

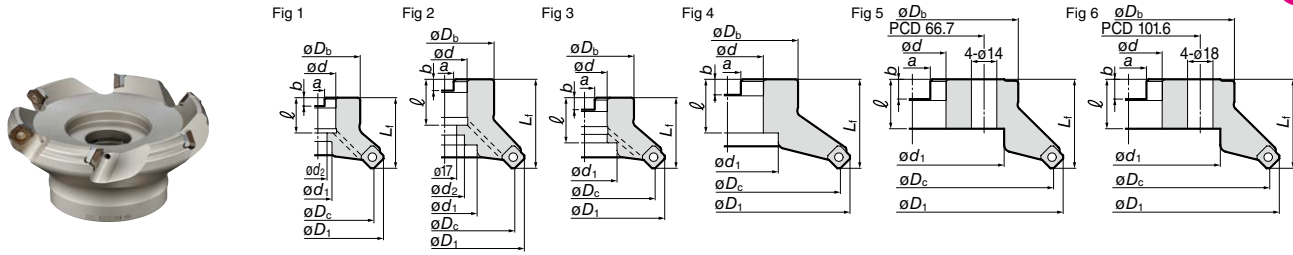
# WGX13000R(S) Type

|            |        |              |
|------------|--------|--------------|
| Rake Angle | Radial | -20° to -24° |
|            | Axial  | 20° to 22°   |



## General Milling for Steel & Hardened Steel & Cast Iron

Expansion



### Body (Standard Pitch)

| Cat. No.           | Stock | Dimensions (mm) |            |            |       |          |      |     |        |            |            | No. of Teeth | Weight (kg) | Fig |
|--------------------|-------|-----------------|------------|------------|-------|----------|------|-----|--------|------------|------------|--------------|-------------|-----|
|                    |       | $\phi D_c$      | $\phi D_1$ | $\phi D_b$ | $L_f$ | $\phi d$ | $a$  | $b$ | $\ell$ | $\phi d_1$ | $\phi d_2$ |              |             |     |
| <b>WGX 13040RS</b> | ●     | 40              | 52         | 32         | 40    | 16       | 8.4  | 5.6 | 18     | 14         | 9          | 3            | 0.3         | 1   |
| <b>13050RS</b>     | ●     | 50              | 62         | 40         | 40    | 22       | 10.4 | 6.3 | 20     | 18         | 11         | 3            | 0.4         | 1   |
| <b>13063RS</b>     | ●     | 63              | 76         | 50         | 40    | 22       | 10.4 | 6.3 | 20     | 18         | 11         | 4            | 0.6         | 1   |
| <b>13080RS</b>     | ●     | *80             | 93         | 55         | 50    | 27       | 12.4 | 7   | 25     | 20         | 13.5       | 4            | 1.2         | 1   |
| <b>13100RS</b>     | ●     | 100             | 113        | 70         | 50    | 32       | 14.4 | 8.5 | 32     | 46         | -          | 5            | 1.6         | 3   |
| <b>13125RS</b>     | ●     | 125             | 138        | 80         | 63    | 40       | 16.4 | 9.5 | 29     | 52         | 29         | 6            | 2.8         | 1   |
| <b>13160RS</b>     | ●     | 160             | 173        | 130        | 63    | 40       | 16.4 | 9.5 | 29     | 88         | -          | 7            | 4.5         | 5   |
| <b>13200RS</b>     | ●     | 200             | 213        | 150        | 63    | 60       | 25.7 | 14  | 35     | 130        | -          | 8            | 7.1         | 6   |
| <b>13250RS</b>     | ●     | 250             | 263        | 190        | 63    | 60       | 25.7 | 14  | 35     | 160        | -          | 10           | 11.2        | 6   |
| <b>WGX 13080R</b>  | ●     | *80             | 93         | 60         | 50    | 25.4     | 9.5  | 6   | 25     | 20         | 13         | 4            | 1.2         | 1   |
| <b>13100R</b>      | ●     | *100            | 113        | 70         | 63    | 31.75    | 12.7 | 8   | 32.5   | 46         | 28         | 5            | 2.3         | 2   |
| <b>13125R</b>      | ●     | 125             | 138        | 80         | 63    | 38.1     | 15.9 | 10  | 35.5   | 55         | 30         | 6            | 2.9         | 1   |
| <b>13160R</b>      | ●     | 160             | 173        | 100        | 63    | 50.8     | 19.1 | 11  | 38     | 72         | -          | 7            | 4.5         | 4   |
| <b>13200R</b>      | ●     | 200             | 213        | 150        | 63    | 47.625   | 25.4 | 14  | 35     | 130        | -          | 8            | 7.1         | 6   |
| <b>13250R</b>      | ●     | 250             | 263        | 190        | 63    | 47.625   | 25.4 | 14  | 35     | 150        | -          | 10           | 11.2        | 6   |

Inserts are not included. Check the collet attachment size ( $\phi d$ ) when selecting the cutter. Sizes  $\phi 160$  mm or above do not have coolant holes.



\*Please use JIS B1176 hexagonal bolt ( $\phi 80$ : M12x30 to 35mm,  $\phi 100$ : M16x40 to 45mm) for securing  $\phi 80/\phi 100$  cutter to the arbour.

### Insert

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metal S Exotic Alloy H Hardened Steel

| Application      | Grade  | Coat   |        |        |        |        |         | Carbide | DLC    | Cermet      | Application                       | Fig |
|------------------|--------|--------|--------|--------|--------|--------|---------|---------|--------|-------------|-----------------------------------|-----|
|                  |        | P      | M      | K      | N      | S      | H       |         |        |             |                                   |     |
| High Speed/Light |        | P      |        | K      | M      | N      |         | N       |        |             |                                   |     |
| General Purpose  |        | M      | M      | K      | M      | S      |         | N       | P      |             |                                   |     |
| Roughing         |        | M      | M      | K      | M      | S      |         |         |        |             |                                   |     |
| Cat. No.         | Coat   |        |        |        |        |        | Carbide | DLC     | Cermet | Application | Fig                               |     |
| SEET 13T3AGFR-L  | ACP100 | ACP200 | ACP300 | ACK200 | ACK300 | ACM200 | ACM300  | H1      | DL1000 | T4500A      | Light Cutting (Non-Ferrous Metal) | 1   |
| 13T3AGSR-L       | ●      | ●      | ●      | ●      | ●      | ●      | ●       |         |        | ●           | Light Cutting                     | 1   |
| 13T3AGSR-G       | ●      | ●      | ●      | ●      | ●      | ●      | ●       |         |        | ●           | general purpose                   | 1   |
| SEMT 13T3AGSR-L  | ●      | ●      | ●      | ●      | ●      | ●      | ●       |         |        |             | Light Cutting                     | 1   |
| 13T3AGSR-G       | ●      | ●      | ●      | ●      | ●      | ●      | ●       |         |        |             | general purpose                   | 1   |
| 13T3AGSR-H       | ●      | ●      | ●      | ●      | ●      | ●      | ●       |         |        |             | Heavy Cut                         | 1   |
| SEMT 13T3AGSR-FG | ●      | ●      | ●      | ●      | ●      | ●      | ●       |         |        |             | Burr prevention                   | 2   |
| XEEW 13T3AGER-WR | ●      | ●      | ●      | ●      | ●      | ●      | ●       |         |        | ●           | Wiper Insert                      | 3   |

\* The new ACP100 and new ACK200 may vary in color or luster, but these variations do not affect the performance.

### Identification Details

# WGX 13 040 R S

(1) Cutter Series (2) Insert Size (3) Cutter (4) Direction (5) Metric Bore

### Recommended Cutting Conditions

| ISO | Work Material     | Hardness      | Cutting Speed $v_c$ (m/min)<br>Min. - Optimum - Max. | Feed Rate $f_z$ (mm/t)<br>Min. - Optimum - Max. | Grade  |
|-----|-------------------|---------------|--|---|--------|
| P   | General Steel     | 180 to 280HB  | 150-200-250  | 0.10-0.20-0.30                                  | ACP200 |
|     | Soft Steel        | $\leq 180$ HB | 180-265-350  | 0.10-0.25-0.40                                  | ACP200 |
|     | Die Steel         | 200 to 220HB  | 100-150-200  | 0.15-0.20-0.25                                  | ACP200 |
| M   | Stainless Steel   | —             | 160-205-250  | 0.15-0.23-0.30                                  | ACM300 |
| K   | Cast Iron         | 250HB         | 100-175-250  | 0.15-0.23-0.30                                  | ACK200 |
| N   | Non-Ferrous Alloy | —             | 500-750-1000   | 0.15-0.23-0.30                                  | DL1000 |
| S   | Exotic Alloy      | —             | 30-50-80   | 0.10-0.20-0.30                                  | ACM300 |

Note The cutting conditions above are a guide. Actual conditions will need to be adjusted according to machine rigidity, work clamp rigidity, cutting depth, and other factors.

### Parts

| Seat    | Seat Screw | Insert Screw | Spanner (Insert) | Spanner (Seat) | Anti-seizure Cream |
|---------|------------|--------------|------------------|----------------|--------------------|
| WGCS13R | BW0507F    | BFTX03512P   | TRDR151P         | LH035          | SUMI-P             |

Recommended Tightening Torque (N·m)



● mark: Standard stocked item (expanded item)