~280	0.20~0.15	2650~7430	660~890	100~280	0.12~0.06
16, 17	2390~5570	1190~2230	120~280	0.25~0.20	1990~5570	600~840	100~280	0.15~0.08
20, 21	1910~4460	950~1780	120~280	0.25~0.20	1590~4460	480~670	100~280	0.15~0.08
25, 26	1530~3570	760~1430	120~280	0.25~0.20	1270~3570	380~530	100~280	0.15~0.07
30, 32, 33	1270~2970	640~1190	120~280	0.25~0.20	1060~2970	320~450	100~280	0.15~0.08

Ø	ACEROS INOXIDABLES STAINLESS STEELS				ACEROS DE ALTA DUREZA HIGH HARDENED STEELS (HB 55 0~740 / HRC 55~65 / N/mm ² ~1500)			
	KS4100				KS4100			
	RPM	Vf	Vc	fz	RPM	Vf	Vc	fz
8	3580~5170	720~1030	90~130	0.10~0.10	3180~8750	640~880	80~220	0.10~0.05
10, 11	2860~4140	630~910	90~130	0.11~0.11	2550~7000	510~700	80~220	0.10~0.05
12, 13	2390~3450	550~790	90~130	0.12~0.11	2120~5840	420~580	80~220	0.10~0.05
16, 17	1790~2590	450~650	90~130	0.13~0.13	1590~4380	480~530	80~220	0.15~0.06
20, 21	1430~2070	360~520	90~130	0.13~0.13	1270~3500	380~420	80~220	0.15~0.06
25, 26	1150~1660	290~410	90~130	0.13~0.12	1020~2800	310~340	80~220	0.15~0.06
30, 32, 33	950~1380	240~340	90~130	0.13~0.12	850~2330	250~280	80~220	0.15~0.06