

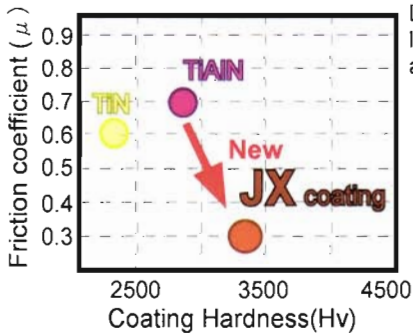
Economical 3 corners insert with
World's first hybrid coating
unveiling!



Triple New Features

New JX Coatings

Low friction Coating

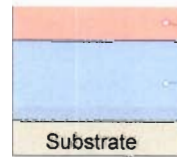


Low friction coating promotes lower cutting heat and less adhesion.

JX coating
Much Harder
&
Smoother

Hybrid Multi-layer structure

Conventional two-layer



With a conventional two-layer coating, abrasion of a layer will lose its effectiveness.

Multi-layer structure



Multi-layer structure maintains the coating effectiveness.

New Economical 3 corners insert

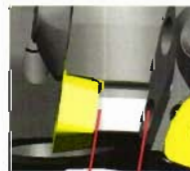
Flat face
for general purpose



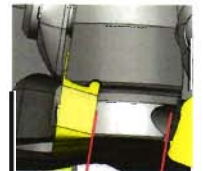
Chip breaker
for lower cutting force



New Rigid Body



$t_1 \ll t_2$



The improved body rigidity promotes higher reliability

IASRT

IASRT
Body & Inserts

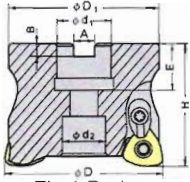


Fig. 1 Body

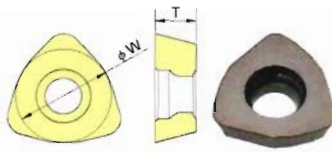


Fig. 2 Flat face type insert

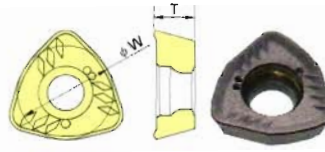
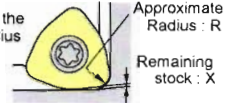


Fig. 3 Chip breaker type insert

Please program the approximate radius as indicated.



| Insert Part No. | Approx. R | X |
|-----------------|-----------|---------|
| WDNW100020 | 0.118in | 0.025in |

Fig. 4 Programing Radius



Face mill style dimensions

| Inch Part No. | φ D(in) | φ D1(in) | H(in) | E(in) | A(in) | B(in) | φ d1(in) | φ d2(in) | Inserts |
|---------------|---------|----------|-------|-------|-------|-------|----------|----------|------------------------|
| IASRT4032R-4 | 2.0 | 1.850 | 1.969 | 0.748 | 0.315 | 0.197 | 0.75 | 0.630 | WDNW120420, WDNT120420 |
| IASRT5048R-5 | 3.0 | 2.213 | 1.969 | 1.378 | 0.380 | 0.827 | 1.00 | 0.827 | WDNW140520, WDNT140520 |
| IASRT5064R-6 | 4.0 | 3.213 | 1.969 | 1.378 | 0.630 | 1.969 | 1.50 | 1.969 | |

Inserts

| Part No. | JX1015 | JX1020 | JX1045 | JX1060 | GX2030 | Type | φ W(in) | T(in) | Body |
|------------|--------|--------|--------|--------|--------|-------|---------|-------|------------------------------|
| WDNW120420 | ● | ● | ● | ● | ● | Fig.2 | 0.472 | 0.187 | IASRT4032R-4 |
| WDNT120420 | ● | ● | ● | ● | ● | Fig.3 | | | |
| WDNW140520 | ● | ● | ● | ● | ● | Fig.2 | 0.551 | 0.219 | IASRT5048R-5 IASRT5064R-6 |
| WDNT140520 | ● | ● | ● | ● | ● | Fig.3 | | | |

Cutting Conditions

| Work | Insert Grade | Conditions | Dia 2in (4 flutes) | | | Dia 3in (5 flutes) | | | Dia 4in (6 flutes) | | |
|---|--------------|------------|--------------------|------------|---------|--------------------|------------|---------|--------------------|------------|---------|
| | | | General | High speed | 3D - 5D | General | High speed | 3D - 5D | General | High speed | 3D - 5D |
| Carbon steel Alloy steel <30HRC | JX1045 | N(rpm) | 960 | 1280 | 960 | 627 | 835 | 627 | 480 | 640 | 480 |
| | | Vf(in/min) | 227 | 302 | 227 | 185 | 247 | 185 | 170 | 227 | 170 |
| | GX2030 | fz(in/t) | 0.059 | 0.059 | 0.059 | 0.059 | 0.059 | 0.059 | 0.059 | 0.059 | 0.059 |
| | | JX1015 | doc(in) | 0.059 | 0.050 | 0.040 | 0.059 | 0.050 | 0.040 | 0.059 | 0.050 |
| | | woc(in) | 1.575 | 1.575 | 1.575 | 2.440 | 2.440 | 2.440 | 3.150 | 3.150 | 3.150 |
| Tool steel Alloy steel 30-45HRC | GX2030 | N(rpm) | 640 | 960 | 640 | 418 | 627 | 418 | 320 | 480 | 320 |
| | | Vf(in/min) | 90 | 192 | 82 | 73 | 157 | 67 | 67 | 144 | 61 |
| | JX1020 | fz(in/t) | 0.035 | 0.050 | 0.032 | 0.035 | 0.050 | 0.032 | 0.035 | 0.050 | 0.032 |
| | | JX1015 | doc(in) | 0.059 | 0.059 | 0.040 | 0.059 | 0.059 | 0.040 | 0.059 | 0.059 |
| | | woc(in) | 1.575 | 1.575 | 1.575 | 2.440 | 2.440 | 2.440 | 3.150 | 3.150 | 3.150 |
| Tool steel Pre-hardened steel 45-55HRC | JX1015 | N(rpm) | 510 | 770 | 510 | 334 | 502 | 334 | 260 | 390 | 260 |
| | | Vf(in/min) | 61 | 123 | 51 | 50 | 100 | 42 | 47 | 94 | 39 |
| | JX1020 | fz(in/t) | 0.030 | 0.040 | 0.025 | 0.030 | 0.040 | 0.025 | 0.030 | 0.040 | 0.025 |
| | | | doc(in) | 0.059 | 0.059 | 0.040 | 0.040 | 0.040 | 0.028 | 0.059 | 0.059 |
| | | woc(in) | 1.575 | 1.575 | 1.575 | 2.440 | 2.440 | 2.440 | 3.150 | 3.150 | 3.150 |
| Stainless steel | JX1060 | N(rpm) | 640 | 1280 | 640 | 418 | 752 | 418 | 320 | 573 | 320 |
| | | Vf(in/min) | 80 | 161 | 80 | 63 | 94 | 58 | 58 | 138 | 54 |
| | GX2030 | fz(in/t) | 0.030 | 0.040 | 0.028 | 0.030 | 0.040 | 0.028 | 0.030 | 0.040 | 0.028 |
| | | | doc(in) | 0.059 | 0.059 | 0.040 | 0.059 | 0.059 | 0.040 | 0.059 | 0.059 |
| | | woc(in) | 1.575 | 1.575 | 1.575 | 2.440 | 2.440 | 2.440 | 3.150 | 3.150 | 3.150 |
| Cast Iron | JX1015 | N(rpm) | 960 | 1280 | 960 | 627 | 836 | 627 | 480 | 640 | 480 |
| | | Vf(in/min) | 227 | 404 | 192 | 185 | 330 | 157 | 170 | 303 | 144 |
| | JX1045 | fz(in/t) | 0.059 | 0.079 | 0.050 | 0.059 | 0.079 | 0.050 | 0.059 | 0.079 | 0.050 |
| | | GX2030 | doc(in) | 0.059 | 0.059 | 0.059 | 0.059 | 0.059 | 0.059 | 0.059 | 0.059 |
| | | | woc(in) | 1.575 | 1.575 | 1.575 | 2.440 | 2.440 | 2.440 | 3.150 | 3.150 |

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