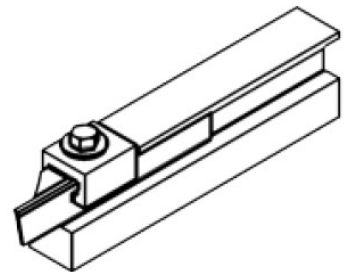
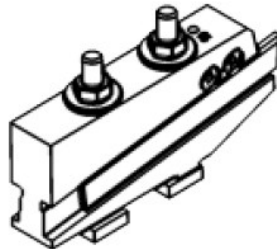
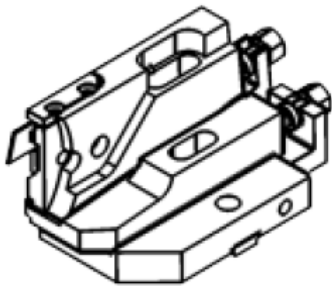




# 2019

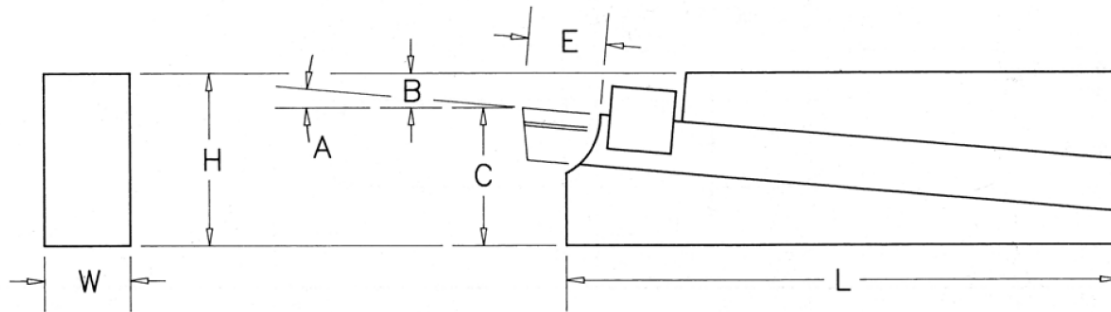
## Cutoff Tooling



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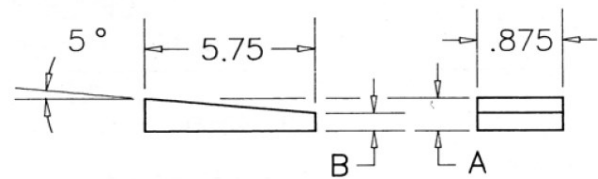
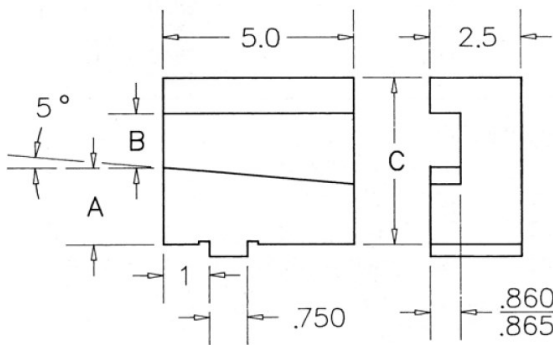
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## Acme Holders, Posts & Wedges



LH CL HOLDER SHOWN

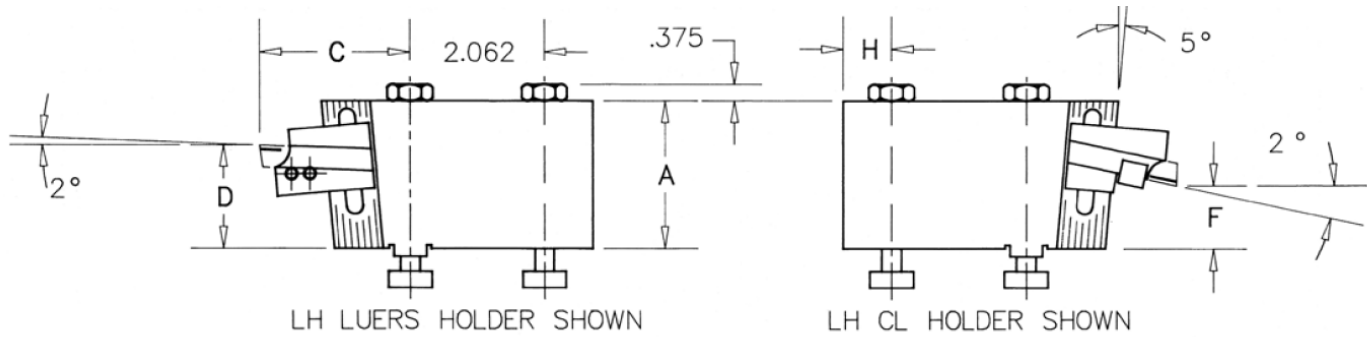
Acme Holders								
HOLDER	A	B	C	E	H	L	W	BLADE
350	3°	.250	.968	.562	1.218	6.00	1.00	P-1
351	3°	.250	.968	.562	1.218	6.00	1.00	P-3
352	4°	.469	1.219	.687	1.688	8.50	1.00	P-3
353	4°	.343	1.345	.875	1.688	8.50	1.25	P-5
354	0°	.550	.700	-	1.250	5.00	1.00	P-1
356	0°	.482	1.203	-	1.688	7.00	1.00	P-3
357	5°	.438	1.812	1.375	2.250	9.00	1.50	P-8
359	5°	.218	2.282	1.813	2.250	9.00	1.50	P-8
383	5°	.281	1.594	.875	1.875	6.75	1.25	P-5
384	2°	.281	1.469	1.813	1.750	6.50	1.50	P-8



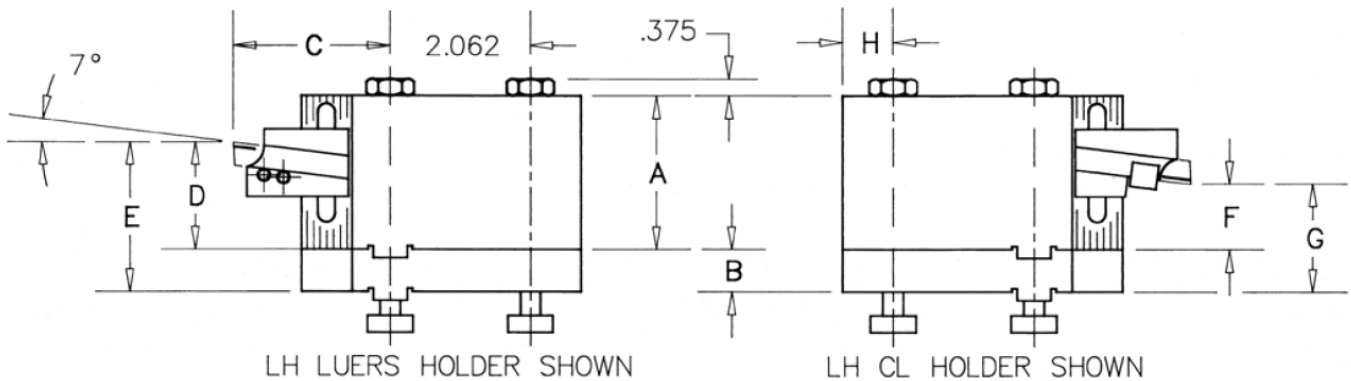
Posts			
Post	A	B	C
3	.718	2.031	3.625
4	1.875	2.125	4.875
5	.964	2.156	4.125
6	1.840	2.656	5.375
9	1.562	2.062	4.500
10	2.719	2.156	5.750

Wedges		
WEDGE	A	B
W-1	.565	.062
W-2	.628	.125
W-3	.721	.218
W-4	.878	.375
W-6	1.128	.625
W-7	1.321	.518
W-9	.784	.281

## Acme Holders, Posts & Risers



380 Post and Riser with X-18A Holder					
A	C	D	F	H	Blade Extension
2.687	2.89	Min 1.187 Max 2.562	Min .437 Max .812	0.5	9/16



379 Post & Riser with X-18A Holder												
Blade Extension	A	B	C	D		E		F		G		H
				Min	Max	Min	Max	Min	Max	Min	Max	
9/16"	3.25	0.18	2.53	2.437	3.093	3.625	4.28	0.687	2.343	2.875	3.53	0.53

381 Post & Riser with X-18 Holder												
Blade Extension	A	B	C	D		E		F		G		H
				Min	Max	Min	Max	Min	Max	Min	Max	
1/4"	2.625	0.96	3	0.017	2.392	0.977	3.352	0.343	0.718	0.303	2.678	0.5
1/2"	2.625	0.96	3.25	0.048	4.423	2.008	3.383	0.312	0.687	0.272	2.647	0.5

381 Post & Riser with X-18A Holder												
Blade Extension	A	B	C	D		E		F		G		H
				Min	Max	Min	Max	Min	Max	Min	Max	
1/2"	2.625	0.96	3.62	0.264	2.639	2.224	3.599	0.096	0.47	0.056	2.43	0.5
3/4"	2.625	0.96	3.88	0.295	2.67	2.255	3.63	0.065	0.44	0.205	2.4	0.5

382 Post & Riser with X-18A Holder												
Blade Extension	A	B	C	D		E		F		G		H
				Min	Max	Min	Max	Min	Max	Min	Max	
3/4"	2.687	1.218	3.44 1	1.958	2.583	3.176	3.8	0.728	0.353	0.946	2.57	0.563

Visit us Online at [www.bmeattachments.com](http://www.bmeattachments.com)  
 3763 Lapeer Rd, Suite E— Port Huron, MI 48060  
 Office 810-937-2974 / Fax 810-937-2975

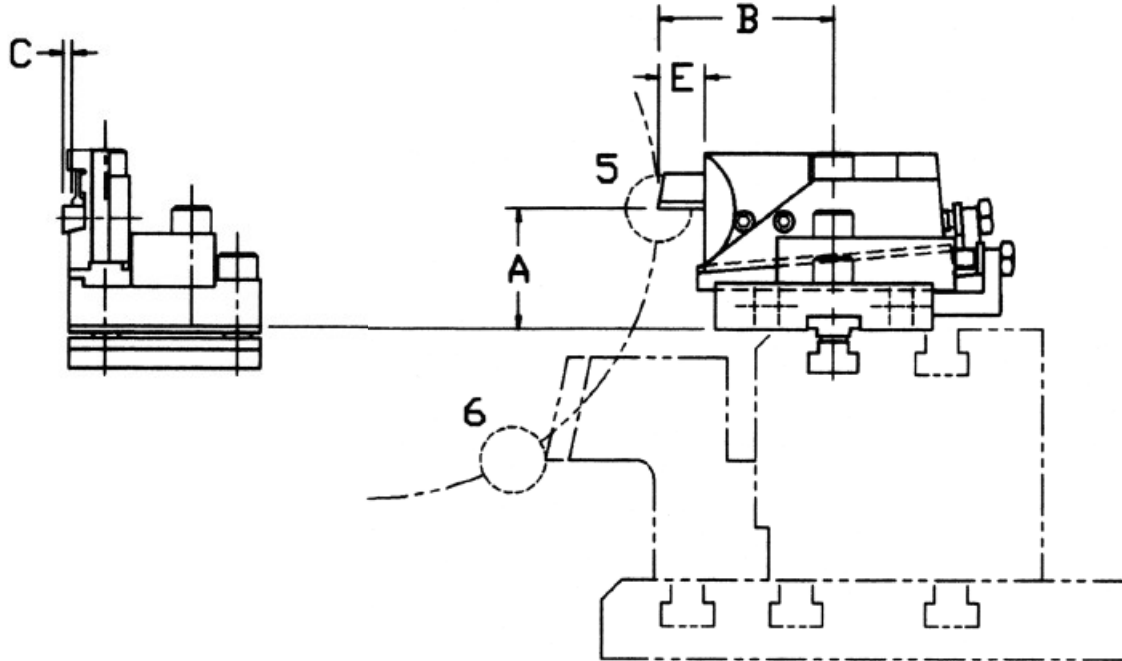
## Acme Holders Six Spindle

National acme six spindle							
Capacity/Model	Position	Holder	Post	Riser or Wedge	Blade Series	Blade Height	
7/16-RA	1	X-18	36W	N/R	P1	1/2"	
	2	X-18	36W	N/R			
	3	X-18	36W	36W			
	4	X-18	36W	N/R			
	5	394 WT	N/R	N/R			
	5SS	X-18	36W	36W			
9/16-RA 9/16-RAN 5/8-RN 1"-RA 1"-RAN	6	X-18	36W	36W	P-3	11/16"	
	1	X-18A	381	N/R			
	2DD	X-18A	381	N/R			
	2SS	X-18A	381	N/R			
	3	X-18A	381	N/R			
	4	X-18A	381	N/R			
	5	351 *	N/R	N/R			
5SS	X-18A	381	N/R				
1"-RAS , 1-1/4-RA	5DD	X-18A	381	381	P-3	11/16"	
	6	X-18A	381	381			
	1	356	7110	W-1			
	2		N/R	N/R			
	2DD		7110	W-1			
	2SS		7110	W-1			
	3		7118	W-3			
	4		7110	W-1			
	5		N/R	N/R			
	5SS		7118	W-3			
5DD	7118		W-3				
6	7118		W-3				
1-5/8-RA 1-5/8-RB 2"-RA 2"-RB	1	353	5-LH	W-3	P-5	7/8"	
	2		N/R	N/R			
	2DD		6-LH	W-3			
	2SS		3-LH	W-3			
	3		4-RH	W-1			
	4		3-LH	W-3			
	5		N/R	N/R			
	5SS		4-RH	W-1			
5DD	4-RH	W-9					
2"-RA 2-1/4-RA 2-5/8-RA	6	384	4-RH	W-9	P-8	1 1/8"	
	1		9-LH	W-2			
	2		357	N/R			
	2DD		384	9-LH			W-2
	3		384	6-RH			W-2
	4		357	3-LH			W-1
	5		357	N/R			N/R
5DD	384	10-RH	W-2				
2-5/8-RB	6	384	10-RH	W-2	P-8	1 1/8"	
	1		9-LH	W-2			
	2		357	N/R			
	2DD		384	9-LH			W-2
	2SS		384	7089			W-1
	3		384	10-RH			W-2
	4		384	9-LH			W-2
	5		357	N/R			N/R
	5SS		384	7106			W-2
5DD	384	10-RH	W-2				
3"-RA 3"-RB 3-1/2-RA 3-1/2-RB 4"-RA	6	384	10-RH	W-2	P-8	1 1/8"	
	1		384	9-LH			W-2
	2		359	N/R			N/R
	2DD		384	9-LH			W-2
	2SS		384	7089			W-1
	3		384	10-RH			W-2
	4		384	9-LH			W-2
	5		359	N/R			N/R
	5SS		384	7106			W-2
5DD	384	10-RH	W-2				
6	384	10-RH	W-2				

## Acme Holders Eight Spindle

National Acme Eight Spindle						
Capacity/Model	Position	Holder	Post	Riser or Wedge	Blade Series	Blade Height
3/4-RA	1	X18A	381	N/R	P-3	11/16"
	2DD	X18A	381	N/R		
	3	351	N/R	N/R		
	3SS	X18A	381	N/R		
	4	X18A	381	N/R		
	5	X18A	381	N/R		
	6	351	N/R	N/R		
	6SS	X18A	381	N/R		
	7DD	X18A	381	381		
	8	X18A	381	381		
1-1/4-RB 1-5/8-RBN	1	356	7110	W-1	P-3	11/16"
	2DD	356	7110	W-1		
	3	356	N/R	N/R		
	3SS	356	7110	W-1		
	4	356	7118	W-3		
	5	356	7110	W-1		
	6	356	N/R	N/R		
	6SS	356	1778	W-3		
	7DD	356	7118	W-3		
	8	356	7118	W-3		
1-5/8-RA 1-5/8-RB 1-5/8-RB 2"-RA 2"-RB	1	353	5-LH	W-3	P-5	7/8"
	2DD	353	5-LH	W-3		
	3	353	N/R	N/R		
	3SS	353	7089	W-3		
	4	353	6-RH	W-4		
	5	353	5-LH	W-3		
	6	353	N/R	N/R		
	6SS	353	7123	W-1		
	7DD	353	6-RH	W-4		
	8	353	6-RH	W-4		
2-1/4-RA 2-1/4-RB 2-5/8-RA 2-5/8-RB	1	384	9-LH	W-2	P-8	1 1/8"
	2DD	384	9-LH	W-2		
	3	359	N/R	N/R		
	3SS	384	3-LH	W-1		
	4	384	6-RH	W-2		
	5	384	3-LH	W-1		
	6	359	N/R	N/R		
	6SS	384	6-RH	W-2		
	7DD	384	10-RH	W-2		
	8	384	10-RH	W-2		
3-1/2-RB 4"-RB	1	384	9-LH	W-2	P-8	1 1/8"
	2DD	384	9-LH	W-2		
	3	359	N/R	N/R		
	3SS	384	9-LH	W-2		
	4	384	10-RH	W-2		
	5	384	9-LH	W-2		
	6	359	N/R	N/R		
	6SS	384	10-RH	W-2		
	7DD	384	10-RH	W-2		
	8	384	10-RH	W-2		

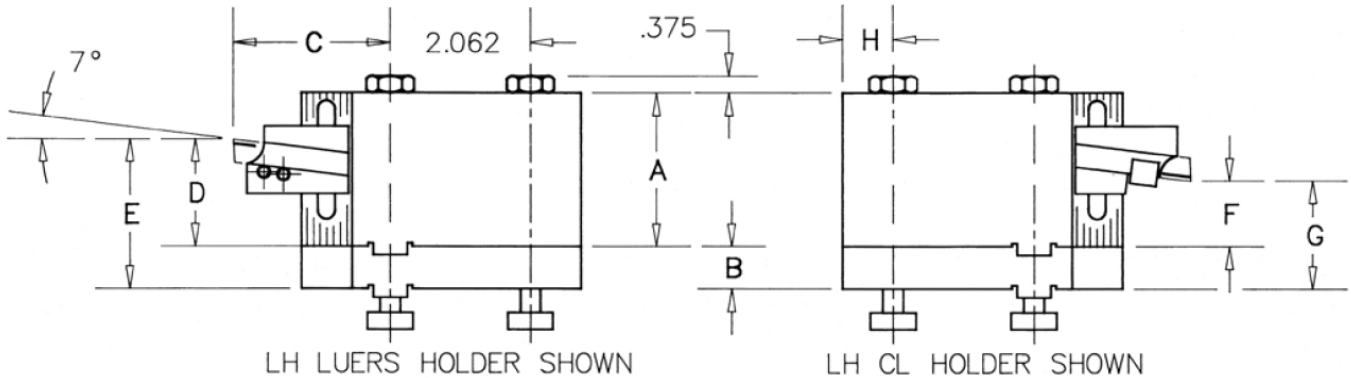
## National Acme Pickoff & Back Burr Cutoff Holders



National Acme Pickoff & Back Burr Cutoff Holder									
MACHINE	POS	A	B		C	E	CLAMP	TOOL SIZES	HOLDER #
			MIN	MAX					
7/16"RA-6	5	1	3.687*	4.187*	0.06	0.375	1738	P1N, P1, P2N, P2, P3S 1216, 1220, 1224, 1230, 1232	70-218-LH
5/8"RN-6 9/16", 1" RA & 3/4"RA-8	5 7	2.364	3.125	3.875	0.06	0.562	1741	P1N, P1, P2N, P2, P3S 1216, 1220, 1224, 1230, 1232	70-219-LH
1 1/4"RA-6	5	2.273	3.125	3.875	0.125	0.687	1742	P3N, P3, P4,P5S	70-161-LH
1 1/4"RB-8 1 5/8"RBN-8	7		3.312	4.0625		0.875			
1 5/8"RB & RA 6 2"RB & 1 5/8"RB-8 2"RB-8	5 7	2.5	4	4.75	0.125	0.875	1742	P3N, P3, P4,P5S 1716, 1720,1724,1730,1732, 1740,1747,1750	70-222-LH
			4.187	4.937		1.062			
2 5/8"RB-8	7	3.125	4.562	5.4375	.213	1.5	2005	P5X	70-319 LH
3 1/2"RB-6	5	3.125	4.187	4.937	0.125	1.062	1742	P3N, P3, P4,P5S 1716, 1720,1724,1730,1732,	70-224-LH

\* Note: On 7/16 Machine, Holder to be placed in back T-slot on Bridge

## Brown and Sharp, Posts & Risers



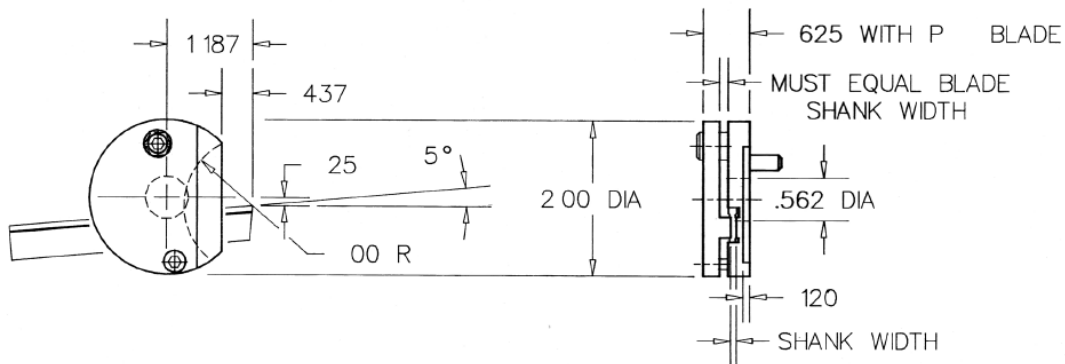
36W Post & Riser with X-18 Holder												
Blade Extension	A	B	C	D		E		F		G		H
				Min	Max	Min	Max	Min	Max	Min	Max	
1/4"	1.250	.875	2.40	1.000	1.355	1.605	2.230	.208	.521	1.083	1.396	.656
1/2"	1.250	.875	2.65	1.031	1.386	1.636	2.261	.177	.490	1.052	1.365	.656
3/4"	1.250	.875	2.89	1.062	1.416	1.666	2.291	.147	.460	1.022	1.335	.656
38 Post & Riser with X-18 Holder												
Blade Extension	A	B	C	D		E		F		G		H
				Min	Max	Min	Max	Min	Max	Min	Max	
1/4"	1.750	.719	2.82	1.024	1.773	1.743	2.492	.190	.939	.910	1.658	1.110
1/2"	1.750	.719	3.07	1.055	1.804	1.774	2.523	.159	.908	.878	1.627	1.110
3/4"	1.750	.719	3.32	1.085	1.834	1.804	2.553	.129	.878	.848	1.597	1.110
39 Post & Riser with X-18 Holder												
Blade Extension	A	B	C	D		E		F		G		H
				Min	Max	Min	Max	Min	Max	Min	Max	
1/4"	1.625	.875	3.39	1.061	1.623	1.684	2.498	.227	.789	1.102	1.664	1.171
1/2"	1.625	.875	3.64	1.092	1.653	1.967	2.529	.196	.758	1.071	1.633	1.171
3/4"	1.625	.875	3.88	1.122	1.684	1.997	2.56	.165	.727	1.040	1.602	1.171
40 Post & Riser with X-18 Holder												
Blade Extension	A	B	C	D		E		F		G		H
				Min	Max	Min	Max	Min	Max	Min	Max	
1/4"	2.656	.875	3.39	1.584	2.686	2.459	3.561	.751	1.852	1.626	2.727	1.171
1/2"	2.656	.875	3.64	1.615	2.717	2.490	3.592	.719	1.821	1.594	2.696	1.171
3/4"	2.656	.875	3.88	1.645	2.748	2.52	3.623	.689	1.791	1.564	2.666	1.171



## Brown and Sharp Holders

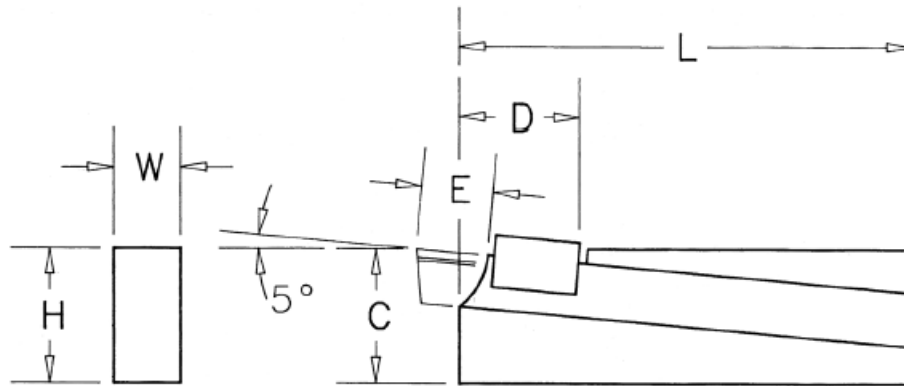
Brown & Sharpe Holders							
Machine	Spindle	Position	Holder	Post	Riser	Blade	
						Series	Height
00,00G 19	Forward	Front	X18	36W	N/R	P-1	1/2"
		Rear			38-B		
	Reverse	Front			38-B		
		Rear			N/R		
0 & 0G	Forward	Front	X18	38	N/R		
		Rear			38-B		
	Reverse	Front			38-B		
		Rear			N/R		
2 & 2G Auto	Forward	Front	X18	39	N/R		
		Rear			39-B		
	Reverse	Front			39-B		
		Rear			N/R		
1 Plain	Forward	Front	X18	40	N/R		
		Rear			40-B		
	Reverse	Front			40-B		
		Rear			N/R		
2 Plain	Forward	Front	X18	40	N/R		
		Rear			40-B		
	Reverse	Front			40-B		
		Rear			N/R		

## Davenport Holders



Davenport Holders				
Holder	Blade	Width	Height	Shank Width
630 ASSY	P1-N	.040	1/2	0.026
	P-1	1/16		0.037
	P-2N	5/64		0.063
	P-2N	3/32		0.063
	P-3S	1/8		0.089

## Cone Holders

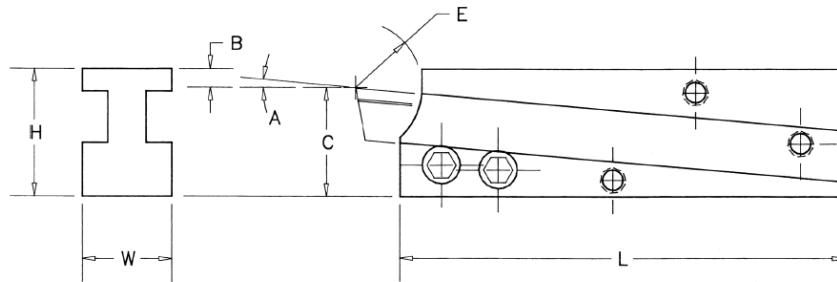


LH CL HOLDER SHOWN

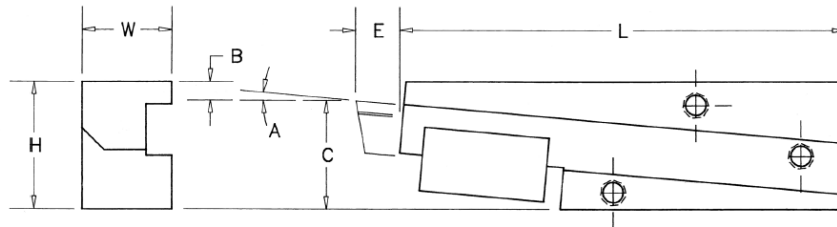
Cone Holders							
Holder	C	D	E	H	L	W	Blade
274	1.750	2.12	1.125	1.750	7.00	1.21	P-5
275	0.500	.56	0.625	1.500	5.75	0.96	P-3
276	1.750	.56	0.785	1.750	7.00	0.96	P-3
277	2.500	2.06	1.437	2.500	8.93	1.46	P-5
278	3.000	2.37	1.437	3.000	9.00	1.46	P-8

Type	Capacity	Holder
4 Spindle	7/8	275
	1-1/4	276
	1-1/2	276
	2	274
	2-1/4 2-5/8 3-1/2 4-1/4	278
Automatic 4 Spindle	3-1/2 4-3/8	278
Vertical 4 Spindle	1 1-1/4 1-1/2	276
	2-1/4 2-5/8	277
Conomatic 6 Spindle	1	275
	1-1/4 1-1/2 1-5/8	276
	1-7/8 2	274
	2-1/4 2-5/8	277
	3-1/2	278
Conomatic 8 Spindle	1-1/4 1-1/2	276
	1-5/8 1-7/8	274
	2-1/4 2-5/8 3	278
G & C	2-1/4 2-5/8	277

## New Britain Holders



226 & 227 LUERS HOLDER SHOWN



226-CL-LH HOLDER SHOWN

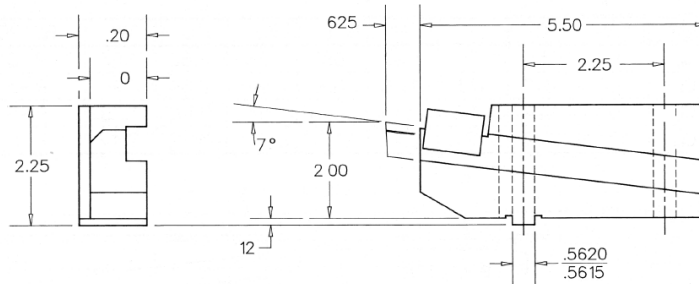
New Britain Cut Off Holders											
Model	Machine		Holder	A	B	C	E	H	L	W	Blade
	Size										
41	1 3/8" & 1 5/8"		226	5 deg	0.078	1.359	0.965	1.437	5.75	0.87	P3
52	1 1/4"										
60	5/8" & 1"										
61	1 3/8" & 1 5/8"		226-CL*	5 deg	0.078	1.359	0.875	1.437	5.75	0.97	P3
62	1 1/4"										
60	5/8"		227**	10 deg	0.078	1.359	0.875	1.437	5.75	0.87	P1
635	3 1/2"		384-CL***	2 deg	0.281	1.469	1.813	1.75	6.5	1.5	P8
A26	2 5/8"										
450	5"										

\* Available in RH & LH CL

\*\*Available in Luers Holder Only

\*\*\*Available in RH and LH CL,

## Wickman Holders



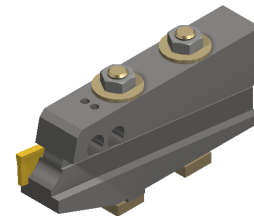
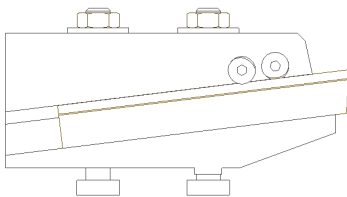
66 1-CL-LH HOLDER STANDARD AS SHOWN

Wickman Cut Off Holders					
Machine	Position	Holder	Post	Wedge	Blade
1"6	1,4 & 6	6611-CL-LH	N/R	N/R	P3
2 5/8"6	1,4 & 6	384-CL*	9LH	W2	P8
3 1/4"6	2,3 & 5		10RH		
3 1/2"4	1 & 3		9LH		
4 1/8"4	2 & 4		10RH		

\* Available in RH and LH Luers & CL

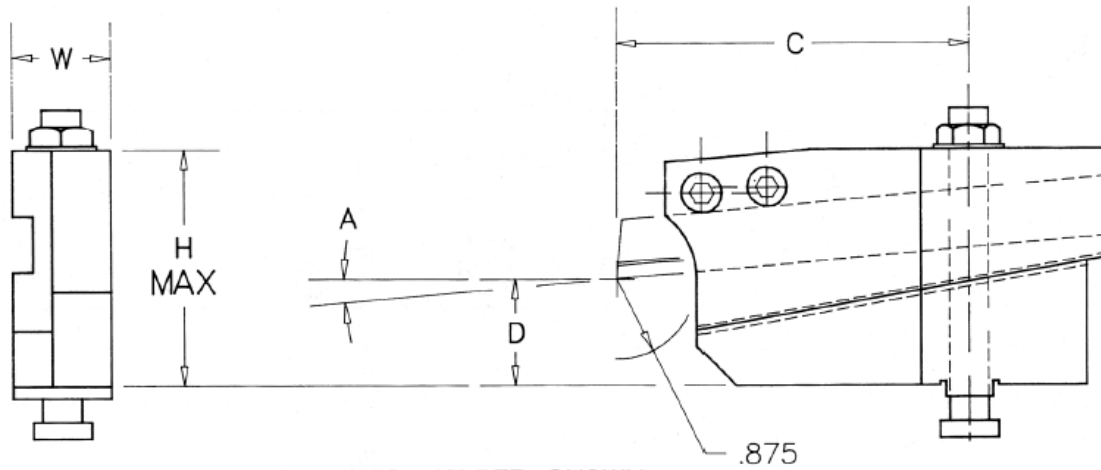
## Wickman Low Profile Reversible Holders

- Luers Style Low Profile Design allows for mounting extremely close to the spindle.
- Dual pocket design allows for mounting in various positions.



Wickman Luers Reversible Cutoff Holders		
Machine	Holder	Blade
FRAME 1	1213-LH-RH LUERS	P5
FRAME 2	1214-LH-RH LUERS	P5
FRAME 3	1216-LH-RH LUERS	P5

## Traub Holders



707-A-LH LUERS HOLDER SHOWN

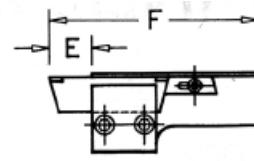
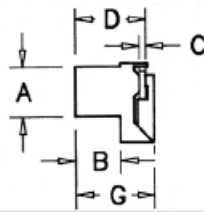
Traub Cut Off Holders										
Machine	Position	Holder	A	C		D		H	W	Blade
				MIN	MAX	MIN	MAX			
A15	REAR SLIDE	701-A *	0 deg	0.285	0.326	0.85	0.92	1.87	0.968	P1
A20										
A25										
A36	REAR SLIDE	707-A **	5 deg	3.2	3.65	1.53	1.62	3.12	1.375	P3
A42										
A56										
A60										
TB42/42T										
TB60/60T										

\* Available in LH Luers & LH CL

\*\*Available in Luers LH only

## NC/CNC Holders

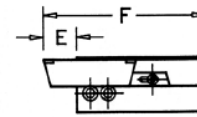
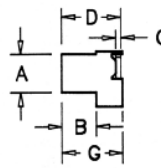
### Clamp Lock



LEFTHAND HOLDER SHOWN

NC/CNC Holders - Clamp Lock (*RH available upon request)									
Holder	A	B	C	D	E	F	G	Clamp	Blade
NC-525-WL	0.628	0.674	0.062	1.027	0.47	3.46	1.3	25509-16	1716
			0.079	1.043	0.47	3.46		25509-20	1720
			0.118	1.083	0.71	3.7		25509-30	1730
			0.125	1.086	0.71	3.7		25509-30	1732
			0.158	1.122	0.94	3.93		25509-40	1740
NC-516-WL	0.75	0.847	0.062	1.186	0.47	4.05	1.46	25509-16	1216
			0.079	1.202	0.47	4.05		25512-20	1220
			0.118	1.241	0.71	4.29		25512-30	1230
			0.125	1.245	0.71	4.29		25512-30	1232
NC-515-WL	0.75	0.847	0.062	1.184	0.47	4.05	1.46	25509-16	1716
			0.079	1.2	0.47	4.05		25509-20	1720
			0.118	1.239	0.71	4.29		25509-30	1730
			0.125	1.243	0.71	4.29		25509-30	1732
			0.158	1.279	0.94	4.52		25509-40	1740
			0.187	1.308	1.18	4.76		25509-47	1747
NC-508-WL	1	1.098	0.062	1.358	0.47	4.05	1.67	25509-16	1716
			0.079	1.374	0.47	4.05		25509-20	1720
			0.118	1.413	0.71	4.29		25509-30	1730
			0.125	1.417	0.71	4.29		25509-30	1732
			0.158	1.453	0.94	4.52		25509-40	1740
			0.187	1.482	1.18	4.76		25509-47	1747
NC-510-WL	1	1.098	0.197	1.492	1.18	4.76	1.87	25509-50	1750
			0.118	1.592	0.71	4.84		25510-30	2230
			0.125	1.596	0.71	4.84		25510-30	2232
			0.158	1.632	0.94	5.07		25510-40	2240
			0.187	1.661	1.18	5.31		25510-47	2247
			0.197	1.61	1.18	5.31		25510-50	2250
NC-509-WL	1.25	1.028	0.236	1.71	1.42	5.55	1.65	25510-60	2260
			0.062	1.381	0.47	4.05		25509-16	1716
			0.079	1.397	0.47	4.05		25509-20	1720
			0.118	1.436	0.71	4.29		25509-30	1730
			0.125	1.44	0.71	4.29		25509-30	1732
			0.158	1.476	0.94	4.52		25509-40	1740
NC-511-WL *	1.25	1.028	0.187	1.505	1.18	4.76	1.81	25509-47	1747
			0.197	1.515	1.18	4.76		25509-50	1750
			0.118	1.535	0.71	4.84		25510-30	2230
			0.125	1.539	0.71	4.84		25510-30	2232
			0.158	1.575	0.94	5.07		25510-40	2240
			0.187	1.604	1.18	5.31		25510-47	2247
NC-524-WL *	1.25	1.26	0.197	1.614	1.18	5.31	2.04	25510-50	2250
			0.236	1.653	1.42	5.55		25510-60	2260
			0.118	1.761	0.71	4.84		25510-30	2230
			0.125	1.765	0.71	4.84		25510-30	2232
			0.158	1.801	0.94	5.07		25510-40	2240
			0.187	1.83	1.18	5.31		25510-47	2247
			0.197	1.84	1.18	5.31	25510-50	2250	
			0.236	1.879	1.42	5.55	25510-60	2260	

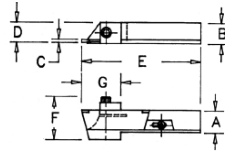
## NC/CNC Holders



LEFTHAND HOLDER SHOWN

### Cam Lock

NC/CNC Holders - Cam Lock									
Holder	A	B	C	D	E	F	G	Cam	Blade
NC-60-207-LH/RH	0.75	0.83	0.062	1.395	0.47	4.05	1.53	4014	1716
			0.079	1.411	0.47	4.05			1720
			0.118	1.451	0.71	4.29			1730
			0.125	1.454	0.71	4.29			1732
			0.158	1.490	0.94	4.52			1740
			0.187	1.520	1.18	4.76			1747
			0.197	1.529	1.18	4.76			1750
NC-60-208-LH	1	1.10	0.062	1.645	0.47	4.05	1.78	4013	1716
			0.079	1.661	0.47	4.05			1720
			0.118	1.701	0.71	4.29			1730
			0.125	1.704	0.71	4.29			1732
			0.158	1.740	0.94	4.52			1740
			0.187	1.770	1.18	4.76			1747
			0.197	1.779	1.18	4.76			1750

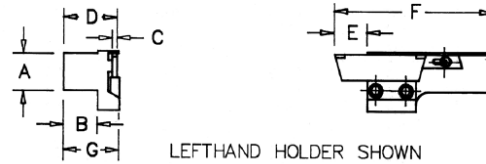


### Pinch Lock

NC/CNC Holders - Pinch Lock (*RH available upon request)									
Holder	A	B	C	D	E	F	G	Screw	Blade
60-293-LH-NC	.312	.312	0.062	.246	3.131	.84	.78	FAS-442	716
			0.079	.262					720
			0.118	.302					730
			0.125	.305					732
60-276-LH-NC	.375	.375	0.062	.309	3.125	.88	.76	FAS-343	716
			0.079	.325					720
			0.118	.365					730
			0.125	.368					732
60-277-LH-NC	.500	.500	0.062	.434	5.437	1.22	1.43	FAS-406	1216
			0.079	.450					1220
			0.118	.490					1230
			0.125	.493					1232
60-278-LH-NC	.625	.625	0.062	.559	5.437	1.28	1.43	FAS-150	1216
			0.079	.575					1220
			0.118	.615					1230
			0.125	.618					1232
60-279-LH-NC	.75	.75	0.062	.605	5.437	1.56	1.43	FAS-150	1716
			0.079	.621					1720
			0.118	.660					1730
			0.125	.664					1732
			0.158	.700					1740
			0.187	.729					1747
			0.197	.739					1750
60-280-LH-NC	1.00	1.00	0.062	.855	5.437	1.56	1.43	FAS-443	1716
			0.079	.871					1720
			0.118	.910					1730
			0.125	.914					1732
			0.158	.950					1740
			0.187	.979					1747
			0.197	.989					1750

## NC/CNC Holders

### Wedge Lock



NC/CNC Holders - Wedge									
Holder	A	B	C	D	E	F	G	Clamp	Blade
70-104-LH-NC	0.375	0.49	0.062	1.04	0.47	2.97	1.1	37 WT	1216
			0.079	1.056					1220
			0.118	1.096	0.71	3.21			1230
			0.125	1.099					1232
70-107-LH-NC	0.5	0.6	0.062	1.149	0.47	3.47	1.23	63 WT	1716
			0.079	1.165					1720
			0.118	1.204	0.71	3.71			1730
			0.125	1.208					1732
			0.158	1.244	0.94	3.94			1740
			0.187	1.273					1.18
			0.197	1.283	1750				
70-080-LH-NC	0.625	0.72	0.079	1.29	0.47	3.46	1.35	63 WT	1720
			0.118	1.329					1730
			0.125	1.333	0.71	3.7			1732
60-210-LH-NC	0.75	0.85	0.079	1.431	0.47	4.05	1.48	37 WT	1720
			0.118	1.471					0.71
			0.125	1.474	1732				
60-212-LH-NC	0.75	0.85	0.079	1.415	0.47	4.05	1.48	63 WT	1720
			0.118	1.454					0.71
			0.125	1.458	1732				
60-211-LH-NC	1	1.1	0.079	1.665	0.47	4.05	1.73	63 WT	1720
			0.118	1.704					0.71
			0.125	1.708	1732				
70-147-LH-NC	1	1.1	0.118	1.954	0.71	5.71	2.05	63 WT	2830
			0.125	1.958					2832
			0.158	1.994	0.94	5.94			2840
			0.187	2.023					1.18

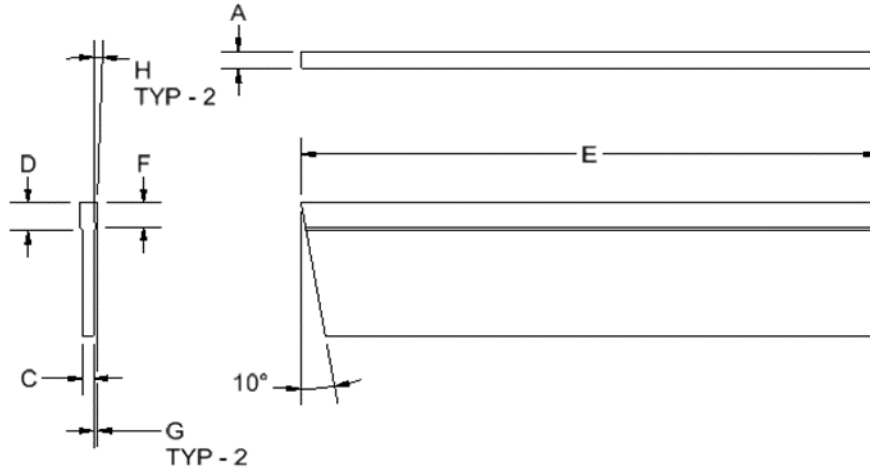
Holders designed to hold Twin-Tip tools and "T" Type Blades, specify blade when ordering

NOTE: P1, P3, P5 & P8 Series blades can be used in place of 12mm, 17mm, 22mm & 28mm Blades respectively



## Solid Carbide Cut Off Blades

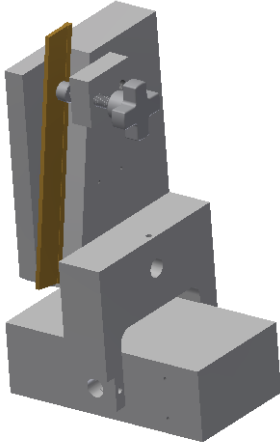
- Quality Grade Carbide
- Coating Available



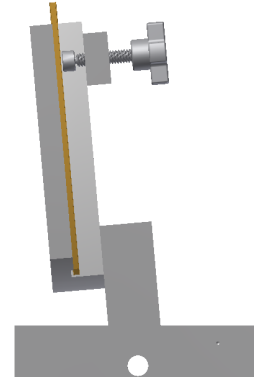
Solid Carbide Parallel Cut Off Blades								
Blade No	A	B	C	D	E	F	G	H (DEG)
P1N	.041/.039	.477/.475	.025/.027	0.092	4.50	.100/.090	.009/.005	1/5
PM1	.065/.063		.038/.036	0.086			.015/.011	2/1
P2N	.079/.077		.091	.0095/.0055			3/2	
P2	.094/.092		.064/.062	0.085				.017/.013
PM2	.099/.097		.085	.019/.015			4/3	
PM3S	.119/.117		.083	.016/.012				
P3S	.126/.124	.088	.020/.016	.677/.675	.009/.005	1/5		
PM3N-1	.041/.039	.025/.027	0.113		.008/.004			
PM3N-1.5	.060/.058	.048/.046	0.122		.010/.006			
MP3N-1.6	.065/.063	.120	.009/.005		2/1			
PM3N-2	.079/.077	.064/.062	0.112			.009/.005		
P3N	.094/.092	.080/.078	0.120		.009/.005	3/2		
PM3N	.099/.097	.118	.011/.007					
PM3	.119/.117	.090/.088	0.111		.016/.012			
P3	.126/.124	.088	0.111		.020/.016			
P4	.157/.155	.098	0.102		.030/.026			

Add suffix TiN to end of part # for TiN Coating

## Blade Sharpening Fixture



Order # Sk-1614



Incorrect



### Advantages of a Blade Sharpening Fixture

- User Friendly, Easy to set-up and operate
- Consistent Lead / Clearance angles = Longer Tool Life
- Less Heat Damage = Longer Tool Life
- Compound Angles in one set-up
- All types of blades and sizes can be sharpened in house

# Setup Troubleshooting

Setup / Cutoff Troubleshooting	
Problem	Cause
Rough Finish	Lack of Coolant, Misdirected Coolant
	Dull Tool
	Insufficient Side Clearance (fig 4)
	Worn Clamp or Tool Holder
	Tool Not on Center (fig 1)
	Excessive Feed Rate
	Spindle Speed (RPM) Low
Excessive Tool Wear	Lack of Coolant, Misdirected Coolant
	Insufficient Side Clearance (fig 4)
	Cut Off Blade Width to Narrow
	Spindle Speed (RPM) High
Tool Chipping	Tool Not on Center (fig 1)
	Front Lead Angle to Large (fig 3)
	Insufficient Cam Travel (rise)
	Worn Clamp or Tool Holder
Tool Breakage	Excessive Blade Extension
	Dull Tool
	Excessive Feed Rate
	Cut Off misaligned with Breakdown
	Worn Clamp or Tool Holder or Slide
	Insufficient Cam Travel (rise)
Chatter	Tool Not on Center - below (fig 1)
	Improper Front Clearance (fig 2)
	Excessive Blade Extension
	Worn Clamp or Tool Holder
	Machine Spindle Bearings Loose/Worn
Part Length Variation	Worn Clamp or Tool Holder or Slide
	Cut Off Blade Width to Narrow
	Machine Spindle Bearings Loose/Worn
	Dull Tool
	Excessive Feed Rate
	Front Lead Angle to Large (fig 3)

