

Grooving

**CUT OFF
DOGBONES
INTERPOLATE GROOVER
U-NOTCH
VEE BOTTOMS**

TURNING

MILLING

GROOVING

DRILLING

THREADING

BRAZED
BLANKSRECTANGLES
STBWOOD
WORKINGOIL & GAS
MININGMISC.
SHAPES

Ultra-met®

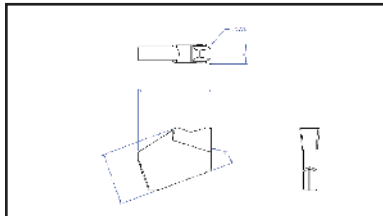
carbide technologies

FABRICATOR & TOOLMAKER
Capabilities Catalog

Cut Offs



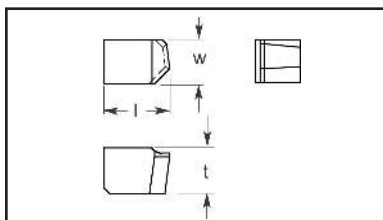
Cut Offs - GTN Self Grip



Part No.	Dimensional Specifications		
	t	w	l
UGTN-2.4	.245/.255	.091/.097	.353/.363
UGTN-3	0.287	.1155/.1205	0.425
UGTN-4.8	.308/.318	.186/.192	.418/.428
UGTN-5	.290/.300	.198/.204	.428/.438
UGTN-6	.290/.300	.249/.255	.428/.438



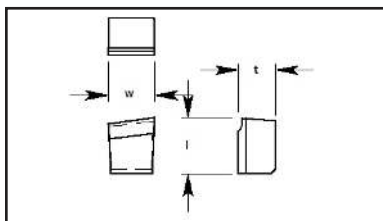
Cut Offs



Part No.	Dimensional Specifications		
	t	w	l
250X260X375-BT	.257/.263	.247/.253	.372/.378



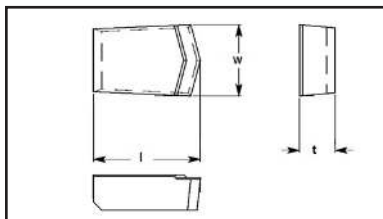
Cut Offs



Part No.	Dimensional Specifications		
	t	w	l
250X312X375-UM	.247/.253	.309/.315	.372/.378



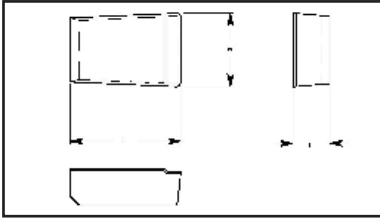
Cut Offs



Part No.	Dimensional Specifications		
	t	w	l
D&T225	.245/.255	.495/.505	.745/.755

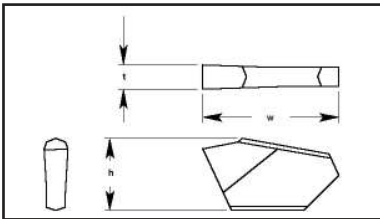
Cut Offs

NEW Cut Offs



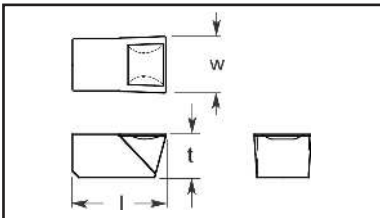
Part No.	Dimensional Specifications		
	t	w	l
D&T576	.245/.255	.495/.505	.745/.755

NEW Cut Offs



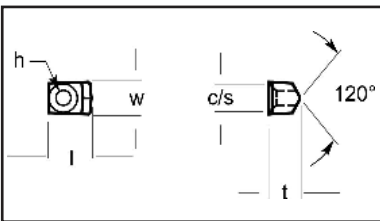
Part No.	Dimensional Specifications		
	t	w	l
DWG#6019	.368	.1205/.1265	.687/.697

NEW Cut Offs



Part No.	Dimensional Specifications		
	t	w	l
SK-1770	.139/.145	.185/.189	.301/.311
SK-1672	.139/.145	.185/.189	.301/.311

Cutoff Vee Bottom With Hole And Countersink



Part No.	Dimensional Specifications				
	t	w	l	h	c/s
DWG#U-5223	.476/.482	.497/.503	.653/.659	.215/.221	427/.431

TURNING

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BRAZED
BLANKS

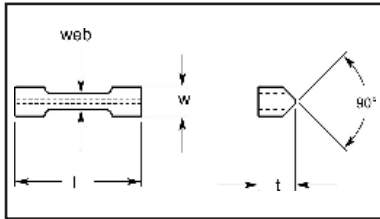
RECTANGLES
STB

WOOD
WORKING

OIL & GAS
MINING

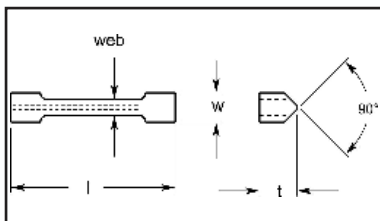
MISC.
SHAPES

Dog Bone Style



Part No.	Dimensional Specifications			
	t	w	l	web
UDB125	.261/.267	.139/.145	1.145/1.155	.102/.110
UDB156	.261/.267	.170/.176	1.145/1.155	.102/.110
UDB188	.261/.267	.200/.210	1.145/1.155	.140/.148
UDB218	.261/.267	.231/.241	1.145/1.155	.140/.148
UDB250A	.261/.267	.262/.272	1.145/1.155	.140/.148
UDB250B	.338/.344	.262/.272	1.145/1.155	.140/.148
UDB281A	.261/.267	.296/.304	1.145/1.155	.198/.206
UDB281B	.338/.344	.296/.304	1.145/1.155	.198/.206
UDB312	.338/.344	.324/.334	1.145/1.155	.198/.206
UDB375	.338/.344	.398/.408	1.145/1.155	.272/.280
UGC4187	.342/.352	.202/.212	1.020/1.040	.140/.148

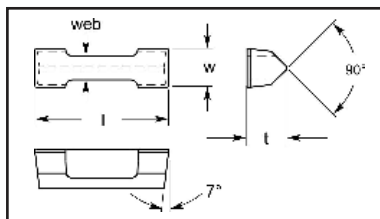
Dog Bone Style - Long



Part No.	Dimensional Specifications			
	t	w	l	web
UDB188-1.500LG	.200/.210	.203/.213	1.520/1.540	.096/.106
UDB250-1.500LG	.255/.265	.265/.275	1.520/1.540	.134/.144
UDB250B-1.500LG	.336/.346	.265/.275	1.520/1.540	.134/.144
UDB312-1.500LG	.350/.360	.327/.337	1.520/1.540	.192/.202
UDB375-1.500LG	.350/.360	.401/.501	1.520/1.540	.266/.276



Positive Dog Bone Style

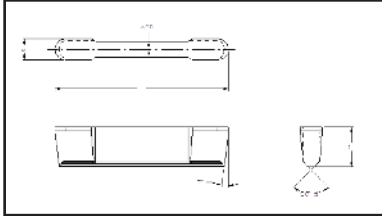


Part No.	Dimensional Specifications			
	t	w	l	web
UDB125-7DEG	.260/.268	.137/.147	1.140/1.160	.101/.111
UDB156-7DEG	.260/.268	.168/.178	1.140/1.160	.101/.111
UDB188-7DEG	.260/.268	.200/.210	1.145/1.165	.139/.149
UDB218-7DEG	.260/.268	.231/.241	1.140/1.160	.139/.149
UDB312-7DEG	.337/.345	.328/.338	1.145/1.165	.197/.207
UDB375-7DEG	.337/.345	.398/.408	1.140/1.160	.271/.281
UDB250A-7DEG	.260/.268	.262/.272	1.140/1.160	.139/.149
UDB250B-7DEG	.337/.345	.265/.275	1.145/1.165	.139/.149
UDB281A-7DEG	.260/.268	.295/.305	1.140/1.160	.197/.207
UDB281B-7DEG	.337/.345	.295/.305	1.140/1.160	.197/.207

Dog Bones



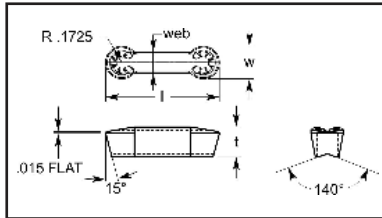
Positive Dog Bone Style - Full Radius



Part No.	Dimensional Specifications			
	t	w	l	web
UDB125FR-7DEG	.260/.268	.137/.145	1.140/1.160	.099/.109
UDB156FR-7DEG	.260/.268	.168/.178	1.140/1.160	.099/.109
UDB188FR-7DEG	.260/.268	.200/.210	1.145/1.165	.139/.149
UDB250BFR-7DEG	.337/.345	.265/.275	1.145/1.165	.139/.149
UDB260BFR-7DEG	.337/.345	.275/.285	1.140/1.160	.139/.149
UDB375FR-7DEG	.337/.345	.398/.408	1.140/1.160	.271/.281

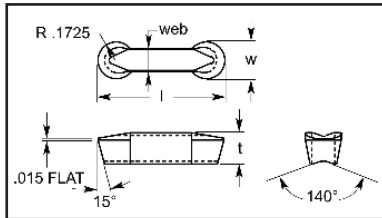
Inverted Vee Style

Inverted Vee Style



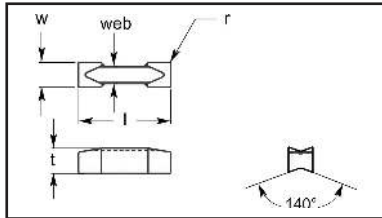
Part No.	Dimensional Specifications			
	t	w	l	web
UGDMY840FR	.319/.325	.342/.348	1.205/1.215	.218/.226

Inverted Vee Style



Part No.	Dimensional Specifications			
	t	w	l	web
UGIDA8040-FR	.319/.325	.342/.348	1.205/1.215	.218/.226

Inverted Vee Style



Part No.	Dimensional Specifications			
	t	w	l	web
UGIDA8040-MOD	.331/.339	.319/.325	1.195/1.205	.218/.226

TURNING

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STB

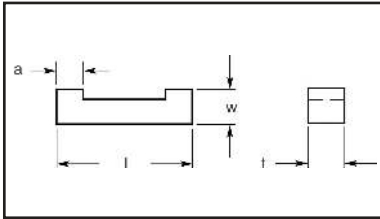
WOOD
WORKING

OIL & GAS
MINING

MISC.
SHAPES

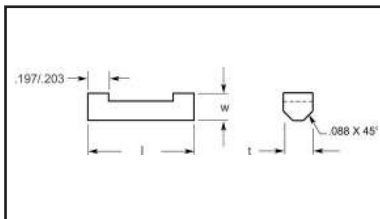
Drop Down Style

Drop Down Style



Part No.	Dimensional Specifications			
	t	w	l	a
UMB125	.148/.154	.267/.273	.890/.900	.177/.183
UMB156	.179/.185	.267/.273	.890/.900	.177/.183
UMB188	.211/.217	.257/.263	1.020/1.030	.197/.203
UMB218	.241/.247	.257/.263	1.020/1.030	.197/.203

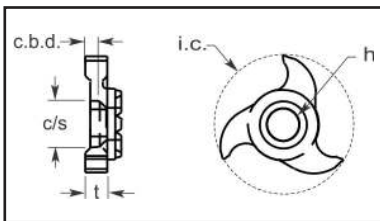
Drop Down Style



Part No.	Dimensional Specifications			
	t	w	l	l
UMB250	.273/.279	.257/.263	1.020/1.030	1.020/1.030

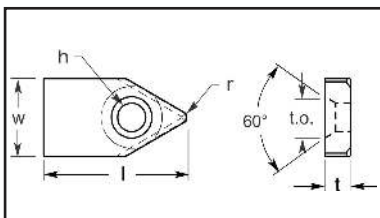
Interpolate Groover

Interpolate Groover



Part No.	Dimensional Specifications				
	i.c.	t	h	c.s.	c.b.d.
SW.125WD	.877/.887	.136/.144	.199/.207	.292/.302	.055/.065
SW.250WD	.877/.887	.261/.269	.199/.207	.292/.302	.055/.065

Elongated Plunge Groove Blank

 Elongated Plunge Groove Blank


Part No.	Dimensional Specifications					
	t	w	l	h	t.o.	r
TNRW-ED2-208T	.205/.211	.613/.623	1.148/1.158	.225/.231	.326/.332	0

U-Notch

TURNING

MILLING

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DRILLING

THREADING

BRAZED
BLANKS

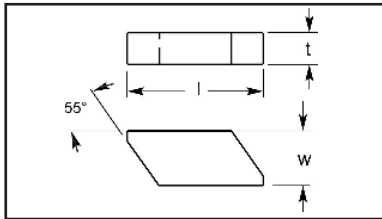
RECTANGLES
STB

WOOD
WORKING

OIL & GAS
MINING

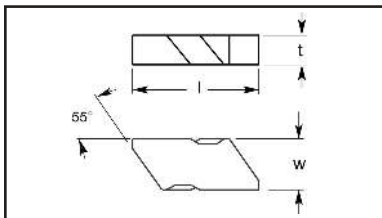
MISC.
SHAPES

U-Notch Style Flat Top • variable thickness quoted on request



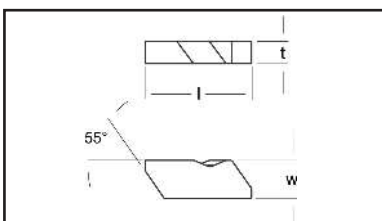
Part No.	Dimensional Specifications		
	t	w	l
ER2	.162/.168	.231/.237	.563/.573
ER3	.207/.213	.356/.362	.951/.959
ER4	.270/.275	.468/.473	1.165/1.175
ER5	.396/.404	.703/.713	1.628/1.648
ER6	.397/.403	.468/.473	1.165/1.175

U-Notch Style



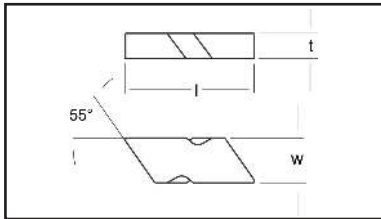
Part No.	Dimensional Specifications		
	t	w	l
ERL2	.162/.168	.231/.237	.589/.595
ERR2	.162/.168	.231/.237	.589/.595
ERL3	.207/.213	.359/.365	.983/.989
ERR3	.207/.213	.359/.365	.983/.989
ERL4	.267/.273	.470/.476	1.190/1.200
ERR4	.267/.273	.470/.476	1.190/1.200
ERL5	.366/.404	.703/.713	1.628/1.648
ERR5	.366/.404	.703/.713	1.628/1.648
ERL6	.366/.404	.468/.474	1.185/1.195
ERR6	.366/.404	.468/.474	1.185/1.195

U-Notch Style Extra Deep



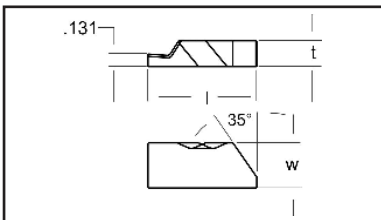
Part No.	Dimensional Specifications		
	t	w	l
ERL2-ED	.162/.168	.229/.239	.669/.689
ERR2-ED	.162/.168	.229/.239	.669/.689
ERL3-ED	.207/.213	.359/.365	1.035/1.045
ERR3-ED	.207/.213	.359/.365	1.035/1.045
ERL4-ED	.270/.276	.470/.476	1.400/1.410
ERR4-ED	.270/.276	.470/.476	1.400/1.410

U-Notch Semi-Finished Style

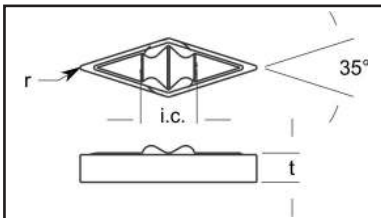


Part No.	Dimensional Specifications		
	t	w	l
ERL2GTB/PER	.149/.151	.218/.220	0.568
ERR2GTB/PER	.149/.151	.218/.220	0.568
ERL3GTB/PER	.194/.196	.343/.345	0.983
ERR3GTB/PER	.194/.196	.343/.345	0.983
ERL4GTB/PER	.254/.256	.452/.454	1.170
ERR4GTB/PER	.254/.256	.452/.454	1.170
ERL5GTB/PER	.379/.381	.687/.689	1.638
ERR5GTB/PER	.379/.381	.687/.689	1.638

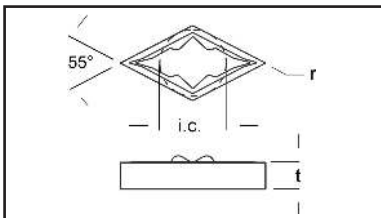
U-Notch Style



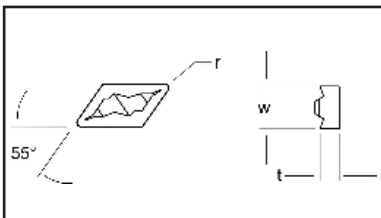
Part No.	Dimensional Specifications		
	t	w	l
ERL4.116WD	.267/.275	.468/.478	1.143/1.148



Part No.	Dimensional Specifications		
	t	i.c.	r
VNRR331	.200/.206	.389/.395	1/64
VNRR332	.200/.206	.389/.395	1/64
VNRR333	.200/.206	.389/.395	1/64



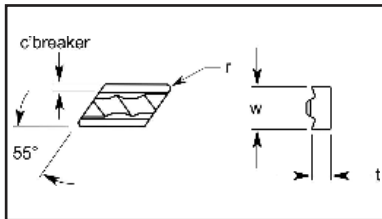
Part No.	Dimensional Specifications		
	t	i.c.	r
DNRR430	.200/.206	.514/.520	0



Part No.	Dimensional Specifications		
	t	w	r
EPRR51R-NEG	.171/.177	.262/.268	1/64

U-Notch Styles

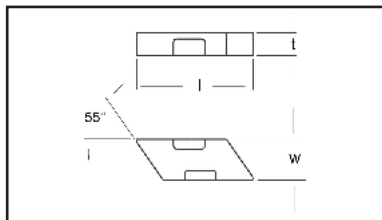
U-Notch Style



Part No.	Dimensional Specifications			
	t	w	r	c'breaker
EPL51NEG	.171/.177	.262/.268	1/64	.068
EPR51NEG	.171/.177	.262/.268	1/64	.068
EPL131F-NEG	.197/.203	.389/.395	1/64	.088
EPR131F-NEG	.197/.203	.389/.395	1/64	.088
EPL331N-NEG	.197/.203	.389/.395	1/64	.107
EPR331N-NEG	.197/.203	.389/.395	1/64	.107
EPR331F-NEG	.197/.203	.389/.395	1/64	.088
EPR-331-NEG	.247/.253	.389/.395	1/64	.135

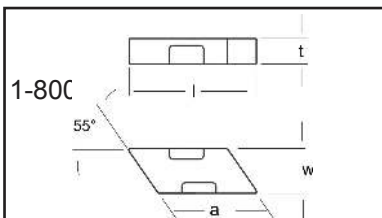
Top Lock Style

Top Lock Style



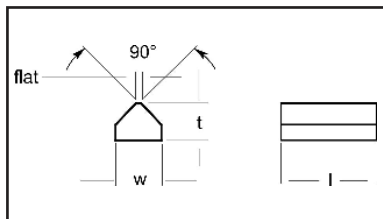
Part No.	Dimensional Specifications		
	t	w	l
ERL3-TL	.207/.213	.356/.362	.950/.960
ERR3-TL	.207/.213	.356/.362	.950/.960
ERL4-TL	.270/.275	.468/.473	1.165/1.175
ERR4-TL	.270/.275	.468/.473	1.165/1.175
EER6-TL	.397/.403	.4680/.4730	1.165/1.175

Top Lock Semi-Finished Style

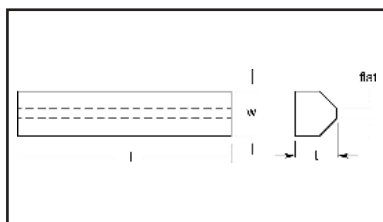


Part No.	Dimensional Specifications			
	t	w	l	a
ERL3-TL-GTB/PER ⁸	.194/.196	.343/.345	0.983	.633/.635
ERR3-TL-GTB/PER	.194/.196	.343/.345	0.983	.633/.635
ERL4-TL-GTB/PER	.254/.256	.452/.454	1.170	.759/.761
ERR4-TL-GTB/PER	.254/.256	.452/.454	1.170	.759/.761

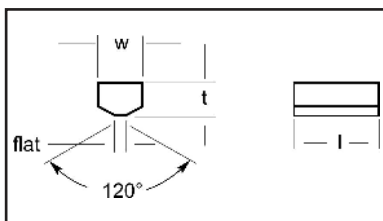
Vee Bottoms



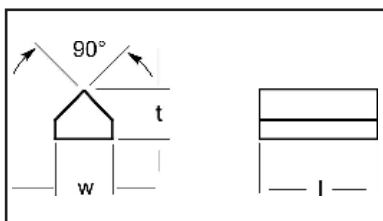
Part No.	Dimensional Specifications			
	t	w	l	flat
187X250X1.000-90°VEE	.201/.207	.263/.271	1.015/1.035	.040
190X251X1.000-90°VEE	.206/.214	.269/.277	1.015/1.035	.040
250X250X1-90°V	.270/.276	.269/.277	1.015/1.035	.040
DWG#101492-1	.270/.276	.270/.276	1.015/1.035	.040
DWG#87319	.335/.341	.417/.423	1.020/1.040	.030
UV84	.241/.249	.270/.276	1.020/1.030	.040
UBV85	.251/.259	.320/.326	1.010/1.020	.038



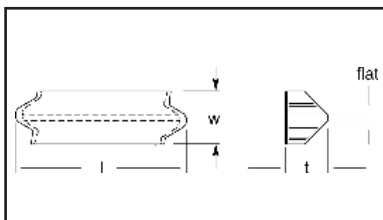
Part No.	Dimensional Specifications			
	t	w	l	flat
UV270	.246/.254	.265/.275	1.270/1.290	.053/.063
UV330	.301/.309	.326/.336	1.270/1.290	.031/.041
UV400	.362/.370	.395/.405	1.270/1.290	.031/.041



Part No.	Dimensional Specifications			
	t	w	l	flat
312X500X750-120°VEE	.312/.322	.515/.525	.765/.775	.056
DWG#23651A	.312/.322	.515/.525	.765/.775	.056



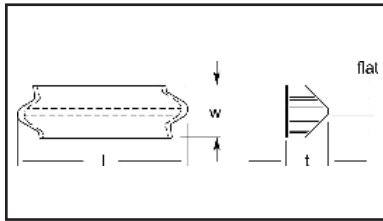
Part No.	Dimensional Specifications		
	t	w	l
375X750X900-90°V	.385/.395	.760/.780	.913/.923



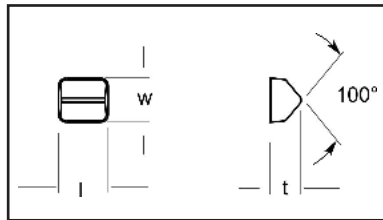
Part No.	Dimensional Specifications			
	t	w	l	flat
A417	.250/.260	.309/.319	1.020/1.040	.038

Vee Bottoms

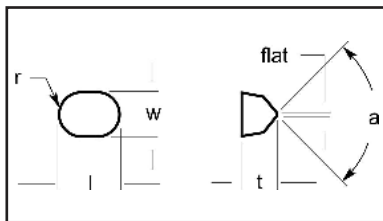
Vee Bottoms



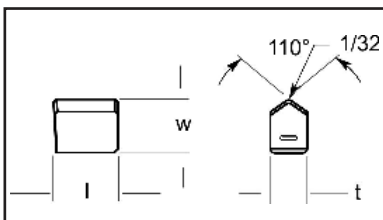
Part No.	Dimensional Specifications			
	t	w	l	flat
A448	.250/.260	.309/.319	1.020/1.040	.038



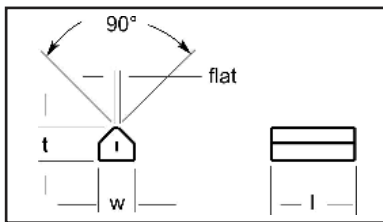
Part No.	Dimensional Specifications		
	t	w	l
K17926	.2315/.2375	.328/.334	.369/.381



Part No.	Dimensional Specifications					
	t	w	l	flat	r	a
K18627	.244/.256	.362/.368	.494/.506	.060/.070	3/16	90°
DWG#U3282	.244/.256	.417/.423	.494/.506	.060/.070	1/4	90°
DWG#U-3282W/STOCK	.261/.273	.417/.423	.494/.506	.060/.070	1/4	90°
DWG#U-3283	.256/.262	.372/.378	.494/.506	.060/.070	3/16	100°
DWG#U-3283W/STOCK	.272/.278	.372/.378	.494/.506	.060/.070	3/16	100°



Part No.	Dimensional Specifications		
	t	w	l
K-120499J	.300/.304	.429/.445	.534/.549
K-120501J	.300/.304	.429/.445	.472/.487



Part No.	Dimensional Specifications			
	t	w	l	flat
KC8632	.247/.253	.262/.268	.640/.650	.031/.041

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DRILLING

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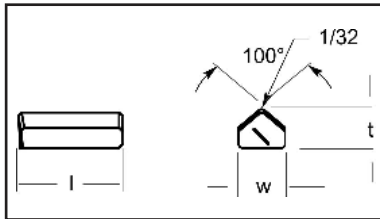
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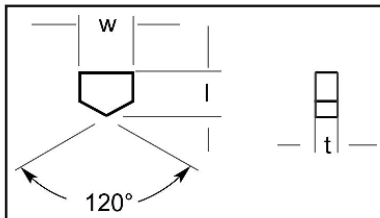
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Vee Bottoms

Vee Bottoms

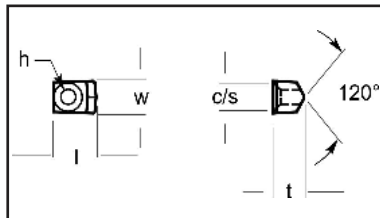


Part No.	Dimensional Specifications		
	t	w	l
K-106358B	.250/.260	.301/.309	.552/.560
K-120405B	.250/.260	.301/.309	.757/.765
K-120425B	.250/.260	.301/.309	.614/.622
K-120449B	.250/.260	.301/.309	.677/.685
K-120509B	.250/.260	.301/.309	.489/.497
K-120591B	.250/.260	.301/.309	.379/.387
K-129222B	.250/.260	.301/.309	.441/.449
DWG#AM-118552	.250/.260	.301/.309	.489/.497



Part No.	Dimensional Specifications		
	t	w	l
WMD5	.050/.055	.338/.358	.368/.388
WMD6	.050/.055	.400/.420	.368/.388
WMD7	.050/.055	.468/.488	.468/.488
WMD8	.081/.086	.535/.555	.472/.492

Cutoff Vee Bottom With Hole And Countersink



Part No.	Dimensional Specifications				
	t	w	l	h	c/s
DWG#U-5223	.476/.482	.497/.503	.653/.659	.215/.221	.427/.433

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