

# **FOR HARDENED STEEL <70HRC**

New & expanded range of cost effective and high performance CBN inserts for medium, finishing & roughing applications.





# BENEFITS OF CBN TURNING

**EXCEPTIONAL HARDNESS** 

Can effectively machine hardened steels (<70HRc), with options available for abrasive cast iron and heat-resistant superalloys.

**⊘** INCREASED TOOL LIFE

Compared to carbide tools, reducing the frequency of tool changes and downtime.

**ODIMENSIONAL STABILITY** 

Crucial for achieving consistent results in mass production. Their stability minimises the risk of dimensional errors and scrapped parts.

**OHIGH-SPEED MACHINING** 

CBN can run at much higher speeds vs traditional carbide tools, leading to increased metal removal rates and reduced cycle times.

**REPLACING GRINDING OPERATIONS** 

CBN turning can replace grinding processes, especially for hardened steel parts, leading to significant cost savings.

# ORDER YOUR CBN INSERTS TODAY

Here's a few reasons why Cutwel should be your number 1 choice:

OVER 100,000 TOOLS AVAILABLE

Whether milling, drilling, turning, threading or anything else in-between our huge range of tooling solutions have you covered.

**FREE NEXT DAY DELIVERY** 

On orders over £59 ex vat you can get the tools you need, when you need them with over £4.5m worth stocked on site.

**EXPERT TECHNICAL ADVICE** 

Our tech team are on hand to provide industry leading support on problem solving and recommendations to save you time and money.

**EXCEPTIONAL CUSTOMER SERVICE** 

All our team are trained on the entire product range so we can support any requirements you have quickly and accurately.

#### WORLDIA CBN TURNING

Consistent performance and excellent value, making it an ideal choice for a cost effective CBN turning solution without compromising on quality.





#### **Grade Selection & Cutting Data**

Grade	Application	Cutting Data
MHN10C	High Speed Continuous Turning	vc=150-250 m/min. f=0.03-0.2 mm. ap<0.3 mm
MHN20C	Medium Speed Continuous / Light Interrupted	vc=50-150 m/min. f=0.03-0.2 mm. ap<0.3 mm
MHN30C	Low Speed - Unstable Machining / Heavy Interrupted	vc=30-120 m/min. f=0.03-0.2 mm. ap<0.3 mm

#### Range & Price Summary

St	yle	From									
CCGW	9	£26.53	DNGA		£26.53	VBGW	0	£26.53	WNGA	200	£39.96
CNGA		£26.53	TCGW		£39.96	VCGW	0	£26.53	-	-	-
DCGW		£26.53	TNGA		£39.96	VNGA	•	£26.53	-	-	

#### **KORLOY CBN TURNING**

Known worldwide for precision, durability, and productivity. Delivering high-performance, high-quality hardened steel turning solutions.

# from **£50**.15

#### **Grade Selection**



Grade	Application			
DNC250	Medium Speed Continuous / Light Interrupted			
DNC350	Low Speed - Unstable / Heavy Interrupted			

#### **Cutting Edge Selection**

Style	Application
Medium	Best for medium machining
Sharp	Best for finish turning
Stable	Best for roughing / heavy duty

#### Range & Price Summary

St	yle	From	St	yle	From	St	yle	From	St	yle	From
ccgw	•	£50.15	DNGA	•	£50.15	TNGA	<b>&gt;</b>	£72.25	VNGA	<b>(</b>	£50.15
CNGA	•	£50.15	SNGA	•	£50.15	VBGW	•	£50.15	-	-	-
DCGW	•	£50.15	TCGW		£50.15	VCGW	•	£50.15	-	-	





# **COST EFFECTIVE CBN TURNING INSERTS FROM WORLDIA**

#### WORLDIA COATED CBN TURNING INSERTS

For Hardened Steel Turning < 70HRC



#### **Grade Selection**

Grade	Application	Cutting Data
MHN10C	High Speed Continuous Turning	vc: 150-250 m/min f: 0.03-0.2 mm ap: <0.3 mm
MHN20C	Medium Speed Continuous/ Light Interrupted	vc: 50-150 m/min f: 0.03-0.2 mm ap: <0.3 mm
MHN30C	Low Speed - Unstable Machining / Heavy Interrupted	vc: 30-120 m/min f: 0.03-0.2 mm ap: <0.3 mm



Style		ISO Code	Cutting Edges	MHN10C	MHN20C	MHN30C	List Price	Offer Price
		CCGW060202-2N		MN00536	MN00555	-		
		CCGW060204-2N		MN00529	MN00557	MN00558		
		CCGW060208-2N		MN00559	MN00560	MN00561		
	-	CCGW09T302-2N		MN00562	MN00547	MN00563		
CCGW		CCGW09T304-2N	2	MN00511	MN00540	MN00532	£31.21	£26.53
		CCGW09T308-2N		MN00494	MN00545	MN00533		
		CCGW09T312-2N		-	MN00565	MN00566		
		CCGW120404-2N		MN00859	MN00860	-		
		CCGW120408-2N		MN00812	-	MN00725		
		CNGA120402-2N		MN00780	MN00781	-		
		CNGA120404-2N		MN00525	MN00497	MN00567		
CNGA		CNGA120408-2N	2	MN00509	MN00498	MN00510	£31.21	£26.53
		CNGA120412-2N		-	MN00807	MN00654		
		CNGA120416-2N		-	MN00823	MN00824		
		DCGW070202-2N		MN00787	MN00788	-	£31.21	
		DCGW070204-2N	2	MN00554	MN00548	MN00570		
	0	DCGW070208-2N		MN00571	MN00572	MN00573		
DCGW		DCGW11T302-2N		MN00550	MN00574	MN00575		£26.53
		DCGW11T304-2N		MN00520	MN00549	MN00515		
		DCGW11T308-2N		MN00576	MN00521	MN00577		
		DCGW11T312-2N		-	MN00828	-		
		DNGA150404-2N		MN00578	MN00541	MN00579		
		DNGA150408-2N		MN00580	MN00546	MN00528		
DNOA		DNGA150412-2N	0	MN00581	MN00582	MN00583	004.04	200 50
DNGA		DNGA150604-2N	2	MN00584	MN00585	MN00586	£31.21	£26.53
		DNGA150608-2N		MN00524	MN00514	MN00513		
		DNGA150612-2N		-	MN00830	MN00668		
		TCGW090202-3N		MN00815	-	-		
		TCGW090204-3N		MN00587	MN00588	MN00589		
		TCGW090208-3N		MN00590	MN00591	MN00592		
T00\M	6	TCGW110204-3N		MN00552	MN00593	MN00594		
TCGW	7	TCGW110208-3N	3	MN00526	MN00595	MN00596	£47.01	£39.96
		TCGW110304-3N		MN00597	MN00598	MN00599		
		TCGW110308-3N		MN00600	MN00601	MN00534		
		TCGW16T304-3N		-	MN00816	-		





# **COST EFFECTIVE CBN TURNING INSERTS FROM WORLDIA**

#### WORLDIA COATED CBN TURNING INSERTS (CONTINUED)

For Hardened Steel Turning < 70HRC

#### **Grade Selection**

Grade	Application	Cutting Data
MHN10C	High Speed Continuous Turning	vc: 150-250 m/min f: 0.03-0.2 mm ap: <0.3 mm
MHN20C	Medium Speed Continuous/ Light Interrupted	vc: 50-150 m/min f: 0.03-0.2 mm ap: <0.3 mm
MHN30C	Low Speed - Unstable Machining / Heavy Interrupted	vc: 30-120 m/min f: 0.03-0.2 mm ap: <0.3 mm



St	yle	ISO Code	Cutting Edges	MHN10C	MHN20C	MHN30C	List Price	Offer Price
		TNGA160402-3N		MN00842	MN00843	-		
		TNGA160404-3N		MN00503	MN00504	MN00505		
TNGA	6	TNGA160408-3N	3	MN00602	MN00495	MN00519	£47.01	£39.96
INGA		TNGA160412-3N	3	WINOOOZ	MN00604	MN00605	247.01	239.90
		TNGA160416-3N		_	MN00831	MN00832		
						WINUUGSZ		
		VBGW110302-2N		MN00775	MN00776	-		
		VBGW110304-2N		MN00782	MN00783	-		
VBGW	-	VBGW160402-2N	2	MN00695	MN00687	MN00680	£31.21	£26.53
		VBGW160404-2N		MN00690	MN00686	MN00679		
		VBGW160408-2N		MN00696	MN00688	MN00683		
		VBGW160412-2N		-	MN00689	MN00684		
		VCGW080202-2N	2	MN00790	MN00789	-	£31.21	£26.53
		VCGW080204-2N		MN00791	-	-		
		VCGW110302-2N		MN00670	MN00835	-		
VCGW	0	VCGW110304-2N		MN00626	MN00627	MN00628		
		VCGW110308-2N		MN00629	MN00630	MN00631		
		VCGW160402-2N		MN00778	MN00779	-		
		VCGW160404-2N		MN00635	MN00636	MN00637		
		VCGW160408-2N		MN00638	MN00639	MN00640		
		VNGA160402-2N		MN00632	MN00633	-		
VNGA	~ 8 >	VNGA160404-2N	2	MN00480	MN00481	MN00482	£31.21	£26.53
VNGA		VNGA160408-2N	2	MN00486	MN00487	MN00488	231.21	2.20.53
		VNGA160412-2N		-	MN00642	MN00643		
		WNGA060404-3N		MN00847	-	-		
14/1-04	6	WNGA080404-3N		MN00644	MN00499	MN00645	04-04	£39.96
WNGA	- Q	WNGA080408-3N	3	MN00500	MN00501	MN00646	£47.01	
		WNGA080412-3N		-	MN00802	-		



# HIGH PERFORMANCE CBN TURNING INSERTS FROM KORLOY

#### KORLOY COATED CBN TURNING INSERTS

For Medium Speed Hardened Steel Turning < 70HRC



#### Grade Selection & Cutting Data

Grade	Application	Cutting Data
DNC250	Medium Speed Continuous/ Light Interrupted	vc: 120-220 m/min f: 0.05-0.3 mm/rev ap: 0.05-0.3 mm



	Sauda	ISO Code	Cutting Edge	С	utting Edge Type		Link Duin	Offer Price	
3	Style	ISO Code	Cutting Edges	Medium	Stable	Sharp	List Price	Offer Price	
		2NU-CCGW060202		6-01-025092	6-01-025094	6-01-025093			
		2NU-CCGW060204		6-01-025095	6-01-025097	6-01-025096			
		2NU-CCGW060208		6-01-025622	6-01-028062	6-01-025628			
CCGW		2NU-CCGW09T302	2	6-01-027380	-	6-01-085982	£59.00	£50.15	
		2NU-CCGW09T304		6-01-015558	6-01-025099	6-01-025098			
		2NU-CCGW09T308		6-01-016407	6-01-025101	6-01-025100			
		2NU-CCGW09T312		6-01-023759	6-01-028097	6-01-028096			
	_	2NU-CNGA120402		6-01-027347	-	_			
		2NU-CNGA120404		6-01-015554	6-01-025103	6-01-025102			
CNGA		2NU-CNGA120408	2	6-01-015555	6-01-025105	6-01-025104	£59.00	£50.15	
		2NU-CNGA120412		6-01-023763	6-01-025109	6-01-025108			
		2NU-DCGW070202		6-01-030792	6-01-073884	6-01-085993			
		2NU-DCGW070204		6-01-028123	6-01-028128	6-01-028127			
		2NU-DCGW070208		6-01-028129	6-01-028136	6-01-028135			
DCGW		2NU-DCGW11T302	2	6-01-029051	6-01-028141	6-01-028140	£59.00	£50.15	
		2NU-DCGW11T304		6-01-015559	6-01-025111	6-01-025110			
		2NU-DCGW11T308		6-01-015876	6-01-025113	6-01-025112			
		2NU-DNGA150404		6-01-015566	6-01-025115	6-01-025112			
		2NU-DNGA150408 2NU-DNGA150412		6-01-015567	6-01-025117	6-01-025116			
DNGA			2	6-01-017080	6-01-025119	6-01-025118	£59.00	£50.15	
		2NU-DNGA150604		6-01-026918		6-01-085927			
		2NU-DNGA150608		6-01-026919	6-01-042889	6-01-084331			
		2NU-DNGA150612		6-01-078821	-	6-01-085935			
		2NU-SNGA120404	2	6-01-023764	6-01-028167	6-01-028166	£59.00		
SNGA		2NU-SNGA120408		6-01-023765	6-01-028174	6-01-028173		£50.15	
		2NU-SNGA120412		6-01-023766	6-01-028181	6-01-028180			
		2NU-VBGW110302		6-01-043976	-	-	£59.00		
		2NU-VBGW110208		6-01-084784	-	-			
		2NU-VBGW110304		-	6-01-028186	6-01-028185			
		2NU-VBGW110308		-	6-01-028193	6-01-028192			
VBGW		2NU-VBGW160402	2	6-01-047851	-	-		£50.15	
		2NU-VBGW160404		6-01-016371	6-01-025121	6-01-025120			
		2NU-VBGW160408		6-01-023769	6-01-025123	6-01-025122			
		2NU-VBGW160412		6-01-080935	-	-			
		2NU-VCGW110302		6-01-027382	-	6-01-086036			
		2NU-VCGW110304		6-01-044517	-	6-01-086043			
VCGW		2NU-VCGW160402	2	6-01-086052	-	6-01-086050	£59.00	£50.15	
		2NU-VCGW160404		6-01-026752	6-01-025125	6-01-025124			
		2NU-VCGW160408		6-01-026751	6-01-025127	6-01-025126			
		2NU-VNGA160402		6-01-034671	-	-			
		2NU-VNGA160404		6-01-015569	6-01-025129	6-01-025128			
VNGA		2NU-VNGA160408	2	6-01-015626	6-01-025123	6-01-025130	£59.00	£50.15	
		2NU-VNGA160412		6-01-023770	6-01-028216	6-01-028215			
		3NU-TCGW110204		6-01-046749	-	6-01-086009			
		3NU-TCGW110208		6-01-027370	6-01-027371	6-01-027369			
TCGW		3NU-TCGW110206	3	6-01-02/3/0	-	6-01-086022	£85.00	£72.25	
		3NU-TCGW16T304		6-01-060057	-	6-01-086029			
					6.01.025133				
TNICA		3NU-TNGA160404		6-01-015568	6-01-025133	6-01-025132	COT 00	070.07	
TNGA		3NU-TNGA160408	3	0.01.005==:	6-01-025135	6-01-025134	£85.00	£72.25	
		3NU-TNGA160412		6-01-023771	6-01-028232	6-01-028231			



#### KORLOY COATED CBN TURNING INSERTS

For Low Speed Hardened Steel Turning <70HRC



#### **Grade Selection & Cutting Data**

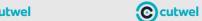
Grade	Application	Cutting Data
DNC350	Low Speed - Unstable Machining / Heavy Interrupted	vc: 90-150 m/min f: 0.05-0.3 mm/rev ap: 0.05-0.25 mm

HIGH PERFORMANCE CBN TURNING INSERTS FROM KORLOY



Low Speed - Onstable Machining / Heavy Interrupted VC: 90-150 Minimit 1: 0.05-0.3 minimev ap: 0.05-0.25 mini							
Style		ISO Code	Cutting Edges	Cutting Edge Type			
				Medium	Stable	List Price	Offer Price
ccgw		2NU-CCGW060202	2	6-01-062157	6-01-085977	£59.00	
		2NU-CCGW060204		6-01-025615	6-01-085979		
		2NU-CCGW060208		6-01-025623	-		£50.15
		2NU-CCGW09T302		6-01-027381	6-01-085985		
		2NU-CCGW09T304		6-01-024314	6-01-029078		
		2NU-CCGW09T308		6-01-025145	6-01-085990		
		2NU-CCGW120404		6-01-041476	6-01-041477		
CNGA	•	2NU-CNGA120404	2	6-01-025146	6-01-029311	£59.00	
		2NU-CNGA120408		6-01-024315	6-01-025646		
		2NU-CNGA120412		6-01-025147	6-01-025657		£50.15
		2NU-CNGA120416		6-01-048167	-		
DCGW	•	2NU-DCGW070202	2	6-01-085994	6-01-085996	£59.00	£50.15
		2NU-DCGW070204		6-01-030799	6-01-086000		
		2NU-DCGW070206		6-01-041045	-		
		2NU-DCGW070208		6-01-045395	6-01-086002		
		2NU-DCGW11T302		6-01-042826	6-01-086005		
		2NU-DCGW11T304		6-01-025148	6-01-046082		
		2NU-DCGW11T308		6-01-025149	6-01-047191		
DNGA	•	2NU-DNGA150404	2	6-01-025150	6-01-062267	£59.00	£50.15
		2NU-DNGA150408		6-01-025151	6-01-046088		
		2NU-DNGA150412		6-01-025152	6-01-046080		
		2NU-DNGA150604		6-01-045393	6-01-085929		
		2NU-DNGA150608		6-01-044149	6-01-038480		
		2NU-DNGA150612		6-01-056536	6-01-085937		
SNGA	•		2			£59.00	
		2NU-SNGA120408		6-01-085946	6-01-085948		£50.15
		2NU-SNGA120412		6-01-085952	6-01-085954		2000
VBGW	•	2NU-VBGW160404	2	6-01-025153	-	£59.00	
		2NU-VBGW160408		6-01-025154	6-01-081183		£50.15
		2NU-VBGW160412		6-01-080936	-		
		2NU-VCGW110302		6-01-086038	6-01-086040		
VCGW	•	2NU-VCGW110304	2	6-01-086045	6-01-086047	£59.00	£50.15
		2NU-VCGW160402		6-01-086053	6-01-086055		
		2NU-VCGW160404		6-01-025155	6-01-046084		
		2NU-VCGW160408		6-01-025156	6-01-086062		
VNGA		2NU-VNGA160402	2	6-01-081607	-	£59.00	
		2NU-VNGA160404		6-01-024316	6-01-046089		£50.15
		2NU-VNGA160408		6-01-025157	6-01-046092		
TCGW		3NU-TCGW110204	3	6-01-086011	6-01-086013	£85.00	
		3NU-TCGW110208		6-01-086017	6-01-086019		
		3NU-TCGW16T304		6-01-086024	6-01-086026		£72.25
		3NU-TCGW16T308		6-01-086031	6-01-086033		
TNGA	<b>'</b>	3NU-TNGA160404	3	6-01-025158	6-01-046095	£85.00	
		3NU-TNGA160408		6-01-025159	6-01-046096		£72.25
				6-01-025160			C/ E/EV
		3NU-TNGA160412		0-01-025160	6-01-046099		





# **OUR FULL RANGE OF HARDENED STEEL SOLUTIONS**



# **X5070 Blue** Milling Cutters

Nothing cuts hardened steel <HRC70 faster or longer.</p>



# **NC Mill Hardened Steel**

Cut through alloy steel, tool steel & hardened steel <60HRC at speed.



# PC2505 / PC2510 Milling Grades

High speed & high feed machining with low cutting resistance.



# i-X Mill Copy Milling System

High precision, for copy & high feed milling.



### **Dream Drill Hardened Steel**

High performance, for high hardened steel (HRC50-HRC70).



### **Hardened Steel Reamers**

Suitable for high hardness materials up to <HRC67.



# **Hardened Steel Taps**

Suitable for tapping alloy & hardened steel.



# **Hardened Steel Thread Mills**

Additional strength, ideal for use on hardened steel.

