



SUMITOMO

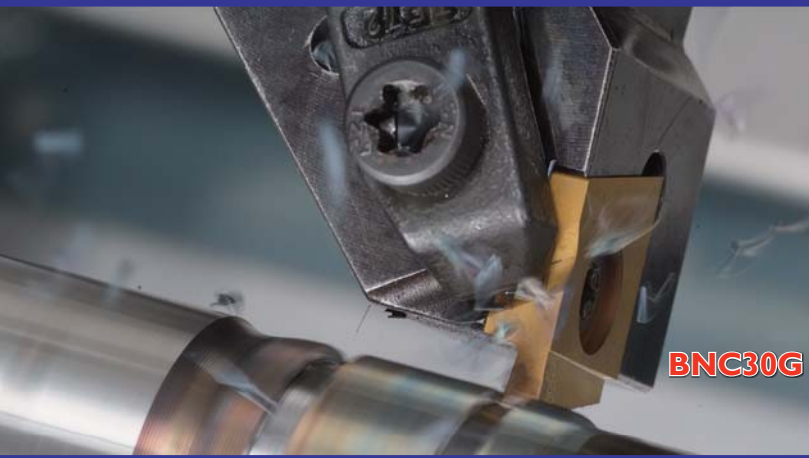
CARBIDE - CBN - DIAMOND

*The Global Leader in
CBN Technology*



CBN Grooving System

“Samples in a Snap” Program



BNC30G



BN2000

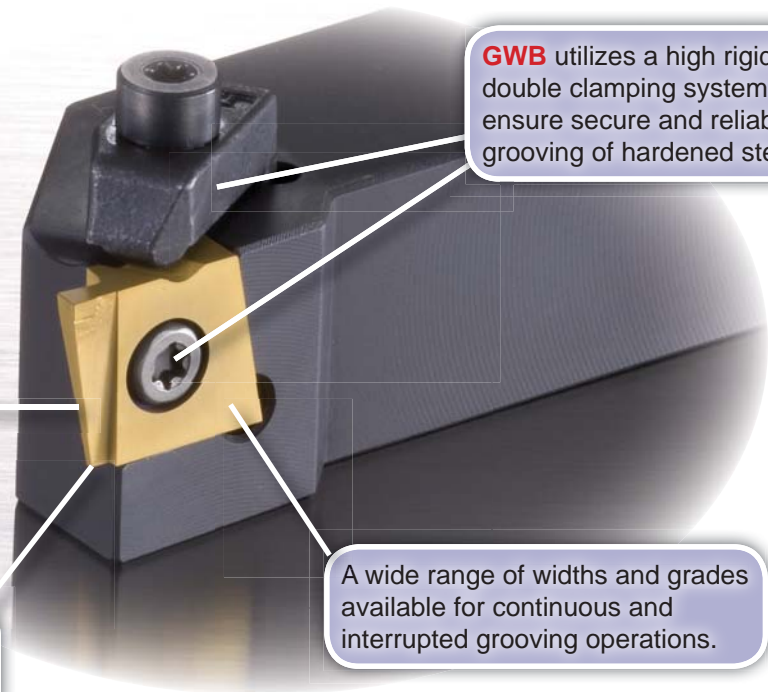
**Order today and have
your Sumitomo Grooving System
delivered in 4 WEEKS**



CBN Grooving System

The latest **Sumitomo Grooving System** combined with superior **SumiBoron** technology

GWB Grooving Holder & CGA CBN Inserts
BN2000 • BNC30G



GWB utilizes a high rigidity double clamping system to ensure secure and reliable grooving of hardened steel.

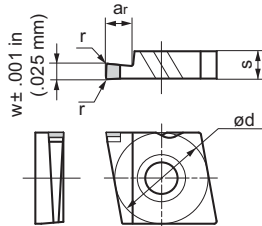
80° tangentially mounted **CGA** inserts contributes to significantly improved rigidity.


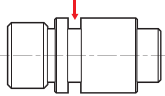

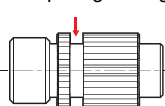
Coated **SumiBoron** grade **BNC30G** enhances the tool life of the **CGA** insert.

A wide range of widths and grades available for continuous and interrupted grooving operations.

Additional benefits:

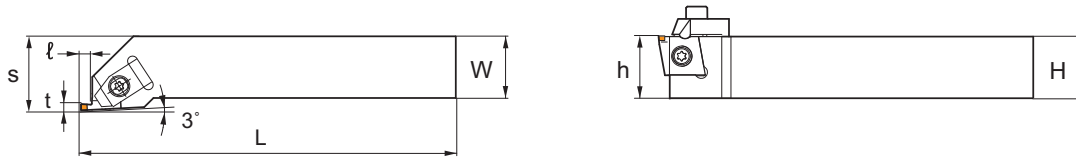
- GWB holder's solid design eliminates the need for additional anvils
- Reliable hardware and holder for low maintenance



| Grade | Application | Features | Hv (GPa) | TRS (GPa) |
|--|--|---|----------|-----------|
| BN2000  | Continuous grooving  | General purpose grade with good wear resistance | 31-34 | 1.0-1.1 |
| BNC30G  | Interrupted grooving  | Tough CBN substrate and special coating with high wear and peeling resistance | 33-35 | 1.1-1.2 |

CGA CBN INSERTS

| Right | | Dimensions (in) | | | | | Left | |
|--------------|--------|-----------------------------|---------------|--------------|---------------|--------------|--------------|--------|
| CGA | CBN | W ±.001 in ±.025 (mm) | ar in (mm) | r in (mm) | ød in (mm) | s in (mm) | CGA | CBN |
| | BN2000 | | | | | | | BNC30G |
| CGAR 4062 | • | .062 (1.575) | .1378 (3.5) | .0078 (.2) | .625 (15.875) | .1875 (4.76) | CGAL 4062 | • |
| CGAR 4094 | • | .094 (2.388) | .1575 (4.0) | | | | CGAL 4094 | • |
| CGAR 4125 | • | .125 (3.175) | .1969 (5.0) | | | | CGAL 4125 | • |
| CGAR 6189 | • | .189 (4.801) | .1969 (5.0) | | | | CGAL 6189 | • |
| CGAR 1504150 | • | .0591 (1.5) | .1378 (3.5) | | | | CGAL 1504150 | • |
| CGAR 1504200 | • | .0787 (2.0) | .1378 (3.5) | | | | CGAL 1504200 | • |
| CGAR 1504250 | • | .0984 (2.5) | .1575 (4.0) | | | CGAL 1504250 | • | |
| CGAR 1504300 | • | .1181 (3.0) | .1575 (4.0) | | | CGAL 1504300 | • | |
| CGAR 1504350 | • | .1378 (3.5) | .1575 (4.0) | | | CGAL 1504350 | • | |
| CGAR 1504400 | • | .1575 (4.0) | .1575 (4.0) | | | CGAL 1504400 | • | |
| CGAR 1504450 | • | .1772 (4.5) | .1575 (4.0) | | | CGAL 1504450 | • | |
| CGAR 1506500 | • | .1969 (5.0) | .1969 (5.0) | | | CGAL 1506500 | • | |
| CGAR 1506550 | • | .2165 (5.5) | .1969 (5.0) | | | CGAL 1506550 | • | |
| CGAR 1506600 | • | .2362 (6.0) | .1969 (5.0) | | | CGAL 1506600 | • | |
| | | | | | .25 (6.35) | | CGAL 1506550 | • |
| | | | | | .25 (6.35) | | CGAL 1506600 | • |



■ **GWB SERIES HOLDERS**

| Sumitomo Cat. No. | Stk. | H in (mm) | W in (mm) | h in (mm) | s in (mm) | t in (mm) | l in (mm) | L in (mm) | Applicable Insert |
|-------------------|------|-------------|-------------|-------------|--------------|--------------------------------------|------------|---------------|--------------------------------|
| GWBR 165D4 | ● | 1.0 (25.4) | 1.0 (25.4) | 1.0 (25.4) | 1.181 (30.0) | $.059 < t \leq .079$ (1.5 < t ≤ 2.0) | .138 (3.5) | 6.0 (152.4) | CGA R/L 1504□□ CGA R/L 4□□□ |
| GWBL 165D4 | | | | | | $.079 < t \leq .118$ (2.0 < t ≤ 3.0) | .177 (4.5) | 6.039 (153.4) | |
| | | | | | | $.118 < t \leq .177$ (3.0 < t ≤ 4.5) | .197 (5.0) | | |
| GWBR 165D6 | ● | 1.0 (25.4) | 1.0 (25.4) | 1.0 (25.4) | 1.181 (30.0) | $.177 < t \leq .236$ (4.5 < t ≤ 6.0) | | 6.039 (153.4) | CGA R/L 1506□□ CGA R/L 6□□□ |
| GWBL 165D6 | | | | | | | | | |
| GWBR 2525-45 | ★ | .984 (25.0) | .984 (25.0) | .984 (25.0) | 1.181 (30.0) | $.059 < t \leq .079$ (1.5 < t ≤ 2.0) | .138 (3.5) | 6.0 (152.4) | CGA R/L 1504□□ CGA R/L 4□□□ |
| GWBL 2525-45 | | | | | | $.079 < t \leq .118$ (2.0 < t ≤ 3.0) | .177 (4.5) | 6.039 (153.4) | |
| | | | | | | $.118 < t \leq .177$ (3.0 < t ≤ 4.5) | .197 (5.0) | | |
| GWBR 2525-60 | ★ | .984 (25.0) | .984 (25.0) | .984 (25.0) | 1.181 (30.0) | $.177 < t \leq .236$ (4.5 < t ≤ 6.0) | | 6.039 (153.4) | CGA R/L 1506□□ CGA R/L 6□□□ |
| GWBL 2525-60 | | | | | | | | | |

■ **RECOMMENDED CUTTING CONDITIONS**

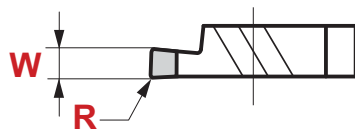
| For hardened steel: | |
|---|--|
| Cutting Speed | 260 - 400 sfm (80 - 120 m/min) |
| Feed Rate | .0016 - .0032 ipr (.04 - .08 mm/rev) |
| Coolant | Continuous cut: dry or wet Interrupted cut: dry |
| NOTE: To avoid thermal cracking of cutting edge during interrupted cutting applications, please ensure work piece remains dry. | |

■ **HARDWARE**

| | | | | |
|--------------------|-------------|--------------|--------|--------|
| | | | | |
| Clamp | Clamp Screw | Insert Screw | Spring | Wrench |
| TF-72 (Right hand) | BX0520T | BFTX 0511N | GSP06 | TRX20 |
| TF-73 (Left hand) | | | | |

“Samples in a Snap” Program

Get the most innovative CBN grooving technology in your hands when you need it. Order today and receive your **SumiBoron GWB Grooving System** in **FOUR WEEKS**--the shortest lead time for CBN grooving in the industry.



1 _____
Distributor Name

2 _____
Contact Name

3 _____
Email Address

4 _____
Enduser Name

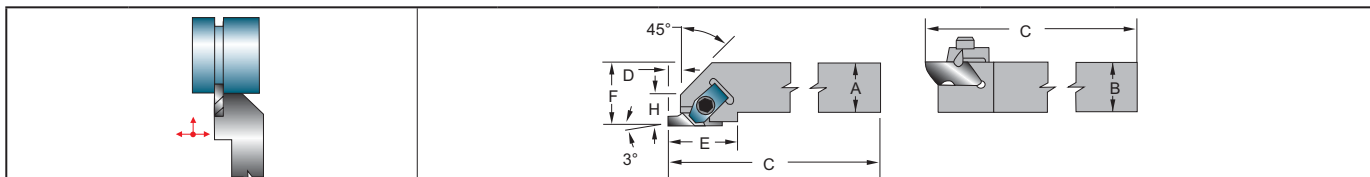
| | | Features & Dimensions | |
|---------------|---|------------------------------------|-------------------------------------|
| Step 1 | Left or Right Handed (Circle one) | Left | Right |
| Step 2 | Groove Width (W) 1.5mm - 3.5mm (.059" - .138") | | |
| Step 3 | Width Tolerance (Circle one) | +/- 0.025mm (+/- 0.001") | +/- 0.013mm (+/- 0.0005") |
| Step 4 | Radius (R) 0.2mm - 0.4mm (.008" - .016") | | |
| Step 5 | Grade (Circle one) | BN2000 (General Purpose) | BNC30G (Interrupted) |

Fax Request for Quote to:
847-635-9335

Step 6 **X** _____
Customer Approval Date

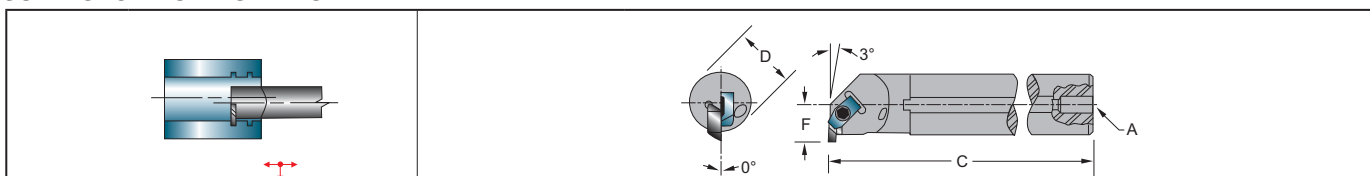
Also from Sumitomo: more CBN Grooving for your existing system*

SUMINOTCH TOOL HOLDERS



| Sumitomo Cat. # | | Gage Insert | | A | B | C | D | E | F | H | R.H. Clamp | L.H. Clamp | Clamp Screw |
|-----------------|-----------|-------------|-------|-------|-------|-------|------|------|-------|-----|------------|------------|-------------|
| Right Hand | Left Hand | R.H. | L.H. | | | | | | | | | | |
| SSR-82V | SSL-82V | SG-2R | SG-2L | .500 | .500 | 3.500 | .140 | 1.25 | .750 | .50 | TF-74 | TF-75 | S-310 |
| SSR-102B | SSL-102B | SG-2R | SG-2L | .625 | .625 | 4.500 | .140 | 1.25 | 1.000 | .50 | TF-74 | TF-75 | S-310 |
| SSR-122B | SSL-122B | SG-2R | SG-2L | .750 | .750 | 4.500 | .140 | 1.25 | 1.000 | .50 | TF-74 | TF-75 | S-310 |
| SSR-162C | SSL-162C | SG-2R | SG-2L | 1.000 | 1.000 | 5.000 | .140 | 1.25 | 1.250 | .50 | TF-74 | TF-75 | S-310 |
| SSR-123A | SSL-123A | SG-3R | SG-3L | .750 | .750 | 4.000 | .210 | 1.25 | 1.000 | .50 | TF72 | TF-73 | S-412 |
| SSR-123B | SSL-123B | SG-3R | SG-3L | .750 | .750 | 4.500 | .210 | 1.25 | 1.000 | .50 | TF72 | TF-73 | S-412 |
| SSR-163C | SSL-163C | SG-3R | SG-3L | 1.000 | 1.000 | 5.000 | .210 | 1.25 | 1.250 | .50 | TF72 | TF-73 | S-412 |
| SSR-163D | SSL-163D | SG-3R | SG-3L | 1.000 | 1.000 | 6.000 | .210 | 1.25 | 1.250 | .50 | TF72 | TF-73 | S-412 |
| SSR-853D | SSL-853D | SG-3R | SG-3L | 1.000 | 1.000 | 6.000 | .210 | 1.25 | 1.500 | .50 | TF72 | TF-73 | S-412 |
| SSR-203D | SSL-203D | SG-3R | SG-3L | 1.250 | 1.250 | 6.000 | .210 | 1.25 | 1.500 | .50 | TF72 | TF-73 | S-412 |

SUMINOTCH BORING BARS



| Sumitomo Cat. # | | Gage Insert | | D | C | F | Min. Bore | A | R.H. Clamp | L.H. Clamp | Clamp Screw |
|-----------------|-----------|-------------|-------|-------|--------|-------|-----------|------------|------------|------------|-------------|
| Right Hand | Left Hand | R.H. | L.H. | | | | | | | | |
| A08-SER2 | A08-SEL2 | SG-2R | SG-2L | .500 | 8.000 | .437 | .730 | 1/4-18 NPT | TF-74 | TF-75 | S-310 |
| A10-SER2 | A10-SEL2 | SG-2R | SG-2L | .625 | 10.000 | .500 | 1.000 | 1/4-18 NPT | TF-74 | TF-75 | S-310 |
| A12-SER2 | A12-SEL2 | SG-2R | SG-2L | .750 | 10.000 | .562 | 1.125 | 1/4-18 NPT | TF-74 | TF-75 | S-310 |
| A16-SER2 | A16-SEL2 | SG-2R | SG-2L | 1.000 | 12.000 | .688 | 1.375 | 1/4-18 NPT | TF-74 | TF-75 | S-310 |
| A16-SER3 | A16-SEL3 | SG-3R | SG-3L | 1.000 | 12.000 | .688 | 1.375 | 1/4-18 NPT | TF72 | TF-73 | S-412 |
| A20-SER3 | A20-SEL3 | SG-3R | SG-3L | 1.250 | 14.000 | .875 | 1.750 | 1/4-18 NPT | TF72 | TF-73 | S-412 |
| A24-SER3 | A24-SEL3 | SG-3R | SG-3L | 1.500 | 14.000 | 1.000 | 2.000 | 1/4-18 NPT | TF72 | TF-73 | S-412 |

SUMINOTCH GROOVING INSERTS

| Right | | Dimensions (in) | | | | | | | Left | |
|----------|--------|-----------------|-----------|------------|------|------|-------|-----------|----------|-------|
| SG | CBN | W ±.001 | R | E ±.001 | T | A | B | Gage Dia. | SG | CBN |
| | BN2000 | | | | | | | | | BN350 |
| SG-3047R | • | .047 | .005/.010 | .075 | | | | | SG-3047L | • |
| SG-3062R | • | .062 | .005/.010 | .094 | | | | | SG-3062L | • |
| SG-3094R | • | .094 | .005/.010 | .150 | .195 | .344 | .4050 | .3750 | SG-3094L | • |
| SG-3125R | • | .125 | .005/.010 | .150 | | | | | SG-3125L | • |
| SG-3189R | • | .189 | .020/.025 | .150 | | | | | SG-3189L | • |

*SumiNotch is not included in the "Samples in a Snap" program

Headquarters

1001 Business Center Drive
 Mount Prospect, IL 60056-2181
 P.O. Box 545
 Mt. Prospect, IL 60056-0545
 Phone: (800) 950-5202
 Phone: (847) 635-0044
 Fax: (847) 635-7866



Distributed by: