

Internal Threading Inserts

Unified (UN)

| Full Profile 60° (mm) | | | | | Classification of usage | | P | Carbon Steel / Alloy Steel | | ● | ○ | | | Ref. Page for Depth of Cut & Number of Passes | |
|--------------------------------|-------------------------|----------------------|------------------------------|-------|------------------------------|----------------|-----------|----------------------------|------|--------------------|-------|---------|------|--|-----|
| Description | Previous Description | A | T | ød | ● : 1st Choice | ○ : 2nd Choice | M | Stainless Steel | | ● | ○ | | | | |
| 16I ^{1/2} L | TNN32I ^{1/2} L | 9.525 | 3.68 | 4.0 | | | K | Cast Iron | | | | | | | |
| 22I ^{1/2} L | TNN43I ^{1/2} L | 12.70 | 4.9 | 4.85 | | | N | Non-ferrous Metals | | | | | | | |
| Insert | Description | Previous Description | Applicable Thread | | Dimension (mm) | | Angle (°) | Cermet | | PVD Coated Carbide | | Carbide | | Ref. Page for Depth of Cut & Number of Passes | |
| | | | UN, UNF | Pitch | øe | S | | θ | TC60 | PR1115 | PR930 | GW15 | KW10 | | |
| Handed Insert shows Right-hand | | | | | | | | | | | | | | | |
| | | | R | L | R | L | R | L | R | L | R | L | R | | L |
| Full Profile | | - | 16I ^{1/2} L 24UN-TF | 24 | 0.06 | 0.8 | 60° | | | ● | | | | | J30 |
| | | | 20UN-TF | 20 | 0.08 | 1.0 | | ● | | | | | | | |
| | | | 18UN-TF | 18 | 0.09 | 1.0 | | ● | | | | | | | |
| | | | 16UN-TF | 16 | 0.10 | 1.1 | | ● | | | | | | | |
| | | | 14UN-TF | 14 | 0.12 | 1.5 | | ● | | | | | | | |
| | | | 13UN-TF | 13 | 0.13 | 1.5 | | ● | | | | | | | |
| | | | 12UN-TF | 12 | 0.14 | 1.5 | | ● | | | | | | | |
| | | | 10UN-TF | 10 | 0.17 | 1.5 | | ● | | | | | | | |
| | | | 8UN-TF | 8 | 0.21 | 1.8 | | ● | | | | | | | |
| | | | Full Profile | | TNN32I ^{1/2} L 24UN | 24 | | 0.05 | 0.8 | 60° | □ | ● | □ | | |
| 20UN | 20 | 0.07 | | | 1.0 | □ | ● | □ | | | | | | | |
| 18UN | 18 | 0.09 | | | 1.0 | □ | ● | □ | | | | | | | |
| 16UN | 16 | 0.10 | | | 1.1 | □ | ● | □ | | | | | | | |
| 14UN | 14 | 0.12 | | | 1.5 | □ | ● | □ | | | | | | | |
| 12UN | 12 | 0.14 | | | 1.5 | □ | ● | □ | | | | | | | |
| TNN43I ^{1/2} L 08UN | 8 | 0.20 | | | 1.8 | 60° | □ | ● | □ | | | | | | |

Applicable Toolholder

For recommended cutting conditions, see page J29

| Description | Applicable Toolholder | Ref. Page for Toolholder |
|-------------|------------------------|--------------------------|
| 16IR ... | SINR...16 CINR...16 | J17 |
| 22IR ... | SINR...22 CINR...22 | |

Internal Threading Inserts

Parallel Pipe [G (PF)] Whitworth (W)

| Full Profile 55° (mm) | | | | | Classification of usage | | P | Carbon Steel / Alloy Steel | | ● | ○ | | | Ref. Page for Depth of Cut & Number of Passes | |
|--------------------------------|-------------------------|--------------------------------|-----------------------------|------|-------------------------|----------------|-----------|----------------------------|------|--------------------|-------|---------|------|--|-----|
| Description | Previous Description | A | T | ød | ● : 1st Choice | ○ : 2nd Choice | M | Stainless Steel | | ● | ○ | | | | |
| 16I ^{1/2} L | TNN32I ^{1/2} L | 9.525 | 3.68 | 4.0 | | | K | Cast Iron | | | | | | | |
| 22I ^{1/2} L | TNN43I ^{1/2} L | 12.70 | 4.9 | 4.85 | | | N | Non-ferrous Metals | | | | | | | |
| Insert | Description | Previous Description | Applicable Thread | | Dimension (mm) | | Angle (°) | Cermet | | PVD Coated Carbide | | Carbide | | Ref. Page for Depth of Cut & Number of Passes | |
| | | | G (PF) | W | øe | S | | θ | TC60 | PR1115 | PR930 | GW15 | KW10 | | |
| Handed Insert shows Right-hand | | | | | | | | | | | | | | | |
| | | | R | L | R | L | R | L | R | L | R | L | R | | L |
| Full Profile | | - | 16I ^{1/2} L 19W-TF | 19 | - | 0.16 | 1.0 | 55° | | | ● | | | | J31 |
| | | | 16W-TF | - | 16 | 0.19 | 1.1 | | ● | | | | | | |
| | | | 14W-TF | 14 | 14 | 0.23 | 1.5 | | ● | | | | | | |
| | | | 11W-TF | 11 | 11 | 0.30 | 1.5 | | ● | | | | | | |
| Full Profile | | TNN32I ^{1/2} L 14W | 14 | 14 | 0.23 | 1.5 | 55° | □ | ● | □ | | | | J31 | |
| | | 11W | 11 | 11 | 0.30 | 1.5 | | □ | ● | □ | | | | | |
| Full Profile | | TNN32I ^{1/2} L 14W-TS | 14 | 14 | 0.23 | 1.5 | 55° | | | □ | | | | J35 | |
| | | 11W-TS | 11 | 11 | 0.30 | 1.5 | | | | □ | | | | | |

For recommended cutting conditions, see page J29

Applicable Toolholder

• No wiper effect is expected when threading the internal whitworth screw using 16IR ○○ W-○○ insert.

| Description | Applicable Toolholder | Ref. Page for Toolholder |
|-------------|------------------------|--------------------------|
| 16IR ... | SINR...16 CINR...16 | J17 |
| 16IL ... | SINL...16 CINL...16 | |

| Applicable Thread | M: Metric | R, Rc (PT), (BSPT): Tapered Pipe |
|-------------------|--------------------------|-------------------------------------|
| | UN: Unified | W: Whitworth |
| | UNF: Unified Fine Thread | NPT: American National Tapered Pipe |
| | G (PF): Parallel Pipe | Tr: 30°Trapezoidal |

● : Std. Item □ : Check Availability

PR930 / PR1115 / GW15
(Threading Insert) is sold in 5 piece boxes.

Inserts are sold
in 10 piece boxes.

