

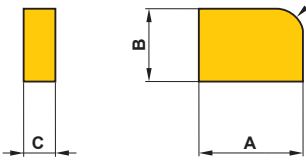
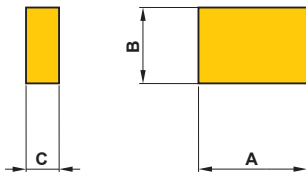
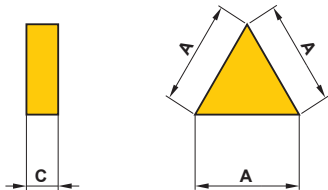
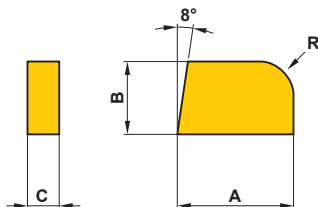
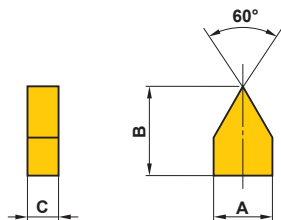
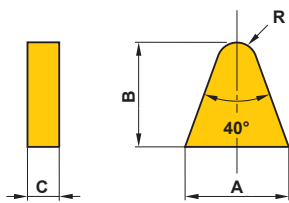
HERRAMIENTAS DE TORNEADO

HERRAMIENTAS SOLDADAS

BLANKS DE CARBURO PARA TORNEADO.....	I002
BARRAS DE CARBURO (MITSUBISHI STANDARD).....	I004
PORTAHERRAMIENTAS SOLDADOS	I005



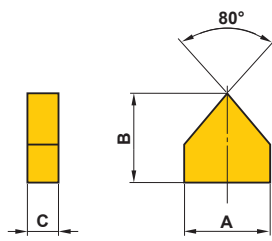
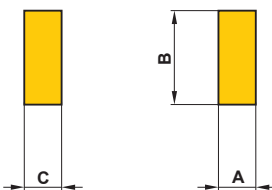
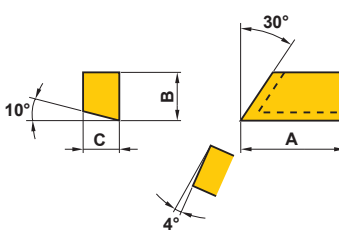
INSERTOS BLANK PARA TORNEADO

Tipo	Geometría	Código	Stock								Dimensiones (mm)			
			P			M	K				A	B	C	R
			ST110 (HW-P10) *	ST120 (HW-P20) *	ST140T (HW-P40) *	UT120T (HW-M20) *	HT103A (HW-K01) *	HT105T (HW-K01) *	HT110 (HW-K10) *	HT120 (HW-K20) *				
Tipo 01		01-0	▲	▲	□	▲	▲	▲	▲	□	10	6	3	4
		01-1	▲	▲	▲	▲	▲	▲	▲	▲	13	9	3	5
		01-2	▲	▲	▲	▲	▲	▲	▲	▲	16	11	4	5
		01-3	▲	▲	▲	▲	□	□	▲	▲	19	13	5	5
		01-4	□	▲	▲	▲	□	□	□	□	22	15	6	8
		01-5	□	□	□	▲	□	□	□	□	25	17	7	8
		01-6	□	□	□	□	□	□	□	□	30	20	8	8
Para tipo 31,32														
Tipo 02		02-0	▲	▲	▲	▲	▲	▲	▲	▲	10	6	3	—
		02-1	▲	▲	▲	▲	▲	▲	▲	▲	13	9	3	—
		02-2	▲	▲	▲	▲	▲	▲	▲	▲	16	11	4	—
		02-3	▲	▲	▲	▲	▲	▲	▲	▲	19	13	5	—
		02-4	▲	▲	▲	▲	□	▲	▲	▲	22	15	6	—
		02-5	□	▲	▲	▲	□	▲	▲	▲	25	17	7	—
		02-6	□	▲	▲	▲	□	▲	▲	▲	30	20	8	—
Para tipo 41,42														
Tipo 03		03-0	□	▲	□	▲	□	□	□	□	10	—	3	—
		03-1	□	▲	□	▲	▲	□	▲	□	12	—	3	—
		03-2	□	▲	□	▲	▲	□	▲	□	15	—	4	—
		03-3	□	▲	□	▲	□	▲	▲	▲	18	—	5	—
		03-4	□	□	□	□	□	□	□	□	24	—	6	—
		03-5	□	□	□	□	□	□	□	□	24	—	7	—
		03-6	□	□	□	□	□	□	□	□	28	—	8	—
Para tipo 37,38,47														
Tipo 04		04-0	▲	▲	□	▲	▲	▲	▲	▲	10	6	3	4
		04-1	▲	▲	□	▲	▲	▲	▲	▲	13	9	3	5
		04-2	▲	▲	▲	▲	▲	▲	▲	▲	16	11	4	5
		04-3	▲	▲	▲	▲	▲	▲	▲	▲	19	13	5	5
		04-4	□	▲	□	▲	□	□	▲	□	22	15	6	8
		04-5	□	□	□	□	□	□	□	□	25	17	7	8
		04-6	□	□	□	□	□	□	□	□	30	20	8	8
Para tipo 33,34														
Tipo 05		05-1	□	▲	□	▲	□	□	▲	□	5	8	3	—
		05-2	▲	▲	□	▲	□	□	▲	□	6	10	4	—
		05-3	▲	▲	□	▲	□	□	▲	□	7	12	5	—
		05-4	□	▲	□	▲	□	□	□	□	9	16	6	—
		05-5	□	□	□	□	□	□	□	□	10	18	7	—
		05-6	□	□	□	□	□	□	□	□	11	20	8	—
Para tipo 49,51														
Tipo 06		06-0	▲	▲	▲	▲	▲	▲	▲	▲	10	10	3	2
		06-1	▲	▲	▲	▲	▲	▲	▲	▲	13	13	3	2.5
		06-2	▲	▲	▲	▲	▲	▲	▲	▲	16	16	4	3
		06-3	▲	▲	▲	▲	▲	▲	▲	▲	19	19	5	4
		06-4	□	▲	□	▲	□	▲	▲	▲	22	22	6	4
		06-5	□	□	□	□	□	□	□	□	25	25	7	5
		06-6	□	□	□	□	□	□	□	□	30	30	8	6
Para tipo 36,39,40														

*() : Materiales para las herramientas de carburo cementado y la clasificación para su uso. (Basado en TAS6000)

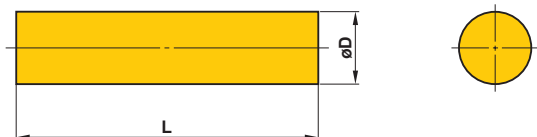
▲ : Stock en Japón. A ser reemplazado por nuevo producto. □ : A pedido, únicamente.

(10 insertos por caja)

Tipo	Geometría	Código	Stock								Dimensiones (mm)			
			P			M	K							
			ST110 (HW-P10) *	ST120 (HW-P20) *	ST140T (HW-P40) *	UT120T (HW-M20) *	HT103A (HW-K01) *	HT105T (HW-K01) *	HT110 (HW-K10) *	HT120 (HW-K20) *	A	B	C	R
Tipo 07		07-0	▲	▲	□	▲	□	▲	▲	□	10	10	3	—
		07-1	□	▲	□	▲	□	□	▲	□	13	13	3	—
		07-2	□	▲	□	▲	□	□	▲	□	16	16	4	—
		07-3	□	▲	□	▲	□	□	▲	□	19	19	5	—
		07-4	□	□	□	□	□	□	□	□	25	20	6	—
		07-5	□	□	□	□	□	□	□	□	25	22	7	—
		07-6	□	□	□	□	□	□	□	□	30	25	8	—
Para tipo 35														
Tipo 08		08-1	▲	▲	▲	▲	▲	▲	▲	▲	3	8	3	—
		08-3	▲	▲	▲	▲	▲	▲	▲	▲	4	13	4	—
		08-4	▲	▲	▲	▲	▲	▲	▲	▲	5	15	5	—
		08-5	▲	▲	▲	▲	□	▲	▲	▲	6	17	6	—
		08-6	▲	▲	□	▲	□	□	▲	▲	8	20	8	—
Para tipo 43														
Tipo 09E		09E1	▲	▲	□	□	□	□	□	□	20	10	7	—
Para tipo 95														

*() : Materiales para las herramientas de carburo cementado y la clasificación para su uso. (Basado en TAS6000)

BARRAS DE CARBURO



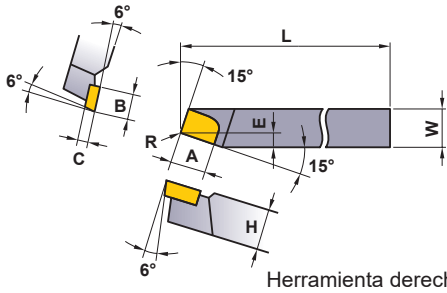
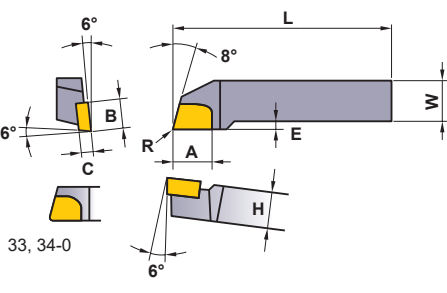
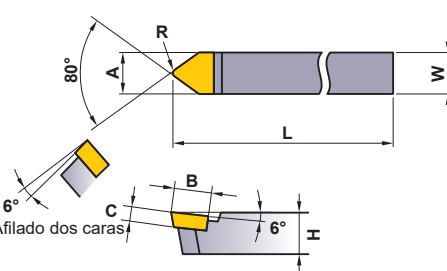
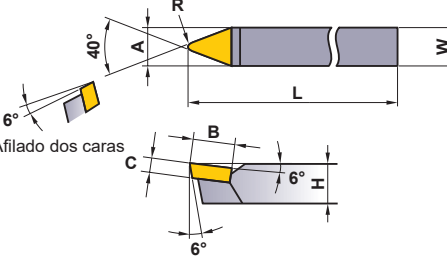
Serie LRB

Código	Stock			Dimensiones (mm)	
	HT10	TF15	MF10	D	L
LRB030	▲	▲	▲	3	330
LRB040	▲	▲	▲	4	330
LRB050	▲	▲	▲	5	330
LRB060	▲	▲	▲	6	330
LRB070	▲	▲	▲	7	330
LRB080	▲	▲	▲	8	330
LRB100	▲	▲	▲	10	330
LRB120	▲	▲	▲	12	330

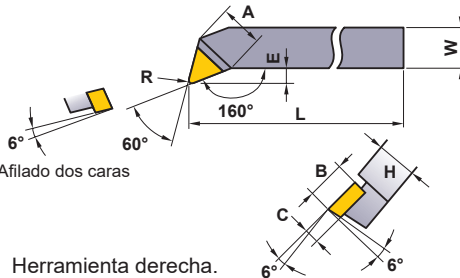
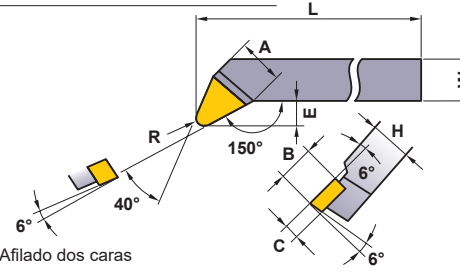
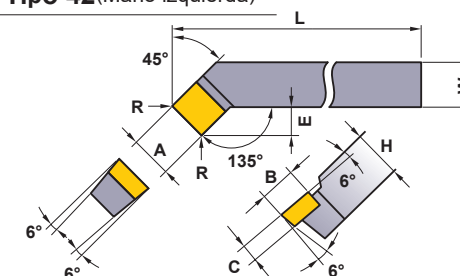
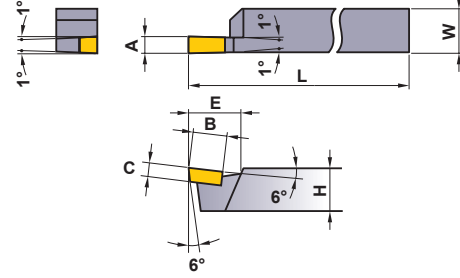
Símbolo	Dimensiones (mm)	Tolerancia (mm)
D	3—8	+0.5 +0.3
	10—12	+0.6 +0.3

Símbolo	Dimensiones (mm)	Tolerancia (mm)	Flexión (mm)
L	330	+10 0	0.3

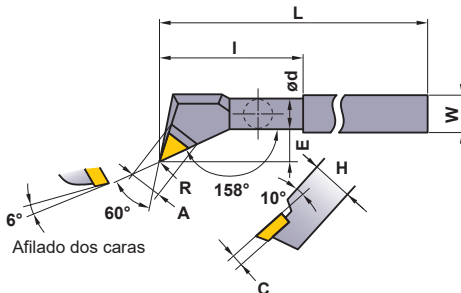
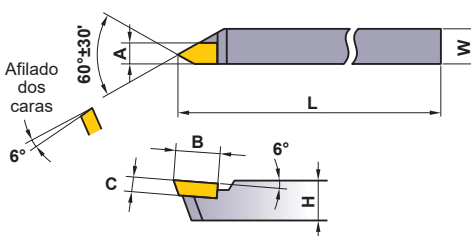
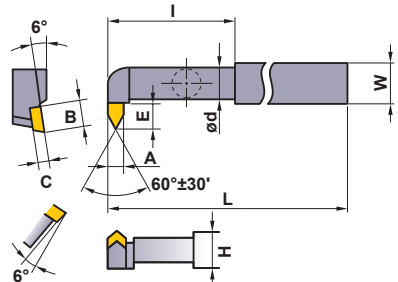
PORTAHERRAMIENTAS SOLDADOS

Geometría	Código	R/L	Stock							Dimensiones (mm)								Blank nro.	
			P			M	K			Mango				Metal Duro					
			STi10	STi20	STi40T	UTi20T	HTi05T	HTi10	HTi20										
			W	H	L	E	A	B	C	R									
Tipo 31 (Mano derecha) Tipo 32 (Mano izquierda)  Herramienta derecha.	31-0	R		●		●				10	10	80	2.7	10	6	3	0.3	01-0	
	32-0	L		●						10	10	80	2.7	10	6	3	0.3	01-0	
	31-1	R		●		●		●		13	13	100	4	13	9	3	0.5	01-1	
	32-1	L		●		●		●		13	13	100	4	13	9	3	0.5	01-1	
	31-2	R		●		●		●		16	16	120	4.5	16	11	4	0.5	01-2	
	32-2	L		●		●		●		16	16	120	4.5	16	11	4	0.5	01-2	
	31-3	R	●	●		●	●	●	●	19	19	140	5.5	19	13	5	0.5	01-3	
	32-3	L		●		●				19	19	140	5.5	19	13	5	0.5	01-3	
	31-4	R	●	●		●	●	●		25	25	160	6.5	22	15	6	1	01-4	
	32-4	L		●	●	●		●		25	25	160	6.5	22	15	6	1	01-4	
Tipo 33 (Mano derecha) Tipo 34 (Mano izquierda)  Herramienta derecha.	33-0	R	●	●		●	●	●	●	10	10	80	—	10	6	3	0.3	04-0	
	34-0	L	●	●		●	●	●	●	10	10	80	—	10	6	3	0.3	04-0	
	33-1	R	●	●	●		●	●	●	●	13	13	100	4	13	9	3	0.5	04-1
	34-1	L	●	●		●	●	●	●	●	13	13	100	4	13	9	3	0.5	04-1
	33-2	R	●	●	●	●	●	●	●	●	16	16	120	4	16	11	4	0.5	04-2
	34-2	L	●	●		●	●	●	●	●	16	16	120	4	16	11	4	0.5	04-2
	33-3	R	●	●	●	●	●	●	●	●	19	19	140	5	19	13	5	0.5	04-3
	34-3	L	●	●	●	●	●	●	●	●	19	19	140	5	19	13	5	0.5	04-3
	33-4	R	●	●	●	●	●	●	●	●	25	25	160	5	22	15	6	1	04-4
	34-4	L	●	●	●	●	●	●	●	●	25	25	160	5	22	15	6	1	04-4
	33-5	R		●		●				25	30	180	6	25	17	7	1	04-5	
	34-5	L		●						25	30	180	6	25	17	7	1	04-5	
	33-6	R		●		●				30	35	200	6	30	20	8	1	04-6	
	34-6	L		●		●				30	35	200	6	30	20	8	1	04-6	
	Tipo 35  Afilado dos caras	35-0	—	●	●		●	●	●	●	10	10	80	—	10	10	3	0.3	07-0
		35-1	—	●	●		●	●	●	●	13	13	100	—	13	13	3	0.5	07-1
35-2		—	●	●		●	●	●	●	16	16	120	—	16	16	4	0.5	07-2	
35-3		—	●	●		●	●	●	●	19	19	140	—	19	19	5	0.5	07-3	
35-4		—		●		●	●	●		25	25	160	—	25	20	6	1	07-4	
Tipo 36  Afilado dos caras	36-0	—	●	●		●	●	●	●	10	10	80	—	10	10	3	2	06-0	
	36-1	—	●	●		●	●	●	●	13	13	100	—	13	13	3	2.5	06-1	
	36-2	—	●	●		●	●	●	●	16	16	120	—	16	16	4	3	06-2	
	36-3	—	●	●	●	●	●	●	●	19	19	140	—	19	19	5	4	06-3	
	36-4	—	●	●	●	●	●	●	●	25	25	160	—	22	22	6	4	06-4	
	36-5	—		●				●		25	30	180	—	25	25	7	5	06-5	
	36-6	—		●		●	●	●		30	35	200	—	30	30	8	6	06-6	

PORTAHERRAMIENTAS SOLDADOS

Geometría	Código	R/L	Stock							Dimensiones (mm)								Blank nro.	
			P			M	K			Mango				Metal Duro					
			STi10	STi20	STi40T	UTi20T	HTi05T	HTi10	HTi20										
										W	H	L	E	A	B	C	R		
Tipo 37 (Mano derecha) Tipo 38 (Mano izquierda)	37-1 38-1	R L	● ●	● ●		● ●	● ●	● ●		13 13	13 13	100 100	5 5	12 12	— —	3 3	0.5 0.5	03-1 03-1	
 Afilado dos caras Herramienta derecha.	37-2 38-2	R L	● ●	● ●		● ●	● ●	● ●		16 16	16 16	120 120	6 6	15 15	— —	4 4	0.5 0.5	03-2 03-2	
	37-3 38-3	R L	● ●	● ●		● ●	● ●	● ●		19 19	19 19	140 140	7 7	18 18	— —	5 5	0.5 0.5	03-3 03-3	
	37-4 38-4	R L	● ●	● ●		● ●	● ●	● ●		25 25	25 25	160 160	10 10	24 24	— —	6 6	1 1	03-4 03-4	
	Tipo 39 (Mano derecha) Tipo 40 (Mano izquierda)	39-0 40-0	R L	● ●	● ●		● ●	● ●	● ●	● ●	10 10	10 10	80 80	5 5	10 10	10 10	3 3	2 2	06-0 06-0
	 Afilado dos caras Herramienta derecha.	39-1 40-1	R L	● ●	● ●		● ●	● ●	● ●	● ●	13 13	13 13	100 100	7 7	13 13	13 13	3 3	2.5 2.5	06-1 06-1
		39-2 40-2	R L	● ●	● ●	● ●	● ●	● ●	● ●	● ●	16 16	16 16	120 120	10 10	16 16	16 16	4 4	3 3	06-2 06-2
		39-3 40-3	R L	● ●	● ●	● ●	● ●	● ●	● ●	● ●	19 19	19 19	140 140	12 12	19 19	19 19	5 5	4 4	06-3 06-3
39-4 40-4		R L	● ●	● ●	● ●	● ●	● ●	● ●	● ●	25 25	25 25	160 160	13 13	22 22	22 22	6 6	4 4	06-4 06-4	
Tipo 41 (Mano derecha) Tipo 42 (Mano izquierda)		41-0 41-1	R R		● ●		● ●			● ●	10 13	10 13	80 100	6 7	10 13	6 9	3 3	0.3 0.5	02-0 02-1
 Afilado dos caras Herramienta derecha.		42-1 41-2	L R		● ●		● ●		● ●		13 16	13 16	100 120	7 10	13 16	9 11	3 4	0.5 0.5	02-1 02-2
		42-2 41-3	L R		● ●		● ●		● ●		16 19	16 19	120 140	10 12	16 19	11 13	4 5	0.5 0.5	02-2 02-3
		42-3 41-4	L R		● ●		● ●		● ●		19 25	19 25	140 160	12 13	19 22	13 15	5 6	0.5 1	02-3 02-4
		42-4	L		●		●		●		25	25	160	13	22	15	6	1	02-4
	Tipo 43	43-1 43-2 43-3 43-4 43-5	— — — — —	● ● ● ● ●	● ● ● ● ●	● ● ● ● ●	● ● ● ● ●	● ● ● ● ●	● ● ● ● ●	10 13 16 19 22	16 19 22 25 32	100 120 140 160 180	13 16 20 25 30	3 3 4 5 6	8 8 13 15 17	3 3 4 5 6	— — — — —	08-1 08-1 08-3 08-4 08-5	
																			

● : Stock en Japón.

Geometría	Código	R/L	Stock					Dimensiones (mm)										Blank nro.
			P		M	K												
			STi10	STi20	UTi20T	HTi05T	HTi10	Mango					Metal Duro					
								W	H	L	d	E	I	A	B	C	R	
Tipo 47 (Mano derecha)	47-1	R	●	●	●	●	●	13	13	140	12	7	50	10	—	3	0.5	03-0
	47-2	R	●	●	●	●	●	16	16	160	15	8	60	12	—	3	0.5	03-1
	47-3	R	●	●	●	●	●	19	19	190	18	9	80	15	—	4	0.5	03-2
	47-4	R		●	●			25	25	230	22	10	100	18	—	5	1	03-3
Tipo 49 (Mano derecha)	49-1	R			●			13	13	100	—	—	—	5	8	3	—	05-1
	49-2	R	●	●	●		●	16	16	120	—	—	—	6	10	4	—	05-2
	49-3	R	●	●	●	●		19	19	140	—	—	—	7	12	5	—	05-3
	49-4	R	●	●	●			25	25	160	—	—	—	9	16	6	—	05-4
Tipo 51 (Mano derecha)	51-1	R		●	●			13	13	140	12	8	50	5	8	3	—	05-1
	51-2	R		●	●			16	16	160	15	10	60	6	10	4	—	05-2
	51-3	R		●	●			19	19	190	18	12	80	7	12	5	—	05-3
Tipo 95	95-1	R	●	●				25	25	160	—	5	—	20	10	7	1	09E1
