

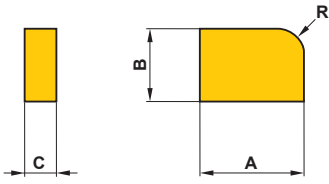
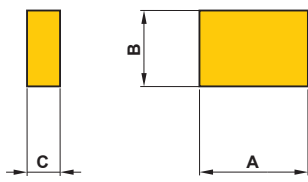
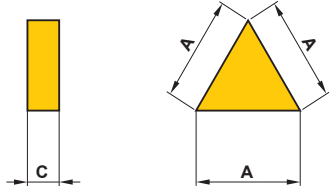
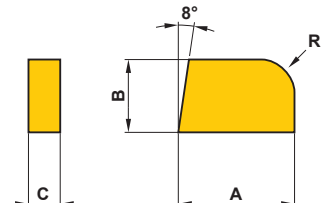
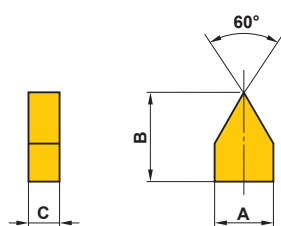
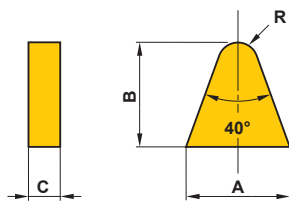
HERRAMIENTAS DE TORNEADO

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	—	
	05-7	□	□	□	□	□	□	□	□	12	22	9	—	
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														

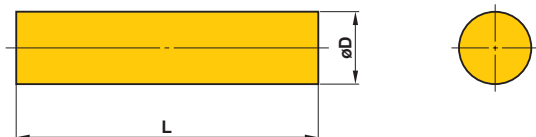
*() : Materiales para herramientas de carburo cementado y clasificación para su uso.

HERRAMIENTAS SOLDADAS

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 07 Para tipo 35		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	—
Tipo 08 Para tipo 43		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	—
Tipo 09E Para tipo 95		09E1	●	●	□	□	□	□	□	□	20	10	7	—

*() : Materiales para herramientas de carburo cementado y clasificación para su uso.

BARRAS DE CARBURO



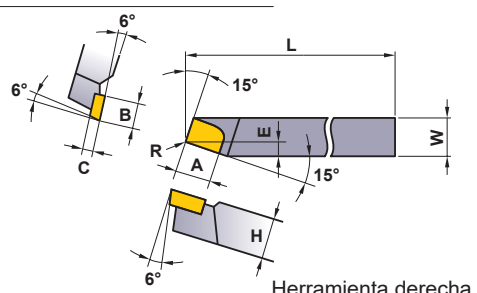
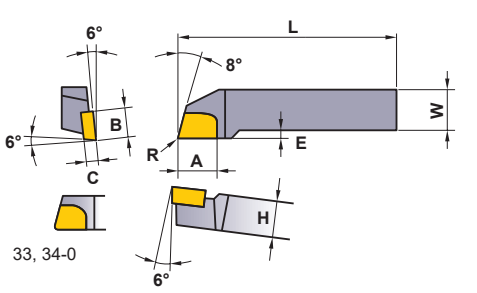
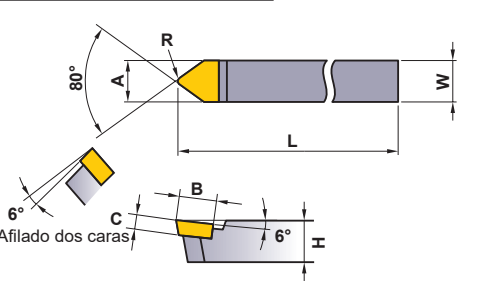
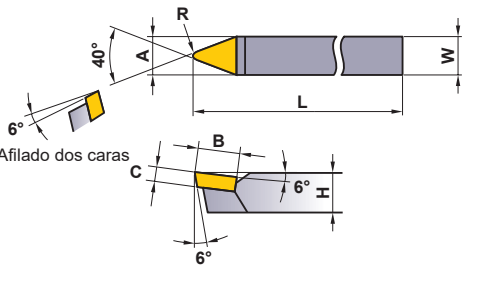
Serie LRB

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

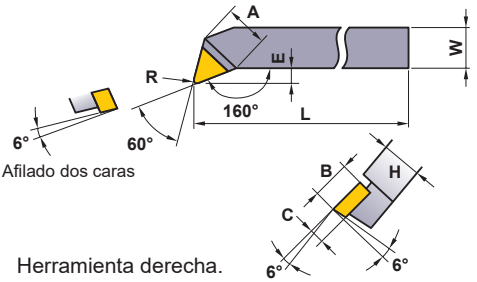
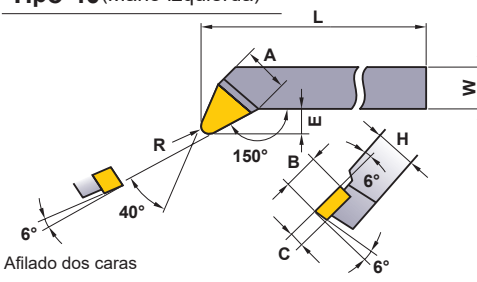
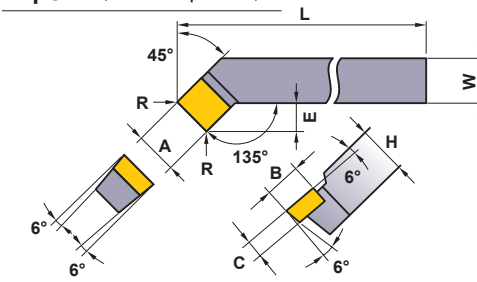
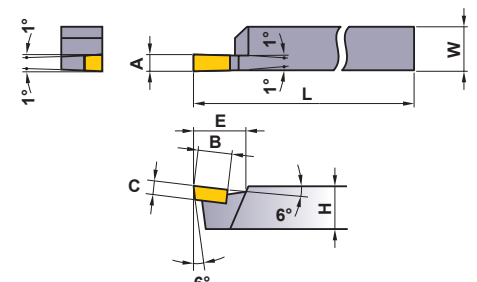
Símbolo	Dimensiones (mm)	Tolerancia (mm)	Flexión (mm)
L	330	+10 0	0.3

PORTAHERRAMIENTAS SOLDADOS

Geometría	Código	R/L	Stock							Dimensiones (mm)								Blank nro.
			P		M			K		Mango				Metal Duro				
			ST110	ST120	ST140T	UT120T	HT105T	HT110	HT120	W	H	L	E	A	B	C	R	
Tipo 31 (Mano derecha) Tipo 32 (Mano izquierda)  <p>Herramienta derecha.</p>	31-0 32-0 31-1 32-1 31-2 32-2 31-3 32-3 31-4 32-4	R L R L R L R L R L	● ● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ●	01-0 01-0 01-1 01-1 01-2 01-2 01-3 01-3 01-4 01-4		
Tipo 33 (Mano derecha) Tipo 34 (Mano izquierda)  <p>Herramienta derecha.</p>	33-0 34-0 33-1 34-1 33-2 34-2 33-3 34-3 33-4 34-4 33-5 34-5 33-6 34-6	R L R L R L R L R L R L R L R L	● ● ● ● ● ● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ● ● ● ● ● ●	04-0 04-0 04-1 04-1 04-2 04-2 04-3 04-3 04-4 04-4 04-5 04-5 04-6 04-6					
Tipo 35  <p>Afilado dos caras.</p>	35-0 35-1 35-2 35-3 35-4	- - - - -	● ● ● ● ●	● ● ● ● ●	● ● ● ● ●	● ● ● ● ●	● ● ● ● ●	● ● ● ● ●	● ● ● ● ●	● ● ● ● ●	● ● ● ● ●	● ● ● ● ●	● ● ● ● ●	● ● ● ● ●	07-0 07-1 07-2 07-3 07-4			
Tipo 36  <p>Afilado dos caras.</p>	36-0 36-1 36-2 36-3 36-4 36-5 36-6	- - - - - - -	● ● ● ● ● ● ●	● ● ● ● ● ● ●	● ● ● ● ● ● ●	● ● ● ● ● ● ●	● ● ● ● ● ● ●	● ● ● ● ● ● ●	● ● ● ● ● ● ●	● ● ● ● ● ● ●	● ● ● ● ● ● ●	● ● ● ● ● ● ●	● ● ● ● ● ● ●	● ● ● ● ● ● ●	06-0 06-1 06-2 06-3 06-4 06-5 06-6			

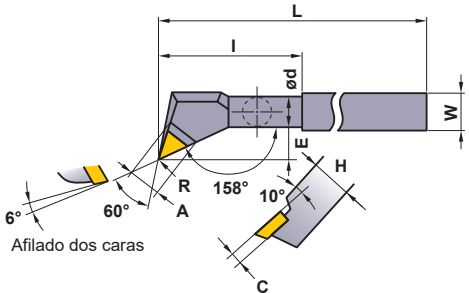
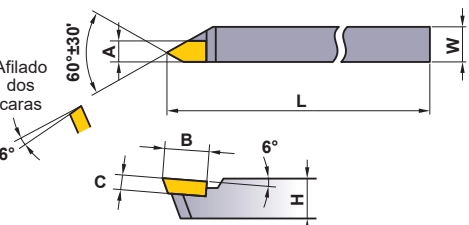
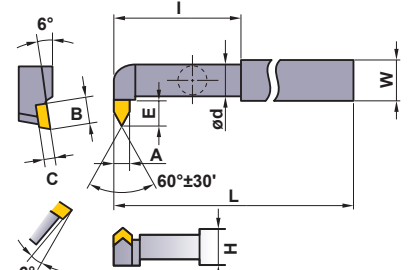
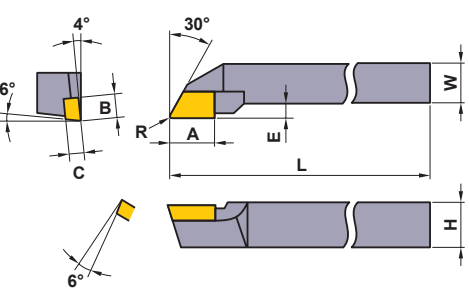
HERRAMIENTAS SOLDADAS

PORTAHERRAMIENTAS SOLDADOS

Geometría	Código	R/L	Stock							Dimensiones (mm)								Blank nro.
			P		M			K		Mango				Metal Duro				
			ST110	ST120	ST140T	UT120T	HT105T	HT110	HT120	W	H	L	E	A	B	C	R	
Tipo 37 (Mano derecha) Tipo 38 (Mano izquierda)  <p>Afilado dos caras Herramienta derecha.</p>	37-1	R	●	●		●	●	●		13	13	100	5	12	—	3	0.5	03-1
	38-1	L		●					●	13	13	100	5	12	—	3	0.5	03-1
	37-2	R	●	●		●	●	●		16	16	120	6	15	—	4	0.5	03-2
	38-2	L		●		●			●	16	16	120	6	15	—	4	0.5	03-2
	37-3	R	●	●		●	●	●		19	19	140	7	18	—	5	0.5	03-3
	38-3	L		●		●	●	●	●	19	19	140	7	18	—	5	0.5	03-3
	37-4	R	●	●		●	●	●		25	25	160	10	24	—	6	1	03-4
	38-4	L		●					●	25	25	160	10	24	—	6	1	03-4
Tipo 39 (Mano derecha) Tipo 40 (Mano izquierda)  <p>Afilado dos caras Herramienta derecha.</p>	39-0	R	●	●		●	●	●	●	10	10	80	5	10	10	3	2	06-0
	40-0	L		●		●	●	●	●	10	10	80	5	10	10	3	2	06-0
	39-1	R	●	●		●	●	●	●	13	13	100	7	13	13	3	2.5	06-1
	40-1	L		●		●	●	●	●	13	13	100	7	13	13	3	2.5	06-1
	39-2	R	●	●	●	●	●	●	●	16	16	120	10	16	16	4	3	06-2
	40-2	L		●	●	●	●	●	●	16	16	120	10	16	16	4	3	06-2
	39-3	R	●	●		●	●	●	●	19	19	140	12	19	19	5	4	06-3
	40-3	L		●	●	●	●	●	●	19	19	140	12	19	19	5	4	06-3
	39-4	R	●	●	●	●	●	●	●	25	25	160	13	22	22	6	4	06-4
	40-4	L		●		●	●	●	●	25	25	160	13	22	22	6	4	06-4
Tipo 41 (Mano derecha) Tipo 42 (Mano izquierda)  <p>Afilado dos caras Herramienta derecha.</p>	41-0	R		●		●				10	10	80	6	10	6	3	0.3	02-0
	41-1	R	●	●		●		●	●	13	13	100	7	13	9	3	0.5	02-1
	42-1	L		●		●		●	●	13	13	100	7	13	9	3	0.5	02-1
	41-2	R	●	●		●	●	●		16	16	120	10	16	11	4	0.5	02-2
	42-2	L		●		●		●		16	16	120	10	16	11	4	0.5	02-2
	41-3	R	●	●		●	●	●		19	19	140	12	19	13	5	0.5	02-3
	42-3	L		●		●	●	●		19	19	140	12	19	13	5	0.5	02-3
	41-4	R	●	●		●	●	●		25	25	160	13	22	15	6	1	02-4
	42-4	L		●		●		●		25	25	160	13	22	15	6	1	02-4
	Tipo 43 	43-1	—	●	●		●	●	●	●	10	16	100	13	3	8	3	—
43-2		—	●	●		●	●	●	●	13	19	120	16	3	8	3	—	08-1
43-3		—	●	●	●	●	●	●	●	16	22	140	20	4	13	4	—	08-3
43-4		—	●	●		●	●	●	●	19	25	160	25	5	15	5	—	08-4
43-5		—		●		●				22	32	180	30	6	17	6	—	08-5

HERRAMIENTAS SOLDADAS

● : Stock en Japón.

Geometría	Código	R/L	Stock					Dimensiones (mm)								Blank nro.		
			P	M	K	Mango				Metal Duro								
			ST110	ST120	UT120T	HT105T	HT110	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