

MINI-TURN™

TURNING PRODUCTS

Series

- TMB

Holder Styles

- Back Turning, Square Shank
- Right hand only
- With or without CoolBurst™

Square Shank Size

- .500"
- .625"
- 12mm
- 16mm

Insert Options

- Series BTVC...
- Wiper geometry

Corner Radii

- .000" (0.0mm)
- .004" (0.1mm)
- .008" (0.2mm)



Series TMB Back Turning Holders and Inserts for Swiss Automatic Machines

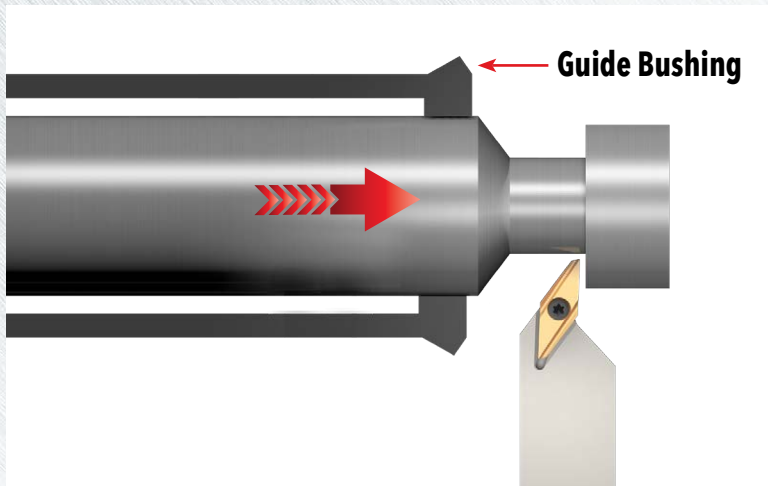
New MINI-TURN TMB back turning holders and inserts make it possible to plunge and turn features that exist behind larger diameters on the work piece. The holder/insert positioning is located away from the guide bushing and allows finish machining to be performed without retracting the work piece from the guide bushing. A specialized insert edge geometry enables high precision, and wiper geometry provides excellent surface roughness.


Standard TMB holders are right-handed and available in inch and metric shanks. All holders use BTVC inserts that feature a 35-degree included angle, wiper geometry, a sharp cutting edge and a maximum reach of .283" (7.2mm) per side.

Back turning tools are a popular option for small size component machining in industries ranging from automotive and medical to semiconductor manufacturing.



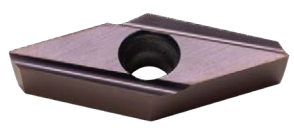
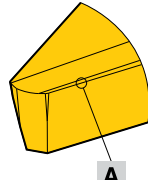

MINITURN™ TMB BACK TURNING HOLDER



- Back turning design for general purpose machining
- Can produce a square shoulder on back side of the workpiece
- Finish machining can be performed without retracting the workpiece from the guide bushing
- Holders offered with or without thru-coolant **COOLBURST™** technology 

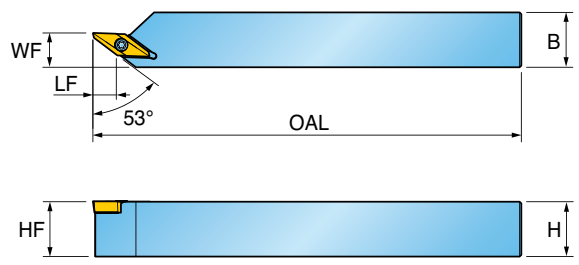
MINITURN™ BTVC BACK TURNING INSERTS

- Sharp cutting edge and optimized chip groove shape provides excellent chip control
- Optimal grooving performance with .283" (7.2mm) depth of cut capability
- Wiper edge produces excellent surface finish

| Chip breaker | Edge geometry | |
|--|--|--|
|  <p data-bbox="381 1648 414 1680">R-F</p> |  <p data-bbox="844 1627 876 1659">A</p> |  <p data-bbox="1347 1543 1380 1585">A</p> |



MINITURN™ TMB-SVXCR SCREW TYPE BACK TURNING HOLDER (BTVC22_)



INCH

| Approach angle | Part Number | Dimension (inch) | | | | | | Insert |
|----------------|--------------------|------------------|----------------------|---------------|--------------------|---------------------|----------------------|------------------------|
| | | H Shank Height | HF Functional Height | B Shank Width | OAL Overall Length | WF Functional Width | LF Functional Length | |
| | TMB-SVXCR 08-2C-SH | .500 | .500 | .500 | 5.0 | .394 | .283 | BTVC22... (1103...) |
| | TMB-SVXCR 10-2C-SH | .625 | .625 | .625 | 5.0 | .394 | .283 | |

METRIC

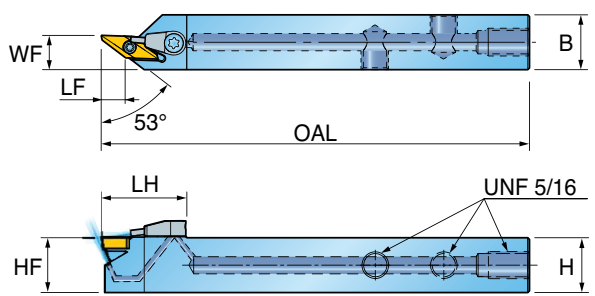
| Approach angle | Part Number | Dimension (mm) | | | | | | Insert |
|----------------|--------------------|----------------|----------------------|---------------|--------------------|---------------------|----------------------|------------------------|
| | | H Shank Height | HF Functional Height | B Shank Width | OAL Overall Length | WF Functional Width | LF Functional Length | |
| | TMB-SVXCR 1212 K11 | 12 | 12 | 12 | 125 | 10 | 7.2 | BTVC22... (1103...) |
| | TMB-SVXCR 1616 K11 | 16 | 16 | 16 | 125 | 10 | 7.2 | |

Spare Parts

| Part Number | Screw | Wrench | |
|-------------|-----------|--------|--|
| TMB-SVXCR | S0 250651 | T7 | |



MINITURN™ TMB-SVXCR-TB SCREW TYPE BACK TURNING HOLDER W/HIGH-PRESSURE COOLANT (BTVC22_)



INCH

| Approach angle | Part Number | Dimension (inch) | | | | | | Insert |
|----------------|-----------------------|------------------|----------------------|---------------|--------------------|---------------------|----------------------|------------------------|
| | | H Shank Height | HF Functional Height | B Shank Width | OAL Overall Length | WF Functional Width | LF Functional Length | |
| | TMB-SVXCR-TB 08-2C-SH | .500 | .500 | .500 | 5.0 | .394 | .283 | BTVC22... (1103...) |
| | TMB-SVXCR-TB 10-2C-SH | .625 | .625 | .625 | 5.0 | .394 | .283 | |

METRIC

| Approach angle | Part Number | Dimension (mm) | | | | | | Insert |
|----------------|-----------------------|----------------|----------------------|---------------|--------------------|---------------------|----------------------|------------------------|
| | | H Shank Height | HF Functional Height | B Shank Width | OAL Overall Length | WF Functional Width | LF Functional Length | |
| | TMB-SVXCR-TB 1212 K11 | 12 | 12 | 12 | 125 | 10 | 7.2 | BTVC22... (1103...) |
| | TMB-SVXCR-TB 1616 K11 | 16 | 16 | 16 | 125 | 10 | 7.2 | |

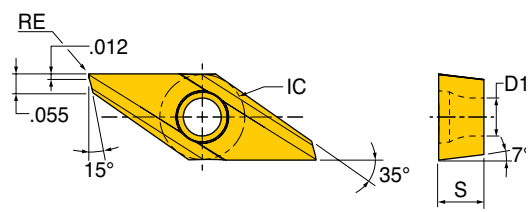
Spare Parts

| Part Number | Screw | Oil Supply Unit | Plug | Wrench | |
|--------------|-----------|-----------------|--------------|--------|----------|
| TMB-SVXCR-TB | SO 250651 | S-CU-TB | PLG 5/16 UNF | T7 | L-W 5/32 |



MINITURN™ BTVC INSERTS

Positive 7° clearance 35° rhombic inserts



| Size | Dimension (inch) | | |
|-------|---------------------|-------------|------------------|
| | IC Inscribed Circle | S Thickness | RE Corner Radius |
| 22X | .250 | .125 | .000 |
| 220 | .250 | .125 | .004 |
| 220.5 | .250 | .125 | .008 |

| Insert | Part Number | ap (inch) | Feed (ipr) | PVD coated |
|--------|--------------------------------|------------|-------------|------------|
| | | | | TT4430 |
| | BTVC22X0R-F (BTVC110300R-F) | .0012-.138 | .0004-.0047 | ● |
| | BTVC220MR-F (BTVC110301MR-F) | .0020-.138 | .0004-.0060 | ● |
| | BTVC220.5MR-F (BTVC110302MR-F) | .0040-.138 | .0004-.0060 | ● |

●: Standard items