

PARTING &  
GROOVING

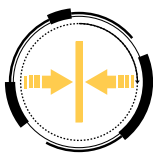
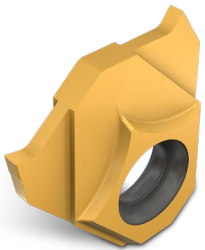
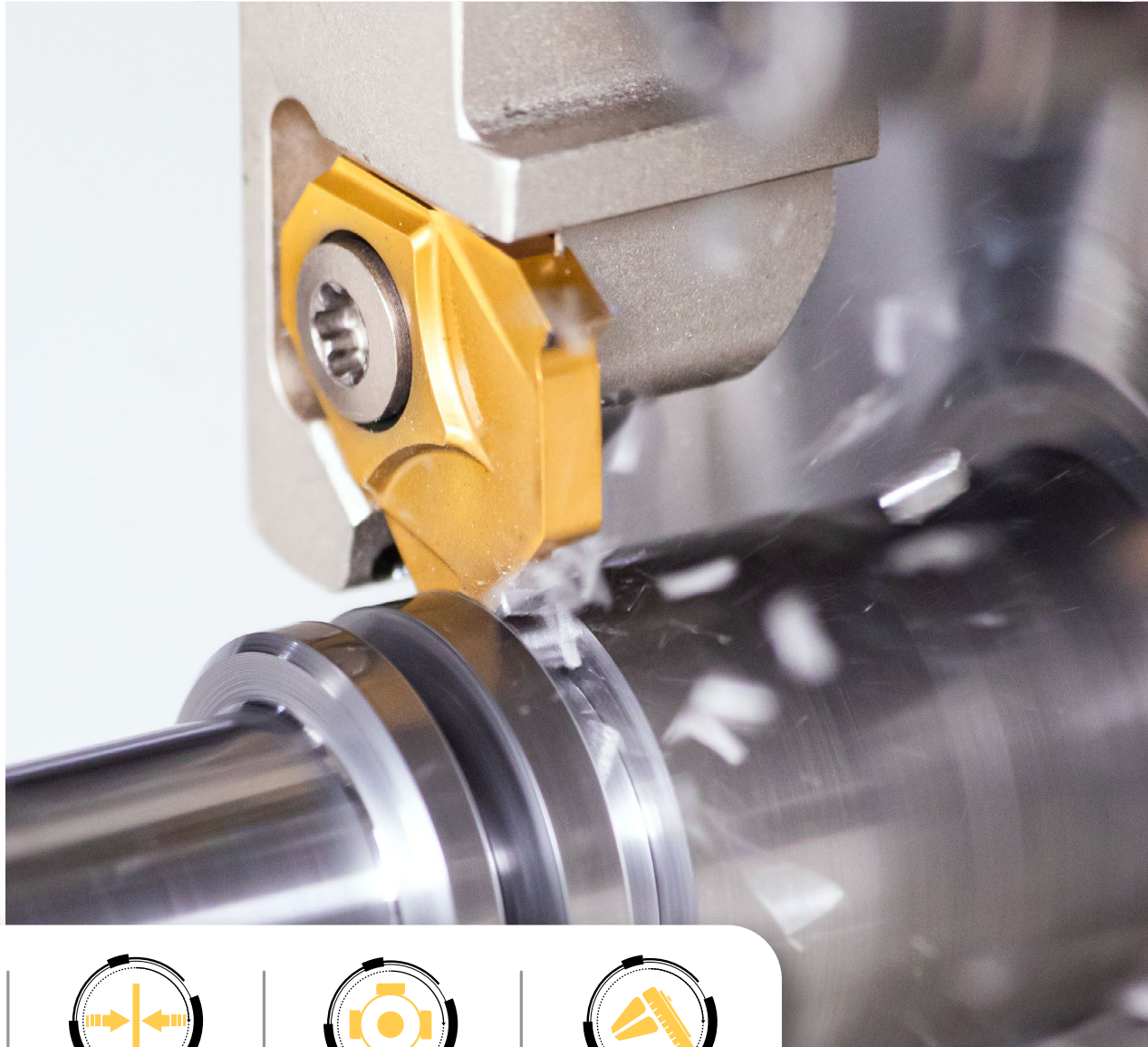
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JUNE 2024

METRIC

# NPA

New Product Announcement



Narrow Insert  
Width



Tangential  
Clamping



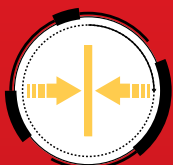
High Precision  
Inserts



## QUICK2CUT<sup>MINI</sup>

### High Precision Tangential Double-Sided Grooving and Parting Inserts, for Swiss Type Machines

## METRIC

Narrow Insert  
WidthTangential  
ClampingHigh Precision  
Inserts

# NPA

New Product Announcement

## QUICK<sup>MINI</sup>2CUT

## Highlights

**New Tangential Double Sided QUICK-2-CUT Inserts with Screw, “V” Shape Clamping, Dedicated for Swiss Type and Small CNC Machines**

### Features

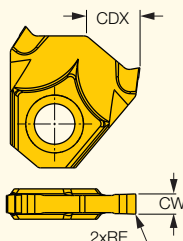
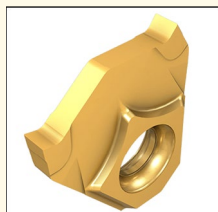
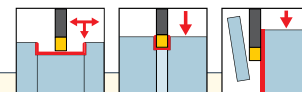
- Double-Sided Tangential Inserts for precision grooving & parting on Swiss Type Machines.
- The system design features stable cut and very high insert toughness.
- Narrow inserts widths of 0.33mm (.013”) and up to 2mm (.079”) for maximum material savings.
- The inserts are able to cut up to 12mm (1/2”) part diameter.
- The complete insert range can be clamped on the same toolholder.
- Pinpointed coolant directed to the cutting zone improves insert tool life & surface finish.
- Shanks sizes :10 mm (3/8”), 12 mm (1/2”), 16mm (5/8”).
- Superb clamping provides stable cut and safe machining with excellent repeatability.
- Sharp and positive cutting edge, suitable for small size parts.
- The inserts are designed with a positive rake angle and a “P” type chipformer.
- Easy and fast insert indexing, user friendly with screw clamping.
- Compact “SH” (Short Head) tool configuration.
- The tool can be used as a “bar stopper “.
- Door opener for SWISS type machines.

[Click for Short Video](#)

#### TGV N

Double Sided Tangential Insert for SWISS Type Machines, Intended for Grooving, Parting and Recessing Small Parts

<https://www.iscar.com/eCatalog/Family.aspx?fnum=5264&mapp=TG&GFSTYP=M&srch=1>



| Designation    | Dimensions |      |                      |                      |      | IC1010 | Recommended Machining Data |
|----------------|------------|------|----------------------|----------------------|------|--------|----------------------------|
|                | CW         | RE   | CWTOL <sup>(1)</sup> | RETOL <sup>(2)</sup> | CDX  |        | f groove (mm/rev)          |
| TGV N033P-000  | 0.33       | 0.00 | 0.020                | 0.030                | 2.00 | •      | 0.02-0.04                  |
| TGV N050P-000  | 0.50       | 0.00 | 0.020                | 0.030                | 2.50 | •      | 0.03-0.05                  |
| TGV N075P-005  | 0.75       | 0.05 | 0.020                | 0.030                | 3.00 | •      | 0.03-0.06                  |
| TGV N1.00P-005 | 1.00       | 0.05 | 0.020                | 0.030                | 4.00 | •      | 0.03-0.08                  |
| TGV N2.00P-0.1 | 2.00       | 0.10 | 0.020                | 0.030                | 6.00 | •      | 0.03-0.10                  |

• Cutting edge with high positive rake, suitable for parting small and miniature parts

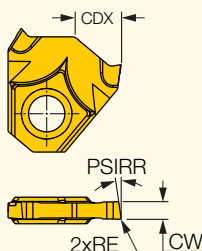
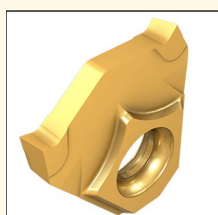
<sup>(1)</sup> Cutting width tolerance (+/-)

<sup>(2)</sup> Corner radius tolerance (+/-)

#### TGV R/L

Double Sided Tangential Insert with Lead Angle Cutting Edge to minimize Burr size, Intended for Parting Small Parts

<https://www.iscar.com/eCatalog/Family.aspx?fnum=5265&mapp=TG&GFSTYP=M&srch=1>



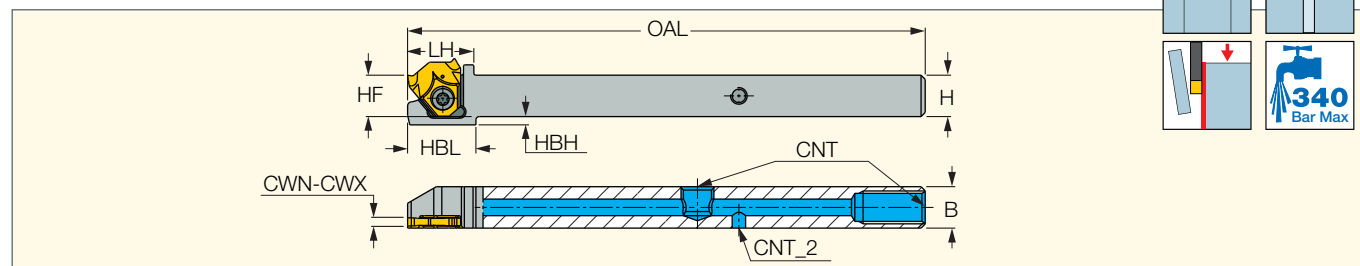
| Designation        | Dimensions |       |       |      |      | IC1010 | Recommended Machining Data |
|--------------------|------------|-------|-------|------|------|--------|----------------------------|
|                    | CW         | PSIRL | PSIRR | RE   | CDX  |        | f groove (mm/rev)          |
| TGV L1.00P-0.05-8D | 1.00       | 8.0   | -     | 0.05 | 4.00 | •      | 0.03-0.06                  |
| TGV R1.00P-0.05-8D | 1.00       | -     | 8.0   | 0.05 | 4.00 | •      | 0.03-0.06                  |
| TGV L2.00P-0.05-8D | 2.00       | 8.0   | -     | 0.05 | 6.00 | •      | 0.03-0.08                  |
| TGV R2.00P-0.05-8D | 2.00       | -     | 8.0   | 0.05 | 6.00 | •      | 0.03-0.08                  |

• Cutting edge with high positive rake, suitable for parting small and miniature parts

#### TGVR/L-JHP

Grooving, Parting and Recessing Tools Carrying TGV Inserts with Channels for High-Pressure Coolant

<https://www.iscar.com/eCatalog/Family.aspx?fnum=5266&mapp=TG&GFSTYP=M&srch=1>



| Designation     | H    | HF   | B    | CWN <sup>(1)</sup> | CWX <sup>(2)</sup> | OAL    | LH   | HBL  | HBH | CNT         | CNT_2 | MIID <sup>(3)</sup> |
|-----------------|------|------|------|--------------------|--------------------|--------|------|------|-----|-------------|-------|---------------------|
| TGVR/L 1010-JHP | 10.0 | 10.0 | 10.0 | 0.33               | 2.00               | 125.00 | 16.0 | 16.5 | 2.0 | UNF 5/16-24 | M4    | TGV N/R/L 0.33-3.0  |
| TGVR/L 1212-JHP | 12.0 | 12.0 | 12.0 | 0.33               | 2.00               | 125.00 | 16.0 | -    | -   | UNF 5/16-24 | M4    | TGV N/R/L 0.33-3.0  |
| TGVR/L 1616-JHP | 16.0 | 16.0 | 16.0 | 0.33               | 2.00               | 125.00 | 16.0 | -    | -   | UNF 5/16-24 | M4    | TGV N/R/L 0.33-3.0  |

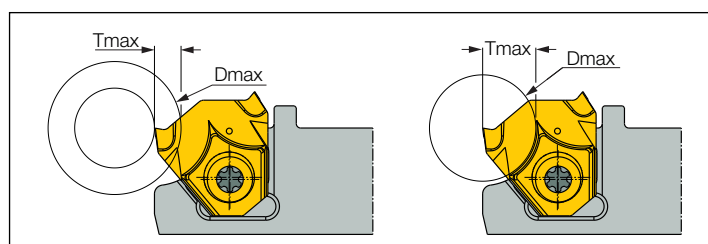
<sup>(1)</sup> Minimum cutting width

<sup>(2)</sup> Maximum cutting width

<sup>(3)</sup> Master insert identification

#### Depth Capacity

Determining depth of cut (Tmax) as function of workpiece diameter (Dmax.)



| W (insert) | Tmax | Dmax | T≤0.5 | T≤1.0 | T≤1.5 | T≤2.0 | T≤2.5 | T≤3.0 | T≤3.5 | T≤4.0 | T≤4.5 | T≤5.0 | T≤5.5 | T≤6.0 |
|------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.33       | 2.0  | 24.0 |       |       |       |       | -     | -     | -     | -     | -     | -     | -     | -     |
| 0.50       | 2.5  | 20.0 |       |       |       |       |       | -     | -     | -     | -     | -     | -     | -     |
| 0.75       | 3.0  | 18.0 | 72    | 45    | 31    | 24    | 20    | 18    | 16    | 15    | 14    | 13    | 13    | 12    |
| 1.00       | 4.0  | 15.0 |       |       |       |       |       |       |       |       |       |       |       |       |
| 2.00       | 6.0  | 12.0 |       |       |       |       |       |       |       |       |       |       |       |       |

#### Spare Parts

| Designation | Screw                 | Key     | Plug             | Plug 1               | Key 1    |
|-------------|-----------------------|---------|------------------|----------------------|----------|
| TGVR/L-JHP  | SR M3.5X0.6-L8.5 IP10 | IP-10/5 | SR 5/16UNF TL360 | SR M4X4 DIN913 TL360 | HW 5/32" |