

# CONTENTS

---

## General product information

Please refer to general catalog - B170 - B198.

## Added products



### **BXA10**

Now available in **BXA10** for effective chipbreaking in hard turning

[View](#)



TurnLine



# T-CBN HARDBREAKER HP

[www.tungaloy.com/us](http://www.tungaloy.com/us)

Tungaloy Report No. 518S1-US

**Now available in BXA10** for effective chipbreaking in hard turning

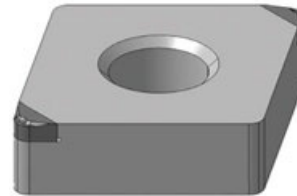


**INDUSTRY 4.0**  
*FEED the SPEED!*



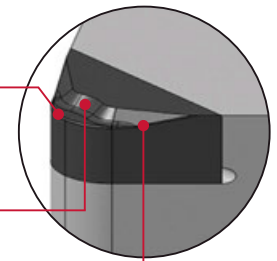
## Available in new BXA10 allowing wider application coverage

- 1 By separating the chipbreaker from the cutting edge, the cutting force imposed on the cutting edge during machining is significantly reduced, thus providing long tool life.
- 2 The cutting edge preparation is designed to ensure easy cutting at low cutting forces, while maintaining close tolerances with no deviations.
- 3 The **HP** style chipbreaker, combined with built-in wipers, yields excellent surface quality and good chip control.



Optimized edge preparation for low cutting force

HP chipbreaker  
Wiper



## CUTTING PERFORMANCE

Chip control is stable for a long time

**HARDBREAKER HP** Vs. **Competitor**

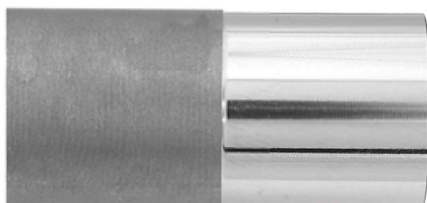
40 min.

80 min.

Insert	: 2QP-CNGM432-HP
Workpiece material	: JIS SCM420 58HRC
Cutting speed	: $V_c = 591$ sfm
Feed	: $f = 0.006$ ipr
Depth of cut	: $a_p = 0.006$ "
Holder	: ACLNR2525M12-A
Coolant	: Wet
Machining	: External continuous cutting

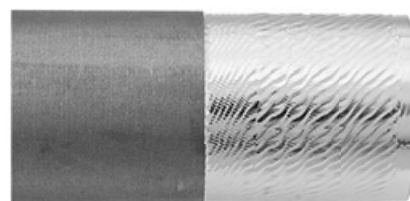
Chatter stability

## HARDBREAKER HP








Due to low cutting force, chatter stability is greatly improved

Competitor (without breaker)







● : Continuous cutting  
 ● : Light interrupted cutting  
 ✱ : Heavy interrupted cutting

## INSERT NEGATIVE TYPE

		P	M	K	N	S	H													
		Steel	Stainless	Cast iron	Non-ferrous	Superalloy	Hard material	●	●	●	●	●	●	●	●	●	●	●		
Shape	Designation				BXA10	BXA20	BXM10	No. of corners	Dimension (in)					Edge prep.						
		Inch	Metric						LE	RE	IC	S	D1	Standard	Sharp edge	L	LFLC	H	Wiper	Chipbreaker
	<b>2QP-CNGM**-H*</b> 2QP-CNGM 431-HP 2QP-CNGM120404-HP			●	●	●	2	0.091	0.016	0.500	0.187	0.203								○
	2QP-CNGM 432-HP 2QP-CNGM120408-HP			●	●	●	2	0.087	0.031	0.500	0.187	0.203								○
	2QP-CNGM 433-HP 2QP-CNGM120412-HP			●	●	●	2	0.094	0.047	0.500	0.187	0.203								○
	2QP-CNGM 432 WL HP 2QP-CNGM120408WL-HP			●	●	●	2	0.087	0.031	0.500	0.187	0.203							○	○
	<b>2QP-DNGM**-H*</b> 2QP-DNGM 431-HP 2QP-DNGM150404-HP			●	●	●	2	0.098	0.016	0.500	0.187	0.203								○
	2QP-DNGM 432-HP 2QP-DNGM150408-HP			●	●	●	2	0.083	0.031	0.500	0.187	0.203								○
	2QP-DNGM 433-HP 2QP-DNGM150412-HP			●	●	●	2	0.079	0.047	0.500	0.187	0.203								○
	2QP-DNGM 442-HP 2QP-DNGM150608-HP			●	●	●	2	0.083	0.031	0.500	0.250	0.203								○
	<b>2QP-GNGG**-HP</b> 2QP-GNGG 431-HP 2QP-GNGG120404-HP			●	●	●	2	0.083	0.016	0.500	0.187	0.203								○
	1) 2QP-GNGG 432-HP 2QP-GNGG120408-HP			●	●	●	2	0.083	0.031	0.500	0.187	0.203								○
	2QP-GNGG 433-HP 2QP-GNGG120412-HP			●	●	●	2	0.087	0.047	0.500	0.187	0.203								○
	<b>3QP-TNGM**-H*</b> 3QP-TNGM 331-HP 3QP-TNGM160404-HP			●	●	●	3	0.087	0.016	0.375	0.187	0.150								○
	3QP-TNGM 332-HP 3QP-TNGM160408-HP			●	●	●	3	0.075	0.031	0.375	0.187	0.150								○
	3QP-TNGM 333-HP 3QP-TNGM160412-HP			●	●	●	3	0.094	0.047	0.375	0.187	0.150								○
	<b>2QP-VNGM**-H*</b> 2QP-VNGM 331-HP 2QP-VNGM160404-HP			●	●	●	2	0.122	0.016	0.375	0.187	0.150								○
	2QP-VNGM 332-HP 2QP-VNGM160408-HP			●	●	●	2	0.087	0.031	0.375	0.187	0.150								○

1) Tungaloy standard

## POSITIVE TYPE

		P	M	K	N	S	H													
		Steel	Stainless	Cast iron	Non-ferrous	Superalloy	Hard material	●	●	●	●	●	●	●	●	●	●	●	●	
Shape	Designation				BXA10	BXA20	BXM10	No. of corners	Dimension (in)					Edge prep.						
		Inch	Metric						LE	RE	IC	S	D1	Standard	Sharp edge	L	LFLC	H	Wiper	Chipbreaker
	<b>2QP-CCGT**-HP</b> 2QP-CCGT 21.51 HP 2QP-CCGT060204-HP			●	●	●	2	0.091	0.016	0.250	0.094	0.110								○
	2QP-CCGT 32.51 HP 2QP-CCGT09T304-HP			●	●	●	2	0.091	0.016	0.375	0.156	0.173								○
	2QP-CCGT 32.52 HP 2QP-CCGT09T308-HP			●	●	●	2	0.087	0.031	0.375	0.156	0.173								○
	2QP-CCGT 32.51 WL HP 2QP-CCGT09T304WL-HP			●	●	●	2	0.091	0.016	0.375	0.156	0.173							○	○
	2QP-CCGT 32.52 WL HP 2QP-CCGT09T308WL-HP			●	●	●	2	0.087	0.031	0.375	0.156	0.173							○	○
	<b>2QP-DCGT**-HP</b> 2QP-DCGT 21.51 HP 2QP-DCGT070204-HP			●	●	●	2	0.098	0.016	0.250	0.094	0.110								○
	2QP-DCGT 32.51 HP 2QP-DCGT11T304-HP			●	●	●	2	0.098	0.016	0.375	0.156	0.173								○
	2QP-DCGT 32.52 HP 2QP-DCGT11T308-HP			●	●	●	2	0.083	0.031	0.375	0.156	0.173								○
	<b>3QP-TPGT**-HP</b> 3QP-TPGT 221 HP 3QP-TPGT110304-HP			●	●	●	3	0.087	0.016	0.250	0.125	0.134								○
	3QP-TPGT 222 HP 3QP-TPGT110308-HP			●	●	●	3	0.075	0.031	0.250	0.125	0.134								○
	<b>2QP-VBGT**-HP</b> 2QP-VBGT 221 HP 2QP-VBGT110304-HP			●	●	●	2	0.118	0.016	0.250	0.125	0.110								○
	2QP-VBGT 222 HP 2QP-VBGT110308-HP			●	●	●	2	0.087	0.031	0.250	0.125	0.110								○
	2QP-VBGT 331 HP 2QP-VBGT160404-HP			●	●	●	2	0.118	0.016	0.375	0.187	0.173								○
	2QP-VBGT 332 HP 2QP-VBGT160408-HP			●	●	●	2	0.087	0.031	0.375	0.187	0.173								○

● : New product  
 ● : Line up

# Tungaloy America, Inc.

3726 N Ventura Drive, Arlington Heights, IL 60004, U.S.A.

Inside Sales: +1-888-554-8394

Technical Support: +1-888-554-8391

Fax: +1-888-554-8392

[www.tungaloy.com/us](http://www.tungaloy.com/us)

## Tungaloy Canada

432 Elgin St. Unit 3, Brantford, Ontario N3S 7P7, Canada

Phone: +1-519-758-5779 Fax: +1-519-758-5791

[www.tungaloy.com/ca](http://www.tungaloy.com/ca)

## Tungaloy de Mexico S.A.

C Los Arellano 113, Parque Industrial Siglo XXI

Aguascalientes, AGS, Mexico 20290

Phone: +52-449-929-5410 Fax: +52-449-929-5411

[www.tungaloy.com/mx](http://www.tungaloy.com/mx)



Scan for instant  
web access



[www.tungaloy.com/us](http://www.tungaloy.com/us)

follow us at:

[facebook.com/tungaloyamerica](https://facebook.com/tungaloyamerica)

[twitter.com/tungaloy](https://twitter.com/tungaloy)

[instagram.com/tungaloyamerica](https://instagram.com/tungaloyamerica)

[linkedin.com/company/tungaloy-america](https://linkedin.com/company/tungaloy-america)

To see this product in action visit:

## Tung-TV

[www.youtube.com/tungaloycorporation](http://www.youtube.com/tungaloycorporation)

Distributed by:



FIND US ON THE CLOUD!  
[machiningcloud.com](http://machiningcloud.com)

