

TURNING TOOLS

BRAZED TOOLS

| | |
|---|------|
| CARBIDE BLANK FOR TURNING TOOLS | 1002 |
| CARBIDE RODS (MITSUBISHI STANDARD)..... | 1004 |
| BRAZED TOOL HOLDERS | 1005 |



CARBIDE BLANK FOR TURNING TOOLS

| Type | Geometry | Order Number | Stock | | | | | | | | Dimensions (mm) | | | | |
|----------------------------------|----------|--------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|-----------------|----|----|---|-----|
| | | | P | | | M | K | | | | A | B | C | R | |
| | | | STI10 (HW-P10) * | STI20 (HW-P20) * | STI40T (HW-P40) * | UTI20T (HW-M20) * | FTI03A (HW-K01) * | FTI05T (HW-K01) * | FTI10 (HW-K10) * | FTI20 (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.

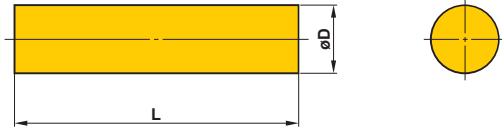
BRAZED TOOLS

| Type | Geometry | Order Number | Stock | | | | | | | | Dimensions (mm) | | | | |
|-----------------------------|----------|--------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|-----------------|----|---|---|---|
| | | | P | | | M | K | | | | | A | B | C | R |
| | | | STi10 (HW-P10) * | STi20 (HW-P20) * | STi40T (HW-P40) * | UTi20T (HW-M20) * | FTi03A (HW-K01) * | FTi05T (HW-K01) * | FTi10 (HW-K10) * | FTi20 (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 |

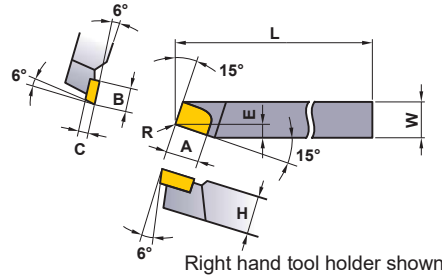
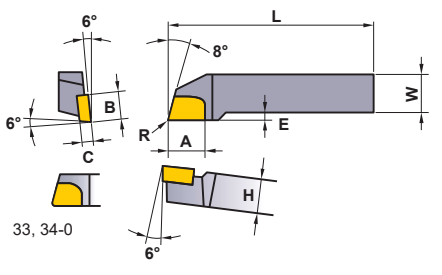
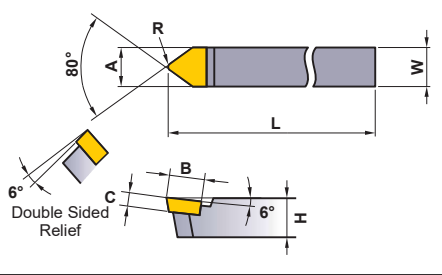
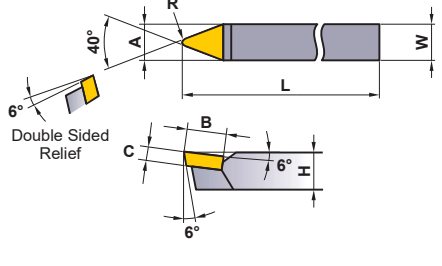
| Symbol | Dimensions (mm) | Tolerance (mm) | Bend (mm) |
|--------|-----------------|----------------|-----------|
| L | 330 | +10 0 | 0.3 |



BRAZED TOOLS

● : Inventory maintained in Japan. (LRB030~LRB080:10pcs/case LRB100&LRB120:5pcs/case)

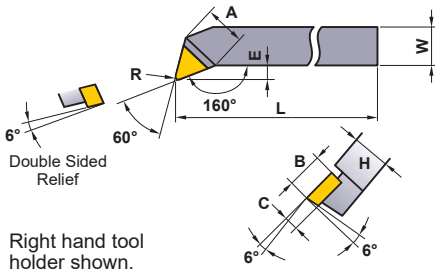
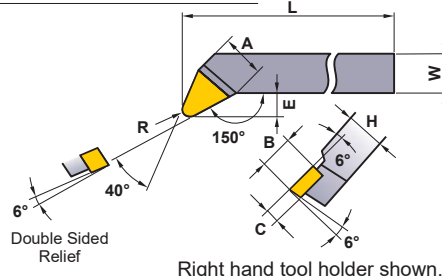
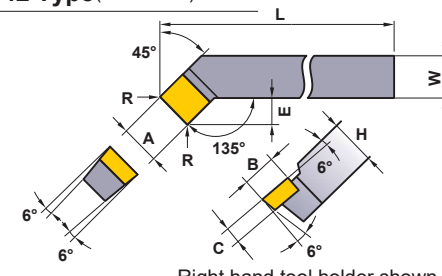
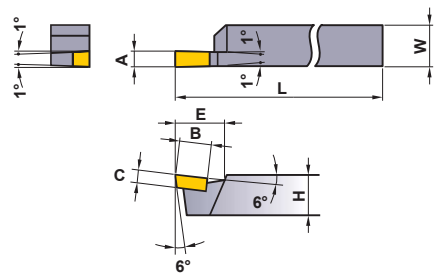
BRAZED TOOL HOLDERS

| Geometry | Order Number | R/L | Stock | | | | | | | Dimensions (mm) | | | | | | | Blank No. | |
|---|--------------|-----|-------|-------|--------|--------|--------|-------|-------|-----------------|-----|-----|----|---------|---|-----|-----------|---|
| | | | P | | | M K | | | | Shank | | | | Carbide | | | | |
| | | | STi10 | STi20 | STi40T | UTi20T | HTi05T | HTi10 | HTi20 | W | H | L | E | A | B | C | | R |
| | | | | | | | | | | | | | | | | | | |
| 31 Type (Right Hand) 32 Type (Left Hand)  <p>Right hand tool holder shown.</p> | 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 | |
| 33 Type (Right Hand) 34 Type (Left Hand)  <p>Right hand tool holder shown.</p> | 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 | |
| 35 Type  <p>Double Sided Relief</p> | 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 | |
| | | | | | | | | | | | | | | | | | | |
| 36 Type  <p>Double Sided Relief</p> | 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 | |



BRAZED TOOLS

BRAZED TOOL HOLDERS

| Geometry | Order Number | R/L | Stock | | | | | | Dimensions (mm) | | | | | | | | Blank No. | |
|--|--------------|-----|-------|-------|--------|--------|--------|-------|-----------------|----|-----|-----|---------|----|----|---|-----------|------|
| | | | P | | M | | K | | Shank | | | | Carbide | | | | | |
| | | | STi10 | STi20 | STi40T | UTi20T | HTi05T | HTi10 | HTi20 | W | H | L | E | A | B | C | | R |
| 37 Type (Right Hand) 38 Type (Left Hand)  <p>Right hand tool holder shown.</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 |
| 39 Type (Right Hand) 40 Type (Left Hand)  <p>Right hand tool holder shown.</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 | |
| 41 Type (Right Hand) 42 Type (Left Hand)  <p>Right hand tool holder shown.</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 | |
| 43 Type  | 43-1 | — | ● | ● | | ● | ● | ● | | 10 | 16 | 100 | 13 | 3 | 8 | 3 | — | 08-1 |
| | 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 |



BRAZED TOOLS

● : Inventory maintained in Japan.

