

# Turning

**DIAMOND NEGATIVE**

**80 DEGREE**

**86 & 87 DEGREE**

**55 DEGREE**

**35 DEGREE**

**DIAMOND POSITIVE**

**80 DEGREE**

**85, 86 & 87 DEGREE**

**55 DEGREE**

**35 DEGREE**

**ROUND NEGATIVE**

**ROUND POSITIVE**

**SQUARE NEGATIVE**

**SQUARE CBN**

**SQUARE POSITIVE**

**TRIANGLE NEGATIVE**

**TRIANGLE NEGATIVE OS**

**POSITIVE TRIANGLES**

**TRIGONS**

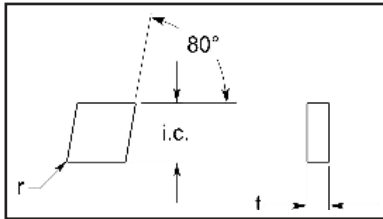
**HEAVY DUTY**

**BAR PEELING**

**RAILROAD**

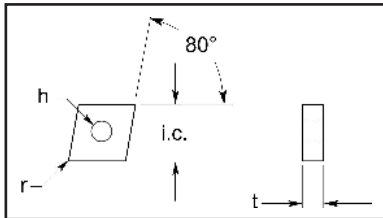
TURNING  
MILLING  
GROOVING  
DRILLING  
THREADING  
BRAZED BLANKS  
RECTANGLES STB  
WOOD WORKING  
OIL & GAS MINING  
MISC. SHAPES

## 80° Diamond Negative • variable thickness quoted on request



Part No.	Dimensional Specifications		
	i.c.	t	r
CNR320	.389/.395	.135/.143	0
CNR420	.514/.520	.135/.143	0
CNR430	.514/.520	.198/.206	0
CNR440	.514/.520	.260/.268	0
CNR4620	.478/.484	.135/.143	0
CNR520	.639/.645	.135/.143	0
CNR530	.639/.645	.198/.206	0
CNR540	.639/.645	.260/.268	0
CNR630	.764/.770	.198/.206	0
CNR638	.764/.770	.198/.206	1/8
CNR640	.764/.770	.260/.268	0

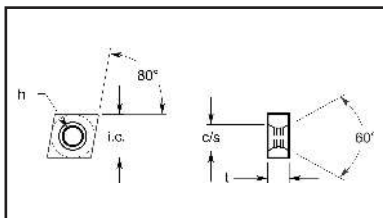
## 80° Diamond Negative With Hole • variable thickness quoted on request



Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNRA32.50	.389/.395	.166/.174	.147/.153	0
CNRA320	.389/.395	.135/.143	.147/.153	0
CNRA330	.389/.395	.198/.206	.148/.152	0
CNRA420	.514/.520	.135/.143	.200/.206	0
CNRA430	.514/.520	.198/.206	.200/.206	0
* CNRA430-030X45°	.515/.525	.195/.205	.200/.206	0
CNRA440	.514/.520	.260/.268	.200/.206	0
CNRA520	.639/.645	.135/.143	.248/.252	0
CNRA530	.639/.645	.198/.206	.248/.252	0
CNRA540	.639/.645	.260/.268	.247/.253	0
CNRA543	.639/.645	.260/.268	.247/.253	3/64
CNRA630	.764/.770	.198/.206	.309/.315	0
CNRA640	.764/.770	.260/.268	.309/.315	0
CNRA660	.764/.770	.390/.398	.310/.314	0

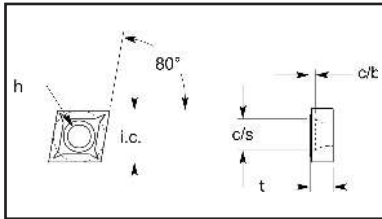
\* with chamf. both sides of hole

## 80° Diamond Negative With Hole & Countersinks



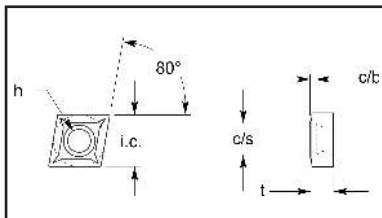
Part No.	Dimensional Specifications			
	i.c.	t	h	c/s
CNRQ3.530-60	.451/.457	.198/.206	.163/.173	.258/.268
CNRQ3.540-60	.451/.457	.260/.268	.163/.173	.269/.279

**80° Diamond Negative F5 Chipbreaker With ISO Style Hole**



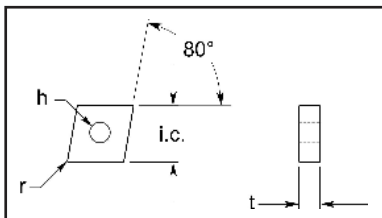
Part No.	Dimensional Specifications					
	i.c.	t	h	c/s	c/b	r
CNRT1.81.50-F5	.264/.270	.109/.115	.107/.113	.143/.149	.029/.035	0
CNRT1.81.51-F5	.264/.270	.109/.115	.107/.113	.143/.149	.029/.035	0
CNRT21.51F5	.264/.270	.109/.115	.107/.113	.143/.149	.029/.035	0
CNRT21.52F5	.264/.270	.109/.115	.107/.113	.143/.149	.029/.035	0
CNRT22.52F5	.264/.270	.170/.176	.107/.113	.143/.149	.029/.035	0
CNRT221F5	.264/.270	.140/.146	.107/.113	.143/.149	.029/.035	0
CNRT32.51F5	.389/.395	.172/.178	.170/.176	.233/.239	.027/.033	0
CNRT32.52F5	.389/.395	.172/.178	.170/.176	.233/.239	.027/.033	0
CNRT431F5	.514/.520	.204/.210	.213/.219	.292/.298	.037/.043	0
CNRT432F5	.514/.520	.204/.210	.213/.219	.292/.298	.037/.043	0

**80° Diamond Negative With ISO Style Hole**



Part No.	Dimensional Specifications				
	i.c.	t	h	c/s	c/b
CNRW1.51.50	.199/.209	.106/.114	.082/.088	.111/.117	.017/.023
CNRW1.81.50	.233/.239	.104/.110	.095/.101	.127/.133	.036/.042
CNRW21.50	.264/.270	.104/.112	.107/.113	.143/.149	.036/.042
CNRW220	.264/.270	.136/.142	.107/.113	.143/.149	.036/.042
CNRW32.50	.389/.395	.167/.173	.170/.176	.233/.239	.034/.040
CNRW32.50R/L	.389/.395	.166/.174	.158/.164	.216/.222	.043
CNRW330	.389/.395	.199/.205	.170/.176	.233/.239	.037
CNRW430	.514/.520	.198/.206	.213/.219	.292/.298	.043/.049
CNRW53.50	.639/.645	.229/.237	.221/.227	.317/.323	.039/.045
CNRW530	.639/.645	.198/.206	.221/.227	.317/.323	.039/.045

**80° Utility Diamond Negative With Hole** • variable thickness quoted on request



Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNSA431	.497/.503	.198/.206	.200/.206	1/64
CNSA432	.497/.503	.198/.206	.200/.206	1/32
CNSA433	.497/.503	.198/.206	.200/.206	3/64
CNSA434	.497/.503	.198/.206	.200/.206	1/16
CNSA436	.497/.503	.198/.206	.201/.205	3/32
CNSA443	.497/.503	.260/.268	.200/.206	3/64
CNSA446	.497/.503	.260/.268	.200/.206	3/32
CNSA542	.622/.628	.260/.268	.247/.253	1/32
CNSA543	.622/.628	.260/.268	.247/.253	3/64
CNSA642	.747/.753	.260/.268	.309/.315	1/32
CNSA643	.747/.753	.260/.268	.309/.315	3/64
CNSA644	.747/.753	.260/.268	.309/.315	1/16
CNSA646	.747/.753	.260/.268	.309/.315	3/32

TURNING

Ultra-met®

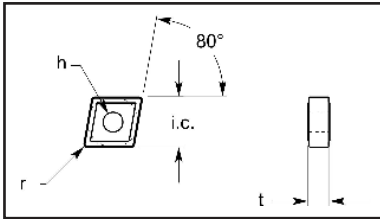
carbide technologies

FABRICATOR & TOOLMAKER  
Capabilities Catalog

Diamond Negative

MILLING

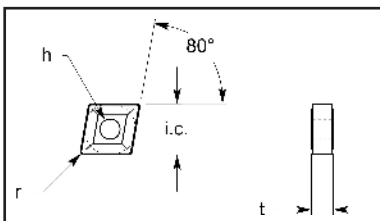
## 80° Utility Diamond Negative F1 Chipbreaker With Hole



Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNSG422F1	.497/.503	.129/.135	.200/.206	1/32
CNSG431F1	.497/.503	.191/.197	.200/.206	1/64
CNSG432F1	.497/.503	.191/.197	.200/.206	1/32
CNSG433F1	.497/.503	.191/.197	.200/.206	3/64
CNSG442F1	.497/.503	.254/.260	.200/.206	1/32

GROOVING

## 80° Utility Diamond Negative R1 Chipbreaker With Hole



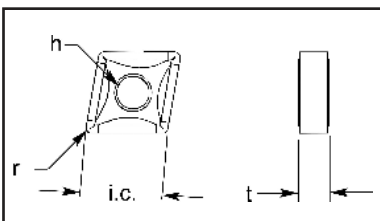
Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNSG422R1	.497/.503	.129/.135	.200/.206	1/32
CNSG432R1	.497/.503	.191/.197	.200/.206	1/32
CNSG434R1	.497/.503	.191/.197	.200/.206	1/16
CNSG442R1	.497/.503	.254/.260	.200/.206	1/32
CNSG532R1	.622/.628	.193/.199	.247/.253	1/32
CNSG542R1	.622/.628	.256/.262	.247/.253	1/32
CNSG543R1	.622/.628	.256/.262	.247/.253	3/64
CNSG544R1	.622/.628	.256/.262	.247/.253	1/16
CNSG548R1	.622/.628	.256/.262	.247/.253	1/8
CNSG634R1	.747/.753	.199/.205	.309/.315	1/16
CNSG642R1	.747/.753	.256/.262	.309/.315	1/32
CNSG643R1	.747/.753	.256/.262	.309/.315	3/64
CNSG644R1	.747/.753	.261/.267	.309/.315	1/16

DRILLING

THREADING

BRAZED  
BLANKS

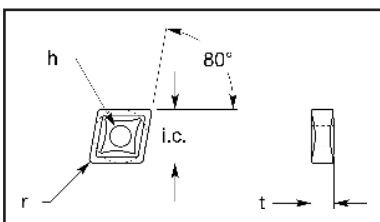
## 80° Diamond Negative 2B Chipbreaker With Hole



Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNSG432-2B	.497/.503	.189/.195	.201/.205	1/32

RECTANGLES  
STBWOOD  
WORKING

## 80° Utility Diamond Negative GP1 Chipbreaker With Hole



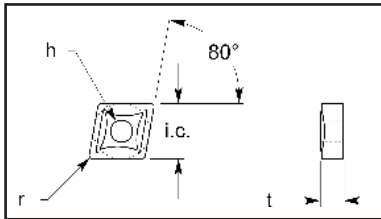
Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNSP421GP1	.497/.503	.138/.144	.201/.205	1/64
CNSP422GP1	.497/.503	.138/.144	.201/.205	1/32
CNSP431GP1	.497/.503	.200/.206	.200/.206	1/64
CNSP432GP1	.497/.503	.200/.206	.200/.206	1/32
CNSP542GP1	.622/.628	.259/.265	.247/.253	1/32
CNSP543GP1	.622/.628	.259/.265	.247/.253	3/64
CNSP632GP1	.747/.753	.200/.206	.309/.315	1/32
CNSP642GP1	.747/.753	.263/.269	.309/.315	1/32
CNSP643GP1	.747/.753	.263/.269	.309/.315	3/64
CNSP644GP1	.747/.753	.263/.269	.309/.315	1/16

OIL & GAS  
MININGMISC.  
SHAPES

**Diamond Negative**

TURNING

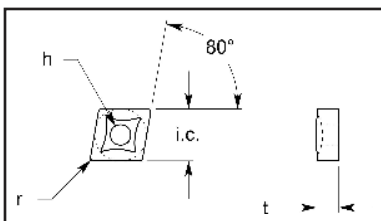
**80° Utility Diamond Negative One Sided GP1 Chipbreaker With Hole**



Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNSP542GP1-1C/B	.622/.628	.265/.271	.248/.252	1/32
CNSP543GP1-1C/B	.622/.628	.262/.268	.248/.252	3/64
CNSP644GP1/1-C/B	.747/.753	.265/.271	.310/.314	1/16

MILLING

**80° Utility Diamond Negative R5 Chipbreaker With Hole**

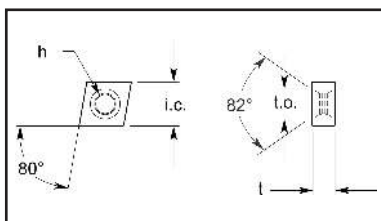


Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNSS432R5	.497/.503	.194/.200	.200/.206	1/32
CNSS642R5	.747/.753	.261/.267	.309/.315	1/32
CNSS643R5	.747/.753	.261/.267	.309/.315	3/64

GROOVING

DRILLING

**80° Diamond Negative With Hole And Dbl. Countersinks**

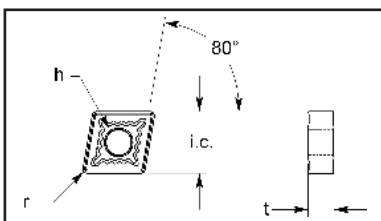


Part No.	Dimensional Specifications			
	i.c.	t	h	t.o.
SPR55R04-NEG	.580/.586	.261/.267	.207/.219	.328/.340

THREADING

BRAZED  
BLANKS

**80° Utility Diamond Negative EXA Chipbreaker With Hole**

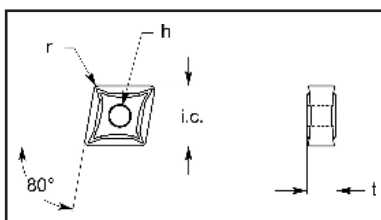


Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNSG543-EXA	.622/.628	.259/.265	.247/.253	3/64

RECTANGLES  
STB

WOOD  
WORKING

**80° Utility Diamond Negative F2 Chipbreaker With Hole**



Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNSP642F2	.747/.753	.263/.269	.309/.315	1/32

OIL & GAS  
MINING

MISC.  
SHAPES

TURNING

Ultra-met<sup>®</sup>

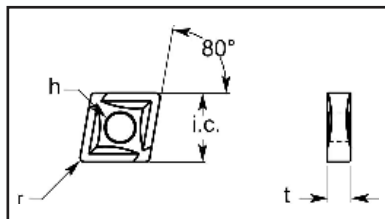
carbide technologies

FABRICATOR & TOOLMAKER  
Capabilities Catalog

Diamond Negative

MILLING

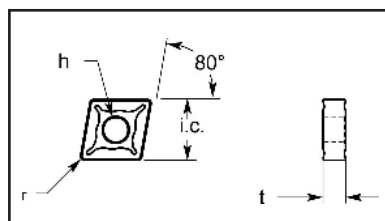
## 80° Utility Diamond Negative R4 Chipbreaker With Hole



Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNSP643R4	.747/.753	.260/.266	.309/.315	3/64

GROOVING

## 80° Utility Diamond Negative GP2 Chipbreaker With Hole

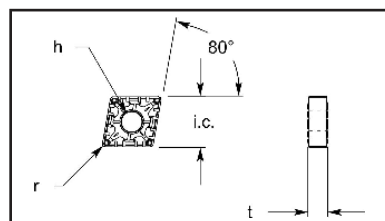


Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNSX432GP2	.497/.503	.189/.195	.200/.206	1/32

DRILLING

THREADING

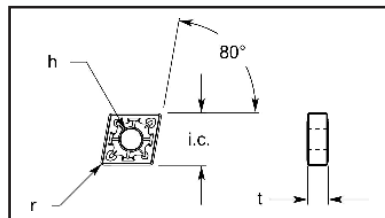
## 80° Utility Diamond Negative FA Chipbreaker With Hole



Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNSG432-FA	.497/.503	.196/.202	.200/.206	1/32

BRAZED  
BLANKSRECTANGLES  
STB

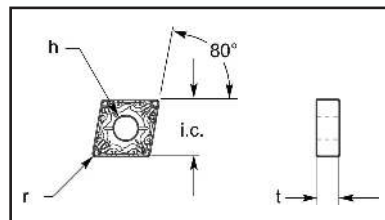
## 80° Utility Diamond Negative RA Chipbreaker With Hole



Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNSG432-RA	.497/.503	.196/.202	.200/.206	1/32

WOOD  
WORKING

## 80° Utility Diamond Negative SA Chipbreaker With Hole



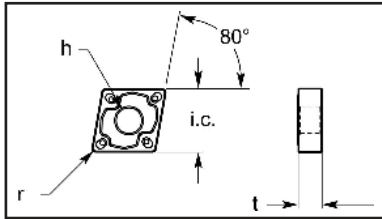
Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNSG432-SA	.497/.503	.196/.202	.200/.206	1/32

OIL & GAS  
MININGMISC.  
SHAPES

**Diamond Negative**

TURNING

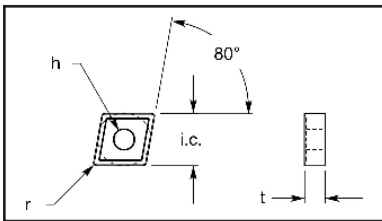
**80° Utility Diamond Negative GP3 Chipbreaker With Hole**



Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNSG432GP3	.497/.503	.195/.201	.200/.206	1/32

MILLING

**80° Utility Diamond Negative R3 Chipbreaker With Hole**

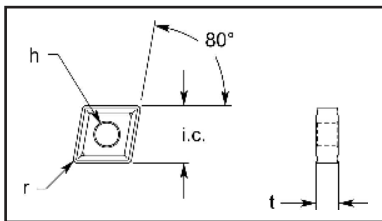


Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNSM432R3	.497/.503	.191/.197	.200/.206	1/32
CNSM643R3	.747/.753	.254/.260	.309/.315	3/64

GROOVING

DRILLING

**80° Utility Diamond Negative GP4 Chipbreaker With Hole**

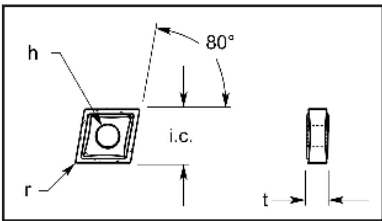


Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNSP432GP4	.497/.503	.197/.206	.200/.206	1/32

THREADING

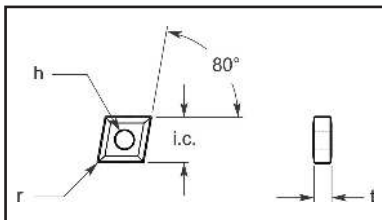
BRAZED  
BLANKS

**80° Diamond Negative Chipbreaker With Hole**



Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNRP430	.514/.520	.203/.209	.201/.205	.0125

RECTANGLES  
STB



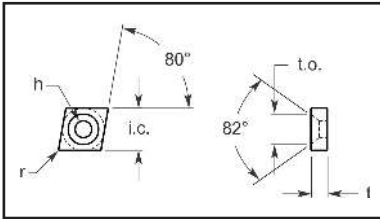
Part No.	Dimensional Specifications			
	i.c.	t	h	r
CNRG430F1	.514/.520	.197/.203	.200/.206	0

WOOD  
WORKING

OIL & GAS  
MINING

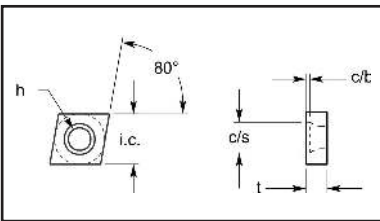
MISC.  
SHAPES

## 80° Diamond Negative With Hole &amp; Countersink



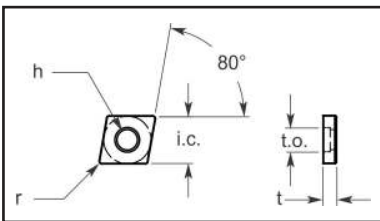
Part No.	Dimensional Specifications					
	i.c.	t	h	t.o.	c/s	r
CNRB50/51	.176/.186	.060/.070	.086/.090	.126/.130	90°	.007
CNRB430-#8FHCS	.514/.520	.198/.206	.175/.181	.373/.379	82°	0

## 80° Diamond Negative With ISO Style Hole



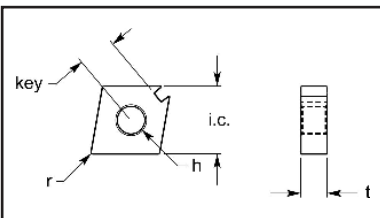
Part No.	Dimensional Specifications					
	i.c.	t	h	c/s	c/b	
DWG#IN-2191D	.639/.645	.236/.244	.221/.227	.317/.323	.039/.045	

## 80° Diamond Negative With Hole And Counterbore



Part No.	Dimensional Specifications					
	i.c.	t	h	t.o.	r	
USCN-64	.735/.745	.198/.206	.309/.315	.372/.378	3/64	

## 80° Diamond Negative Indexable CBN Pocket



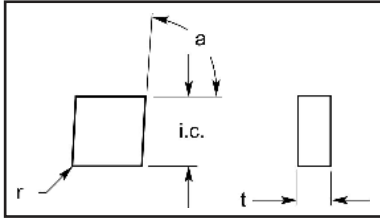
Part No.	Dimensional Specifications					
	i.c.	t	h	key	r	
CH6450	.515/.525	.195/.205	.200/.210	.264/.270	.012	



**Diamond Negative**

TURNING

**86° 87° Diamond Negative**



MPR, NPR, PRPR and UP Styles may overlap in Dimensional Specifications  
Different nomenclature is only for individual customers reference.

Part No.	Dimensional Specifications			
	i.c.	t	r	a
MNR420	.514/.520	.135/.143	0	86°
MNR430	.514/.520	.198/.206	0	86°
MNR430/87	.514/.520	.198/.206	0	87°
MNR52.50	.639/.645	.166/.174	0	86°
MNR52.52	.639/.645	.166/.174	1/32	86°
MNR520	.639/.645	.135/.143	0	86°
MNR530	.639/.645	.198/.206	0	86°
MNR532	.639/.645	.198/.206	1/32	86°
MNR550	.639/.645	.166/.174	0	86°
MNR552	.639/.645	.166/.174	1/32	86°
MNR630	.764/.770	.198/.206	0	86°
MNR640	.764/.770	.260/.268	0	86°

Part No.	Dimensional Specifications			
	i.c.	t	r	a
NNR630	.764/.770	.198/.206	0	87°
NNR640	.764/.770	.260/.268	0	87°

Part No.	Dimensional Specifications			
	i.c.	t	r	a
PRNR630	.764/.770	.198/.206	0	87°

Part No.	Dimensional Specifications			
	i.c.	t	r	a
UP66N	.764/.770	.198/.206	0	87°

Part No.	Dimensional Specifications			
	i.c.	t	r	a
UFMB90N19	.769/.775	.232/.238	0	87°

MILLING

GROOVING

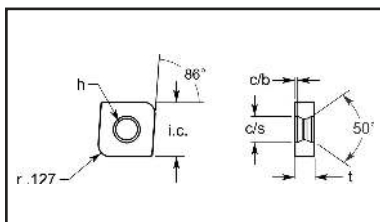
DRILLING

THREADING

BRAZED  
BLANKS

RECTANGLES  
STB

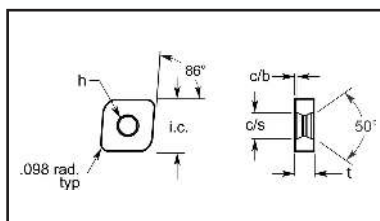
**86° 87° Diamond Negative With Hole & Countersinks**



Part No.	Dimensional Specifications				
	i.c.	t	h	c/s	c/b
DWG#E-22072-020BLANK	.605/.611	.207/.215	.230/.236	.286/.292	.025/.031

WOOD  
WORKING

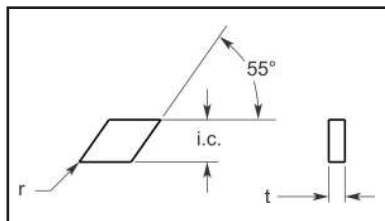
**86° 87° Diamond Negative With Hole and Dbl. Countersinks**



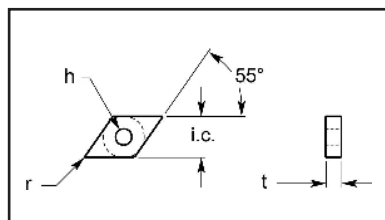
Part No.	Dimensional Specifications				
	i.c.	t	h	c/s	c/b
DWG#E23139	.642/.652	.209/.215	.228/.232	.295/.299	.098

OIL & GAS  
MINING

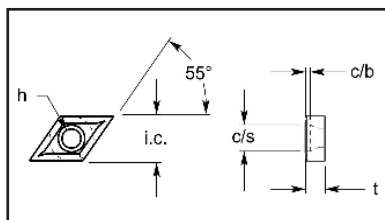
MISC.  
SHAPES

**55° Diamond Negative** • variable thickness quoted on request

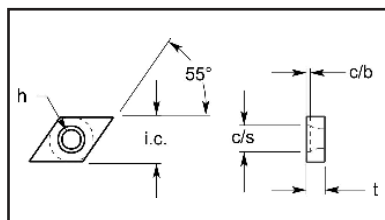
Part No.	Dimensional Specifications		
	i.c.	t	r
DNR32.50	.389/.395	.166/.174	0
DNR320	.389/.395	.135/.143	0
DNR330	.389/.395	.198/.206	0
DNR430	.514/.520	.198/.206	0
DNR530	.639/.645	.198/.206	0
DNR540	.639/.645	.260/.268	0

**55° Diamond Negative With Hole** • variable thickness quoted on request

Part No.	Dimensional Specifications			
	i.c.	t	h	r
DNRA2.530	.328/.338	.200/.208	.147/.153	0
DNRA32.50	.389/.395	.166/.174	.148/.152	0
DNRA320	.389/.395	.135/.143	.147/.153	0
DNRA330	.389/.395	.198/.206	.147/.153	0
DNRA360	.389/.395	.385/.393	.147/.153	0
DNRA430	.514/.520	.198/.206	.200/.206	0
DNRA440	.514/.520	.260/.268	.200/.206	0
DNRA4630	.478/.484	.198/.206	.200/.206	0
DNRA530	.639/.645	.198/.206	.248/.252	0
DNRA530.635IC	.649/.655	.198/.206	.185/.189	0
DNRA540	.639/.645	.260/.268	.248/.252	0
DNRA540.635	.649/.655	.260/.268	.185/.189	0
DNRA560.635	.649/.655	.285/.393	.185/.189	0

**55° Diamond Negative F5 Chipbreaker With ISO Style Hole**

Part No.	Dimensional Specifications				
	i.c.	t	h	c/s	c/b
DNRT21.51F5	.264/.270	.109/.115	.107/.113	.143/.149	.029/.035
DNRT21.52F5	.264/.270	.109/.115	.107/.113	.143/.149	.029/.035
DNRT32.51F5	.389/.395	.172/.178	.170/.176	.233/.239	.040/.046
DNRT32.52F5	.389/.395	.172/.178	.170/.176	.233/.239	.040/.046
DNRT431F5	.514/.520	.205/.211	.213/.219	.292/.298	.037/.043
DNRT432F5	.514/.520	.205/.211	.213/.219	.292/.298	.037/.043

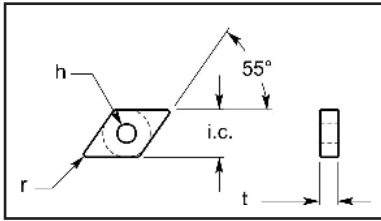
**55° Diamond Negative With ISO Style Hole**

Part No.	Dimensional Specifications				
	i.c.	t	h	c/s	c/b
DNRW21.50	.264/.270	.104/.112	.107/.113	.143/.149	.036/.042
DNRW220	.264/.270	.135/.143	.107/.113	.143/.149	.036/.042
DNRW32.50	.389/.395	.166/.174	.170/.176	.233/.239	.046/.052
DNRW330	.389/.395	.198/.206	.170/.176	.233/.239	.046/.052
DNRW430	.514/.520	.198/.206	.213/.219	.292/.298	.043/.049

**Diamond Negative**

TURNING

**55° Utility Diamond Negative With Hole** • variable thickness quoted on request

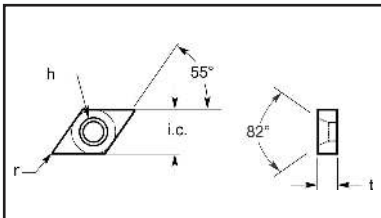


Part No.	Dimensional Specifications			
	i.c.	t	h	r
DNSA431	.497/.503	.198/.206	.200/.206	1/64
DNSA432	.497/.503	.198/.206	.200/.206	1/32
DNSA433	.497/.503	.198/.206	.200/.206	3/64
DNSA434	.497/.503	.198/.206	.200/.206	1/16
DNSA443	.497/.503	.260/.268	.200/.206	3/64
DNSA444	.497/.503	.260/.268	.200/.206	1/16
DNSA533	.622/.628	.198/.206	.247/.253	3/64
DNSA542	.622/.628	.260/.268	.247/.253	1/32
DNSA543	.622/.628	.260/.268	.247/.253	3/64
DNSA544	.622/.628	.267/.273	.247/.253	1/16

MILLING

GROOVING

**55° Diamond Negative With Hole**

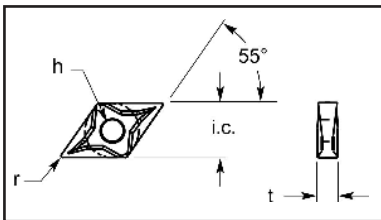


Part No.	Dimensional Specifications			
	i.c.	t	h	r
DNRB320	.393/.399	.135/.143	.153/.159	0

DRILLING

THREADING

**55° Diamond Negative With P Top Form and Hole**

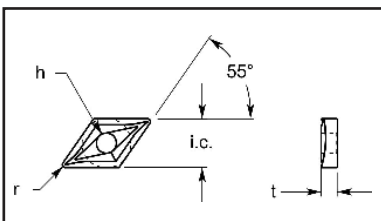


Part No.	Dimensional Specifications			
	i.c.	t	h	r
DNRP430	.514/.520	.193/.194	.200/.206	.0125

BRAZED  
BLANKS

RECTANGLES  
STB

**55° Utility Diamond Negative R5 Chipbreaker With Hole**



Part No.	Dimensional Specifications			
	i.c.	t	h	r
DNSS432R5	.497/.503	.195/.201	.200/.206	1/32
DNSS442R5	.497/.503	.258/.264	.200/.206	1/32
DNSS532R5	.622/.628	.200/.206	.247/.253	1/32
DNSS542R5	.622/.628	.260/.266	.248/.252	1/32

WOOD  
WORKING

OIL & GAS  
MINING

MISC.  
SHAPES

TURNING

Ultra-met®

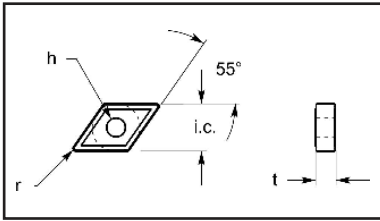
carbide technologies

FABRICATOR & TOOLMAKER  
Capabilities Catalog

Diamond Negative

MILLING

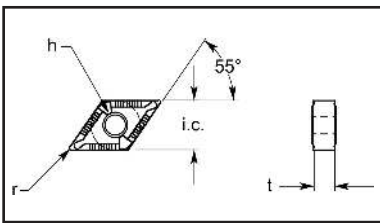
## 55° Utility Diamond Negative F1 Chipbreaker With Hole



Part No.	Dimensional Specifications			
	i.c.	t	h	r
DNSG431F1	.497/.503	.191/.197	.200/.206	1/64
DNSG432F1	.497/.503	.191/.197	.200/.206	1/32
DNSG441F1	.497/.503	.254/.260	.200/.206	1/64
DNSG442F1	.497/.503	.254/.260	.200/.206	1/32

GROOVING

## 55° Utility Diamond Negative GP8 Chipbreaker With Hole

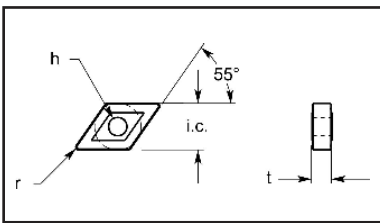


Part No.	Dimensional Specifications			
	i.c.	t	h	r
DNSG433GP8	.497/.503	.202/.208	.201/.205	3/64
DNSG443GP8	.497/.503	.264/.270	.201/.205	3/64

DRILLING

THREADING

## 55° Utility Diamond Negative R1 Chipbreaker With Hole

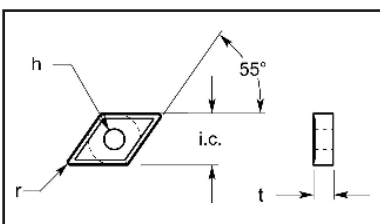


Part No.	Dimensional Specifications			
	i.c.	t	h	r
DNSG532R1	.622/.628	.196/.202	.247/.253	1/32
* DNSG532R1-OS	.635/.650	.196/.202	.247/.253	1/32
DNSG533R1	.622/.628	.196/.202	.247/.253	3/64
DNSG542R1	.622/.628	.261/.267	.247/.253	1/32
DNSG543R1	.622/.628	.261/.267	.247/.253	3/64

\* No grind stock on periphery

BRAZED  
BLANKSRECTANGLES  
STB

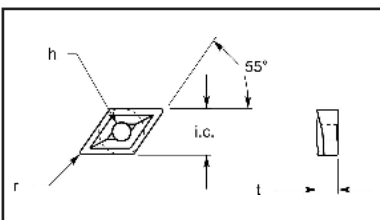
## 55° Utility Diamond Negative R3 Chipbreaker With Hole



Part No.	Dimensional Specifications			
	i.c.	t	h	r
DNSM432R3	.497/.503	.192/.198	.200/.206	1/32
DNSM542R3	.622/.628	.254/.260	.248/.253	1/32
DNSM543R3	.622/.628	.254/.260	.248/.253	3/64

WOOD  
WORKINGOIL & GAS  
MINING

## 55° Utility Diamond Negative GP1 Chipbreaker With Hole



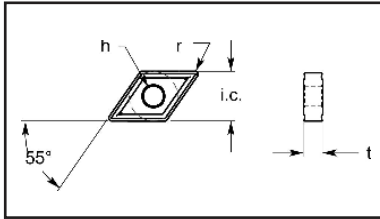
Part No.	Dimensional Specifications			
	i.c.	t	h	r
DNSP431GP1	.497/.503	.198/.204	.200/.206	1/64
DNSP432GP1	.497/.503	.198/.204	.200/.206	1/32
DNSP433GP1	.497/.503	.198/.204	.200/.206	3/64
DNSP442GP1	.497/.503	.261/.267	.200/.206	1/32
DNSP532GP1	.622/.628	.198/.204	.247/.253	1/32
DNSP533GP1	.622/.628	.198/.204	.247/.253	3/64
DNSP542GP1	.622/.628	.261/.267	.247/.253	1/32
DNSP543GP1	.622/.628	.261/.267	.247/.253	3/64

MISC.  
SHAPES

**Diamond Negative**

TURNING

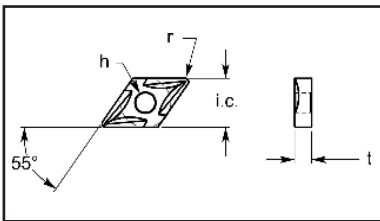
**55° Utility Diamond Negative GP4 Chipbreaker With Hole**



Part No.	Dimensional Specifications			
	i.c.	t	h	r
DNSP431GP4	.497/.503	.193/.199	.200/.206	1/64
DNSP432GP4	.497/.503	.193/.199	.200/.206	1/32

MILLING

**55° Utility Diamond Negative R4 Chipbreaker With Hole**

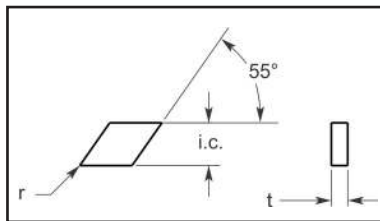


Part No.	Dimensional Specifications			
	i.c.	t	h	r
DNSP543R4	.622/.628	.260/.266	.247/.253	3/64

GROOVING

DRILLING

**55° Diamond Negative**

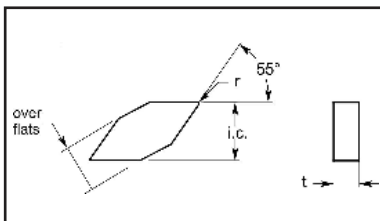


Part No.	Dimensional Specifications		
	i.c.	t	r
DNS544	.622/.628	.267/.273	1/16

THREADING

BRAZED  
BLANKS

**55° Diamond Negative With Flats**

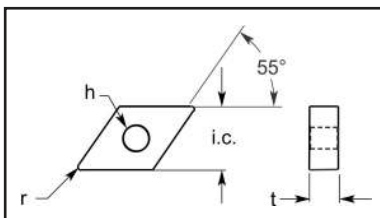


Part No.	Dimensional Specifications			
	i.c.	t	over flats	r
DNR320F	.389/.395	.135/.143	.295/.301	0
DNR531F	.639/.645	.198/.206	.464/.470	1/64
DNRT320F	.410/.416	.135/.143	.263/.269	0
DNR4620F	.478/.484	.135/.143	.483	0
DNR4630F	.478/.484	.198/.206	.483	0

RECTANGLES  
STB

WOOD  
WORKING

**55° Utility Diamond Negative With Hole** variable thickness quoted on request

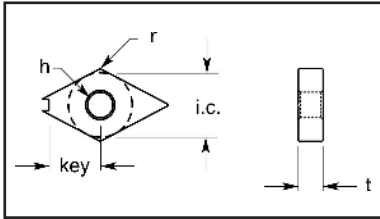


Part No.	Dimensional Specifications			
	i.c.	t	h	r
DNXA431	.504/.508	.198/.206	.200/.206	1/64

OIL & GAS  
MINING

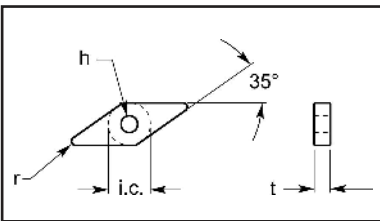
MISC.  
SHAPES

## 55° Diamond Negative Indexable CBN Pocket



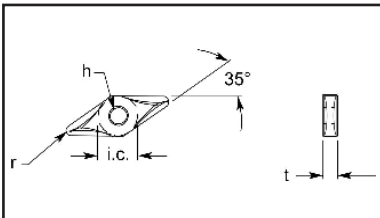
Part No.	Dimensional Specifications				
	i.c.	t	h	key	r
LX-0881-3	.512/.522	.195/.205	.200/.210	.412/.418	.012
LX-0604-1T	.512/.522	.195/.205	.200/.210	.388/.394	.012

## 35° Diamond Negative With Hole • variable thickness quoted on request



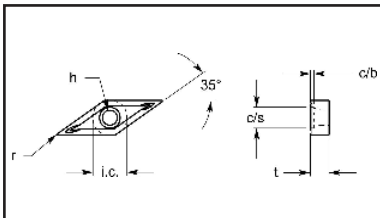
Part No.	Dimensional Specifications			
	i.c.	t	h	r
VNRA321	.389/.395	.135/.143	.147/.153	1/64
VNRA330	.389/.395	.202/.207	.147/.153	0
VNRA331	.389/.395	.202/.207	.147/.153	1/64
VNRA331/CITD	.389/.395	.202/.207	.148/.152	1/64
VNRA421	.514/.520	.140/.145	.201/.205	1/64
VNRA43.51	.520/.525	.230/.236	.200/.206	1/64
VNRA431	.520/.525	.202/.208	.200/.206	1/64
VNRA441	.520/.525	.265/.270	.201/.205	1/64

## 35° Diamond Negative With P Top Form and Hole



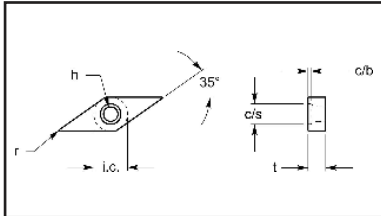
Part No.	Dimensional Specifications			
	i.c.	t	h	r
VNRP330	.389/.395	.194/.200	.148/.152	.0125
VNRP332	.389/.395	.194/.200	.148/.152	.040

## 35° Diamond Negative F5 Chipbreaker With ISO Style Hole



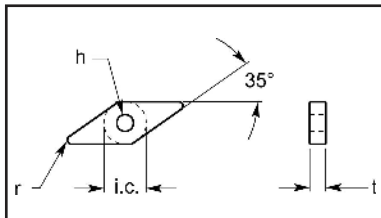
Part No.	Dimensional Specifications					
	i.c.	t	h	c/s	c/b	r
VNRT21.51F5	.264/.270	.109/.115	.108/.112	.143/.149	.028/.036	1/64
VNRT21.52F5	.264/.270	.109/.115	.108/.112	.143/.149	.028/.036	1/64
VNRT221F5	.264/.270	.141/.147	.108/.112	.143/.149	.028/.036	1/64
VNRT222F5	.264/.270	.141/.147	.108/.112	.143/.149	.028/.036	1/64
VNRT32.51F5	.389/.395	.173/.179	.170/.176	.233/.239	.038/.044	0
VNRT32.52F5	.389/.395	.173/.179	.170/.176	.233/.239	.038/.044	0
VNRT32.53F5	.389/.395	.173/.179	.170/.176	.233/.239	.038/.044	0
VNRT331F5	.389/.395	.204/.211	.170/.176	.233/.239	.038/.044	0
VNRT332F5	.389/.395	.204/.211	.170/.176	.233/.239	.038/.044	0
VNRT333F5	.389/.395	.204/.211	.170/.176	.233/.239	.038/.044	0

### 35° Diamond Negative With ISO Style Hole



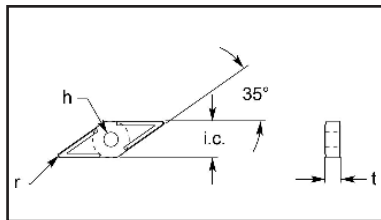
Part No.	Dimensional Specifications					
	i.c.	t	h	c/s	c/b	r
VNRW21.51	.264/.270	.104/.112	.107/.113	.155/.160	.019/.027	1/64
VNRW221	.264/.270	.135/.143	.107/.113	.155/.160	.019/.027	1/64
VNRW32.50	.389/.395	.166/.174	.170/.176	.233/.239	.046/.052	0
VNRW330	.389/.395	.198/.206	.170/.176	.233/.239	.046/.052	0

### 35° Utility Diamond Negative With Hole • variable thickness quoted on request



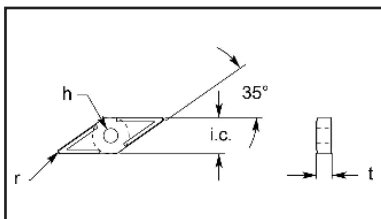
Part No.	Dimensional Specifications			
	i.c.	t	h	r
VNSA331	.373/.377	.198/.206	.147/.153	1/64
VNSA332	.373/.377	.198/.206	.147/.153	1/32
VNSA333	.373/.377	.198/.206	.147/.153	3/64
VNSA432	.497/.503	.202/.207	.200/.206	1/32
VNSA442	.497/.503	.265/.270	.200/.206	1/32

### 35° Utility Diamond Negative F1 Chipbreaker With Hole



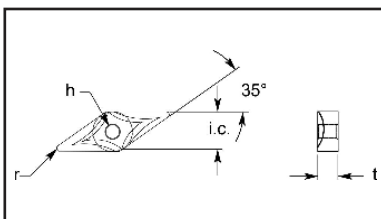
Part No.	Dimensional Specifications			
	i.c.	t	h	r
VNSG331F1	.373/.377	.193/.199	.148/.152	1/64
VNSG332F1	.373/.377	.193/.199	.148/.152	1/32
VNSG333F1	.373/.377	.191/.197	.148/.152	3/64
VNSG432F1	.497/.503	.194/.200	.200/.206	1/32
VNSG442F1	.497/.503	.259/.265	.200/.206	1/32

### 35° Utility Diamond Negative F1-3 Chipbreaker With Hole

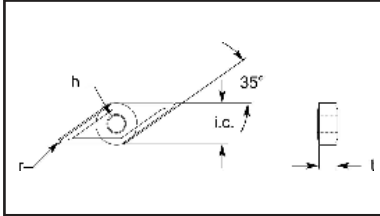


Part No.	Dimensional Specifications			
	i.c.	t	h	r
VNSG432F1-3	.497/.503	.194/.200	.230/.236	1/32
VNSG433F1-3	.497/.503	.194/.200	.230/.236	3/64
VNSG434F1-3	.497/.503	.194/.200	.230/.236	1/16
VNSG442F1-3	.497/.503	.259/.265	.230/.236	1/32

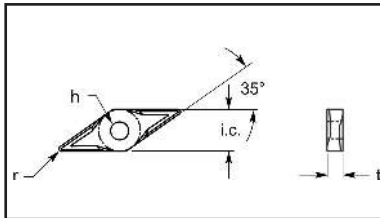
### 35° Utility Diamond Negative GP1 Chipbreaker With Hole



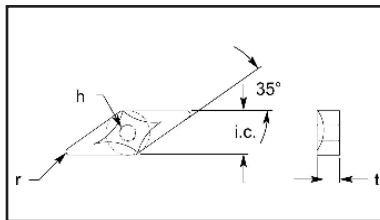
Part No.	Dimensional Specifications			
	i.c.	t	h	r
VNSP322GP1	.373/.377	.138/.144	.148/.152	1/32
VNSP331GP1	.373/.377	.194/.200	.148/.152	1/64
VNSP332GP1	.373/.377	.194/.200	.148/.152	1/32

**35° Utility Diamond Negative GP4 Chipbreaker With Hole**

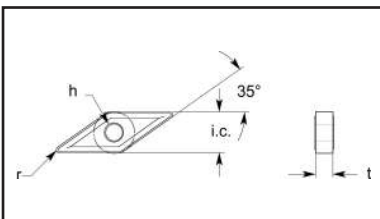
Part No.	Dimensional Specifications			
	i.c.	t	h	r
VNSP331GP4	.373/.377	.192/.198	.148/.152	1/64
VNSP332GP4	.373/.377	.192/.198	.148/.152	1/32

**35° Utility Diamond Negative F2 Chipbreaker With Hole**

Part No.	Dimensional Specifications			
	i.c.	t	h	r
VNSP332F2	.373/.377	.200/.206	.148/.152	1/32

**35° Utility Diamond Negative R5 Chipbreaker With Hole**

Part No.	Dimensional Specifications			
	i.c.	t	h	r
VNSS322R5	.373/.377	.132/.138	.148/.152	1/32
VNSS331R5	.373/.377	.194/.200	.148/.152	1/64
VNSS332R5	.373/.377	.194/.200	.148/.152	1/32
VNSS333R5	.373/.377	.194/.200	.148/.152	3/64

**NEW 35° Diamond Negative F1 Chipbreaker With Hole**

Part No.	Dimensional Specifications			
	i.c.	t	h	r
VNRG330F1	.389/.395	.192/.198	.145/.152	0



**Diamond Negative**















