

TURNING TOOLS

# BRAZED TOOLS

CARBIDE BLANK FOR TURNING TOOLS .....	I002
CARBIDE RODS (MITSUBISHI STANDARD).....	I004
BRAZED TOOL HOLDERS .....	I005



# CARBIDE BLANK FOR TURNING TOOLS

Type	Geometry	Order Number	Stock								Dimensions (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) *					
01 Type  For 31,32 Type		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
02 Type  For 41,42 Type		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	—
03 Type  For 37,38,47 Type		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	—	
04 Type  For 33,34 Type		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
05 Type  For 49,51 Type		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	□	□	□	□	□	□	□	□	—	—	—	—	
06 Type  For 36,39,40 Type		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

\*( ) : Materials for cemented carbide tools and the classification for usage.

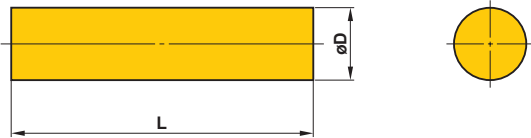
● : Inventory maintained in Japan. (10 inserts in one case)

□ : Non stock, produced to order only.

Type	Geometry	Order Number	Stock							Dimensions (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) *				
07 Type  For 35 Type		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	—
08 Type  For 43 Type		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	—
09E Type  For 95 Type		09E1	●	●	□	□	□	□	□	□	20	10	7	—

\*( ) : Materials for cemented carbide tools and the classification for usage.

# CARBIDE RODS



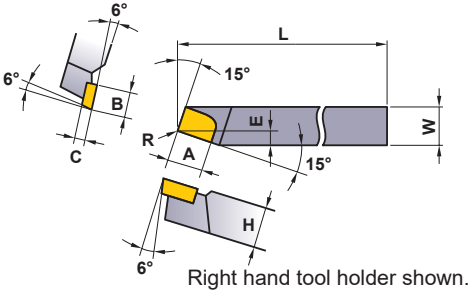
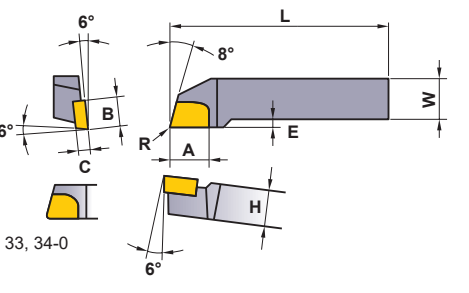
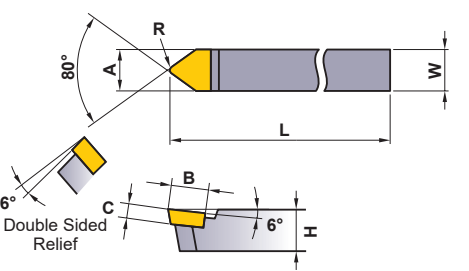
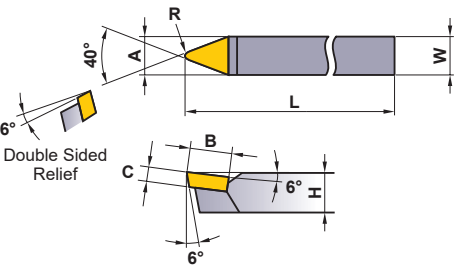
## LRB SERIES

Order Number	Stock			Dimensions (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

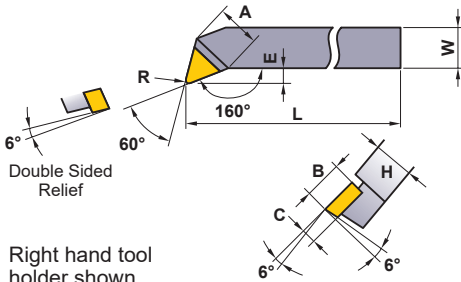
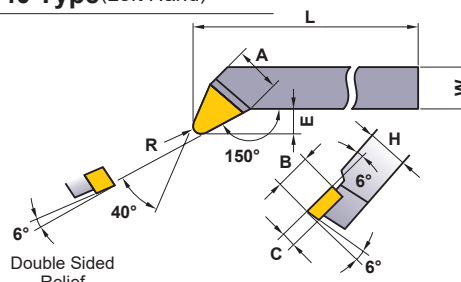
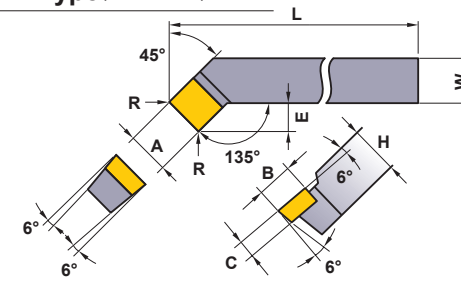
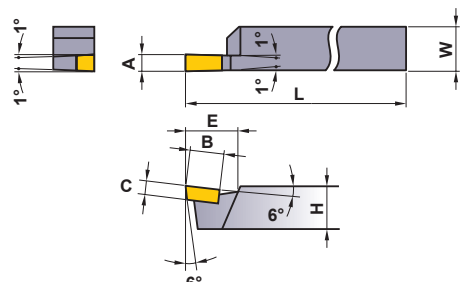
Symbol	Dimensions (mm)	Tolerance (mm)
D	3-8	+0.5 +0.3
	10-12	+0.6 +0.3

Symbol	Dimensions (mm)	Tolerance (mm)	Bend (mm)
L	330	+10 0	0.3

# BRAZED TOOL HOLDERS

Geometry	Order Number	R/L	Stock						Dimensions (mm)								Blank No.		
			P		M		K		Shank				Carbide						
			ST110	ST120	ST140T	UT120T	HT105T	HT110	HT120	W	H	L	E	A	B	C		R	
<b>31 Type</b> (Right Hand) <b>32 Type</b> (Left Hand)  <p>Right hand tool holder shown.</p>	<b>31-0</b>	R	●	●	●				10	10	80	2.7	10	6	3	0.3	01-0		
	<b>32-0</b>	L	●	●	●				10	10	80	2.7	10	6	3	0.3	01-0		
	<b>31-1</b>	R	●	●	●	●			13	13	100	4	13	9	3	0.5	01-1		
	<b>32-1</b>	L	●	●	●	●			13	13	100	4	13	9	3	0.5	01-1		
	<b>31-2</b>	R	●	●	●	●	●			16	16	120	4.5	16	11	4	0.5	01-2	
	<b>32-2</b>	L	●	●	●	●	●			16	16	120	4.5	16	11	4	0.5	01-2	
	<b>31-3</b>	R	●	●	●	●	●	●			19	19	140	5.5	19	13	5	0.5	01-3
	<b>32-3</b>	L	●	●	●	●	●	●			19	19	140	5.5	19	13	5	0.5	01-3
	<b>31-4</b>	R	●	●	●	●	●	●			25	25	160	6.5	22	15	6	1	01-4
	<b>32-4</b>	L	●	●	●	●	●	●			25	25	160	6.5	22	15	6	1	01-4
<b>33 Type</b> (Right Hand) <b>34 Type</b> (Left Hand)  <p>Right hand tool holder shown.</p>	<b>33-0</b>	R	●	●	●	●	●	●	10	10	80	—	10	6	3	0.3	04-0		
	<b>34-0</b>	L	●	●	●	●	●	●	10	10	80	—	10	6	3	0.3	04-0		
	<b>33-1</b>	R	●	●	●	●	●	●	13	13	100	4	13	9	3	0.5	04-1		
	<b>34-1</b>	L	●	●	●	●	●	●	13	13	100	4	13	9	3	0.5	04-1		
	<b>33-2</b>	R	●	●	●	●	●	●	16	16	120	4	16	11	4	0.5	04-2		
	<b>34-2</b>	L	●	●	●	●	●	●	16	16	120	4	16	11	4	0.5	04-2		
	<b>33-3</b>	R	●	●	●	●	●	●	19	19	140	5	19	13	5	0.5	04-3		
	<b>34-3</b>	L	●	●	●	●	●	●	19	19	140	5	19	13	5	0.5	04-3		
	<b>33-4</b>	R	●	●	●	●	●	●	25	25	160	5	22	15	6	1	04-4		
	<b>34-4</b>	L	●	●	●	●	●	●	25	25	160	5	22	15	6	1	04-4		
	<b>33-5</b>	R	●	●	●	●				25	30	180	6	25	17	7	1	04-5	
	<b>34-5</b>	L	●	●	●	●				25	30	180	6	25	17	7	1	04-5	
	<b>33-6</b>	R	●	●	●	●				30	35	200	6	30	20	8	1	04-6	
	<b>34-6</b>	L	●	●	●	●				30	35	200	6	30	20	8	1	04-6	
<b>35 Type</b>  <p>Double Sided Relief</p>	<b>35-0</b>	—	●	●	●	●	●	●	10	10	80	—	10	10	3	0.3	07-0		
	<b>35-1</b>	—	●	●	●	●	●	●	13	13	100	—	13	13	3	0.5	07-1		
	<b>35-2</b>	—	●	●	●	●	●	●	●	16	16	120	—	16	16	4	0.5	07-2	
	<b>35-3</b>	—	●	●	●	●	●	●	●	19	19	140	—	19	19	5	0.5	07-3	
	<b>35-4</b>	—	●	●	●	●	●	●	●	25	25	160	—	25	20	6	1	07-4	
<b>36 Type</b>  <p>Double Sided Relief</p>	<b>36-0</b>	—	●	●	●	●	●	●	10	10	80	—	10	10	3	2	06-0		
	<b>36-1</b>	—	●	●	●	●	●	●	13	13	100	—	13	13	3	2.5	06-1		
	<b>36-2</b>	—	●	●	●	●	●	●	●	16	16	120	—	16	16	4	3	06-2	
	<b>36-3</b>	—	●	●	●	●	●	●	●	19	19	140	—	19	19	5	4	06-3	
	<b>36-4</b>	—	●	●	●	●	●	●	●	25	25	160	—	22	22	6	4	06-4	
	<b>36-5</b>	—	●	●	●	●	●	●	●	25	30	180	—	25	25	7	5	06-5	
	<b>36-6</b>	—	●	●	●	●	●	●	●	30	35	200	—	30	30	8	6	06-6	

# BRAZED TOOL HOLDERS

Geometry	Order Number	R/L	Stock							Dimensions (mm)								Blank No.
			P		M		K			Shank				Carbide				
			ST110	ST120	ST140T	UT120T	HT105T	HT110	HT120	W	H	L	E	A	B	C	R	
<b>37 Type</b> (Right Hand) <b>38 Type</b> (Left Hand)  <p>Right hand tool holder shown.</p>	<b>37-1</b>	R	●	●		●	●	●		13	13	100	5	12	—	3	0.5	03-1
	<b>38-1</b>	L		●				●		13	13	100	5	12	—	3	0.5	03-1
	<b>37-2</b>	R	●	●		●	●	●		16	16	120	6	15	—	4	0.5	03-2
	<b>38-2</b>	L		●		●		●		16	16	120	6	15	—	4	0.5	03-2
	<b>37-3</b>	R	●	●		●	●	●		19	19	140	7	18	—	5	0.5	03-3
	<b>38-3</b>	L		●		●	●	●	●	19	19	140	7	18	—	5	0.5	03-3
	<b>37-4</b>	R	●	●		●	●	●		25	25	160	10	24	—	6	1	03-4
	<b>38-4</b>	L		●				●		25	25	160	10	24	—	6	1	03-4
<b>39 Type</b> (Right Hand) <b>40 Type</b> (Left Hand)  <p>Right hand tool holder shown.</p>	<b>39-0</b>	R	●	●		●	●	●	10	10	80	5	10	10	3	2	06-0	
	<b>40-0</b>	L		●		●	●	●	10	10	80	5	10	10	3	2	06-0	
	<b>39-1</b>	R	●	●		●	●	●	13	13	100	7	13	13	3	2.5	06-1	
	<b>40-1</b>	L		●		●	●	●	13	13	100	7	13	13	3	2.5	06-1	
	<b>39-2</b>	R	●	●	●	●	●	●	16	16	120	10	16	16	4	3	06-2	
	<b>40-2</b>	L		●	●	●	●	●	16	16	120	10	16	16	4	3	06-2	
	<b>39-3</b>	R	●	●		●	●	●	19	19	140	12	19	19	5	4	06-3	
	<b>40-3</b>	L		●	●	●	●	●	19	19	140	12	19	19	5	4	06-3	
<b>39-4</b>	R	●	●	●	●	●	●	25	25	160	13	22	22	6	4	06-4		
<b>40-4</b>	L		●		●	●	●	25	25	160	13	22	22	6	4	06-4		
<b>41 Type</b> (Right Hand) <b>42 Type</b> (Left Hand)  <p>Right hand tool holder shown.</p>	<b>41-0</b>	R		●		●			10	10	80	6	10	6	3	0.3	02-0	
	<b>41-1</b>	R	●	●		●		●	13	13	100	7	13	9	3	0.5	02-1	
	<b>42-1</b>	L		●		●		●	13	13	100	7	13	9	3	0.5	02-1	
	<b>41-2</b>	R	●	●		●	●	●	16	16	120	10	16	11	4	0.5	02-2	
	<b>42-2</b>	L		●		●		●	16	16	120	10	16	11	4	0.5	02-2	
	<b>41-3</b>	R	●	●		●	●	●	19	19	140	12	19	13	5	0.5	02-3	
	<b>42-3</b>	L		●		●	●	●	19	19	140	12	19	13	5	0.5	02-3	
	<b>41-4</b>	R	●	●		●	●	●	25	25	160	13	22	15	6	1	02-4	
<b>42-4</b>	L		●		●		●	25	25	160	13	22	15	6	1	02-4		
<b>43 Type</b> 	<b>43-1</b>	—	●	●		●	●	●	10	16	100	13	3	8	3	—	08-1	
	<b>43-2</b>	—	●	●		●	●	●	13	19	120	16	3	8	3	—	08-1	
	<b>43-3</b>	—	●	●	●	●	●	●	16	22	140	20	4	13	4	—	08-3	
	<b>43-4</b>	—	●	●		●	●	●	19	25	160	25	5	15	5	—	08-4	
	<b>43-5</b>	—		●		●			22	32	180	30	6	17	6	—	08-5	

BRAZED TOOLS

● : Inventory maintained in Japan.

Geometry	Order Number	R/L	Stock					Dimensions (mm)								Blank No.		
			P	M	K			Shank				Carbide						
			ST110	ST120	UT120T	HT105T	HT110	W	H	L	d	E	I	A	B		C	R
<b>47Type (Right Hand)</b> 	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
	49-1	R	●	●	●	●	●	13	13	100	—	—	—	5	8	3	—	05-1
<b>49Type (Right Hand)</b> 	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
	51-1	R	●	●	●	●	●	13	13	140	12	8	50	5	8	3	—	05-1
<b>51Type (Right Hand)</b> 	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
	95-1	R	●	●	●	●	●	25	25	160	—	5	—	20	10	7	1	09E1
<b>95Type</b> 																		