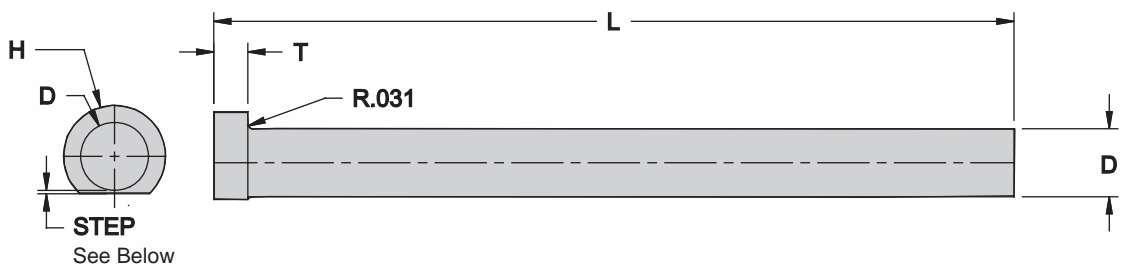


# Hardened Throughout™ D-Headed™ Pins



- IN STOCK
- Save Time and Money let us key your pins
- Etched for easy identification
- **Diameters not shown available upon request**

Tolerances	
Pin Diameter (D) P3 - P33	+0.000 -0.003
Pin Diameter (D) P34 - P47	+0.000 -0.005
Head Diameter (H)	+0.000 -0.010
Head Thickness (T)	+0.000 -0.002
Length (L)	+0.062 -0.000

TOLERANCES	CATALOG NUMBER	D PIN DIA	ACTUAL SIZE <small>+0.000 -0.003</small>	H HEAD DIA	T HEAD THICK.	6" STD	10" STD	14" STD
<p>STEP.006 ±.002</p>	DHP9-	1/8	.1245	1/4	1/8	•	•	•
	DHP10-	9/64	.1401	1/4	1/8	•	•	•
	DHP11-	5/32	.1557	9/32	5/32	•	•	•
	DHP-13	3/16	.1870	3/8	3/16	•	•	•
	DHP15-	7/32	.2183	13/32	3/16	•	•	•
	DHP17-	1/4	.2495	7/16	3/16	•	•	•
	DHP21-	5/16	.3120	1/2	1/4	•	•	•
<p>STEP.007 ±.003</p>	DHP23-	11/32	.3433	9/16	1/4	•	•	•
	DHP25-	3/8	.3745	5/8	1/4	•	•	•
	DHP27	13/32	.4057	11/16	1/4	•	•	•
	DHP29-	7/16	.4370	11/16	1/4	•	•	•
	DHP33-	1/2	.4995	3/4	1/4	•	•	•
	DHP37-	5/8	.6245	7/8	1/4	•	•	•
	DHP41-	3/4	.7495	1	1/4	•	•	•
	DHP47-	1	.9995	1-1/4	1/4	•	•	•

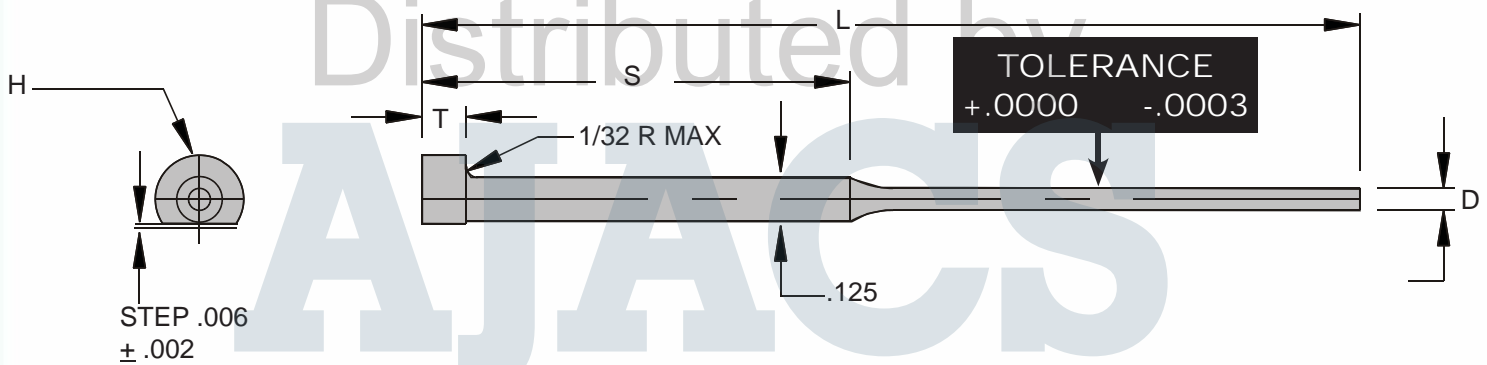
Diameters not shown in 6,10,14, lengths also available upon request.





# Hardened Throughout™ D-Headed™ Step Pins

Tolerances	
Pin Diameter (D)	+0.000 -0.003
Shoulder Diameter	+0.000 -0.001
Shoulder Length (S)	+0.010 -0.010
Head Diameter	+0.000 -0.010
Head Thickness	+0.000 -0.002
Length (L)	+0.062 -0.000



1-800-968-6868

CATALOG NUMBER	D PIN DIA	ACTUAL SIZE +0.000 -0.003	H HEAD DIA	T HEAD THICK.	6" STD	S SHOULDER LENGTH
DSP3-62	1/32	.0307	1/4	1/8	.	2
DSP4-62	3/64	.0464	1/4	1/8	.	2
DSP5-62	1/16	.0620	1/4	1/8	.	2
DSP6-62	5/64	.0776	1/4	1/8	.	2
DSP7-62	3/32	.0933	1/4	1/8	.	2
DSP8-62	7/64	.1089	1/4	1/8	.	2

Longer lengths available

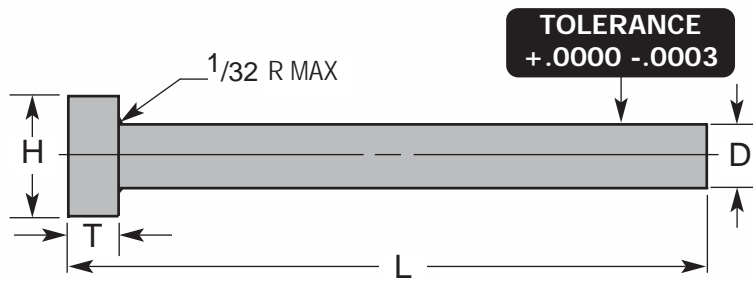
# Ejector Pins

## The Hardened Throughout™ Pin



WE CUT PINS TO LENGTH

Tolerances	
Pin Diameter (D) P3 - P33	+0.0000 -0.0003
Pin Diameter (D) P34 - P47	+0.0000 -0.0005
Head Diameter (H)	+0.000 -0.010
Head Thickness (T)	+0.000 -0.002
Length (L)	+0.062 -0.000



FOR APPLICABLE REAMER & C BORE, SEE PAGES C19

### What's Important

- Our *Hardened Throughout™* Pin can be used as an ejector or core pin, reducing inventory
- Surface is hardened to 65-70 Rc
- Core is hardened to 50-52 Rc
- Reduces "dishing" effect common to nitrided pins
- Precision ground to 4-10 micro-inch finish
- Manufactured from premium hotwork steel
- **Etched for Easy Identification**

### Special Size? Not a Problem!

CATALOG NUMBER	D PIN DIA	+0000 -0003 ACTUAL SIZE	H HEAD DIA	T HEAD THICK.	L = LENGTH											
					4"		6"		8"		10"		12"		14"	
					STD	STD	.005 OS	STD	STD	.005 OS	STD	STD	.005 OS	STD	STD	.005 OS
P3-	1/32	.0307	1/8	1/8	•	•	•									
P4-	3/64	.0464	5/32	1/8	•	•	•									
P5-	1/16	.0620	3/16	1/8	•	•	•	•	•	•						
P6-	5/64	.0776	13/64	1/8	•	•	•	•	•	•						
P7-	3/32	.0933	7/32	1/8	•	•	•	•	•	•						
P8-	7/64	.1089	15/64	1/8	•	•	•	•	•	•						
P9-	1/8	.1245	1/4	1/8	•	•	•	•	•	•	•	•	•	•	•	
P10-	9/64	.1401	1/4	1/8	•	•	•	•	•	•						
P11-	5/32	.1557	9/32	5/32	•	•	•	•	•	•	•	•	•	•	•	
P12-	11/64	.1714	11/32	3/16	•	•	•	•	•	•						
P13-	3/16	.1870	3/8	3/16	•	•	•	•	•	•	•	•	•	•	•	
P14-	13/64	.2026	3/8	3/16	•	•	•	•	•	•						
P15-	7/32	.2183	13/32	3/16	•	•	•	•	•	•						
P16-	15/64	.2339	13/32	3/16	•	•	•	•	•	•						
P17-	1/4	.2495	7/16	3/16	•	•	•	•	•	•	•	•	•	•	•	
P18-	17/64	.2651	7/16	1/4	•	•	•	•	•	•						
P19-	9/32	.2807	7/16	1/4	•	•	•	•	•	•						
P20-	19/64	.2964	1/2	1/4	•	•	•	•	•	•						
P21-	5/16	.3120	1/2	1/4	•	•	•	•	•	•						
P22-	21/64	.3276	9/16	1/4	•	•	•	•	•	•						
P23-	11/32	.3433	9/16	1/4	•	•	•	•	•	•						
P24-	23/64	.3589	5/8	1/4	•	•	•	•	•	•						
P25-	3/8	.3745	5/8	1/4	•	•	•	•	•	•	•	•	•	•	•	
P26-	25/64	.3901	37/64	1/4	•	•	•	•	•	•						
P27-	13/32	.4057	11/16	1/4	•	•	•	•	•	•						
P28-	27/64	.4214	11/16	1/4	•	•	•	•	•	•						
P29-	7/16	.4370	11/16	1/4	•	•	•	•	•	•						
P30-	29/64	.4526	45/64	1/4	•	•	•	•	•	•						
P31-	15/32	.4683	3/4	1/4	•	•	•	•	•	•						
P32-	31/64	.4839	3/4	1/4	•	•	•	•	•	•						
P33-	1/2	.4995	3/4	1/4	•	•	•	•	•	•	•	•	•	•	•	
P34-	17/32	.5307	25/32	1/4	•	•	•	•	•	•						
P35-	9/16	.5620	13/16	1/4	•	•	•	•	•	•						
P37-	5/8	.6245	7/8	1/4	•	•	•	•	•	•						
P39-	11/16	.6870	15/16	1/4	•	•	•	•	•	•						
P41-	3/4	.7495	1	1/4	•	•	•	•	•	•						
P45-	7/8	.8745	1-1/8	1/4	•	•	•	•	•	•						
P47-	1	.9995	1-1/4	1/4	•	•	•	•	•	•						

\*6" and over Annealed Heads

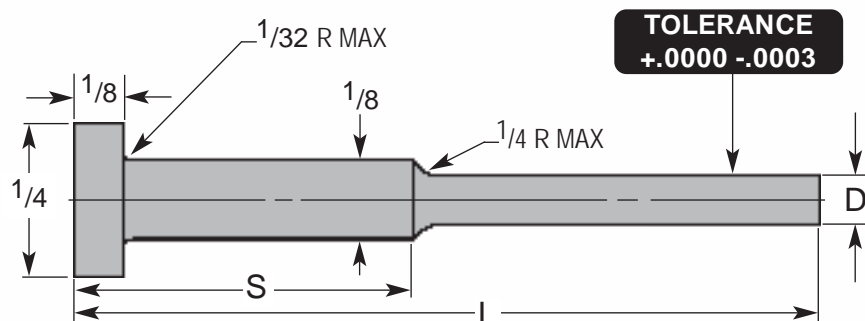
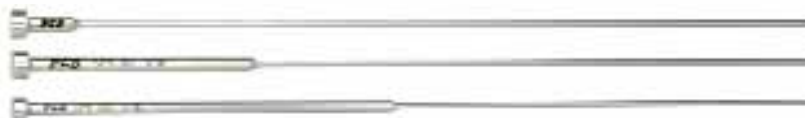
Add length to the end of the catalog number (i.e.P3-4)

For oversize add "OS" to the end of the catalog number (i.e. P3-6OS)



# Step Pins

## Hardened Throughout™ Pin



FOR APPLICABLE REAMER, SEE PAGES C-19

WE CUT PINS TO LENGTH

CATALOG NUMBER	D PIN DIA	$^{+.0000}$ $_{-.0003}$ ACTUAL SIZE	L LENGTH	S SHOULDER LENGTH	STD	.005 OS
SP3-6 1/2	1/32	.0307	6	1/2	•	•
SP4-6 1/2	3/64	.0464	6	1/2	•	•
SP5-6 1/2	1/16	.0620	6	1/2	•	•
SP6-6 1/2	5/64	.0776	6	1/2	•	•
SP7-6 1/2	3/32	.0933	6	1/2	•	•
SP8-6 1/2	7/64	.1089	6	1/2	•	•
SP5-10 1/2	1/16	.0620	10	1/2	•	•
SP6-10 1/2	5/64	.0776	10	1/2	•	•
SP7-10 1/2	3/32	.0933	10	1/2	•	•
SP8-10 1/2	7/64	.1089	10	1/2	•	•
SP3-62	1/32	.0307	6	2	•	•
SP4-62	3/64	.0464	6	2	•	•
SP5-62	1/16	.0620	6	2	•	•
SP6-62	5/64	.0776	6	2	•	•
SP7-62	3/32	.0933	6	2	•	•
SP8-62	7/64	.1089	6	2	•	•
SP3-82	1/32	.0307	8	2	•	•
SP4-82	3/64	.0464	8	2	•	•
SP5-82	1/16	.0620	8	2	•	•
SP6-82	5/64	.0776	8	2	•	•
SP7-82	3/32	.0933	8	2	•	•
SP8-82	7/64	.1089	8	2	•	•

Tolerances	
Pin Diameter (D)	$^{+.0000}$ $_{-.0003}$
Shoulder Diameter	$^{+.000}$ $_{-.001}$
Shoulder Length (S)	$^{+.010}$ $_{-.010}$
Head Diameter	$^{+.000}$ $_{-.010}$
Head Thickness	$^{+.000}$ $_{-.002}$
Length (L)	$^{+.062}$ $_{-.000}$

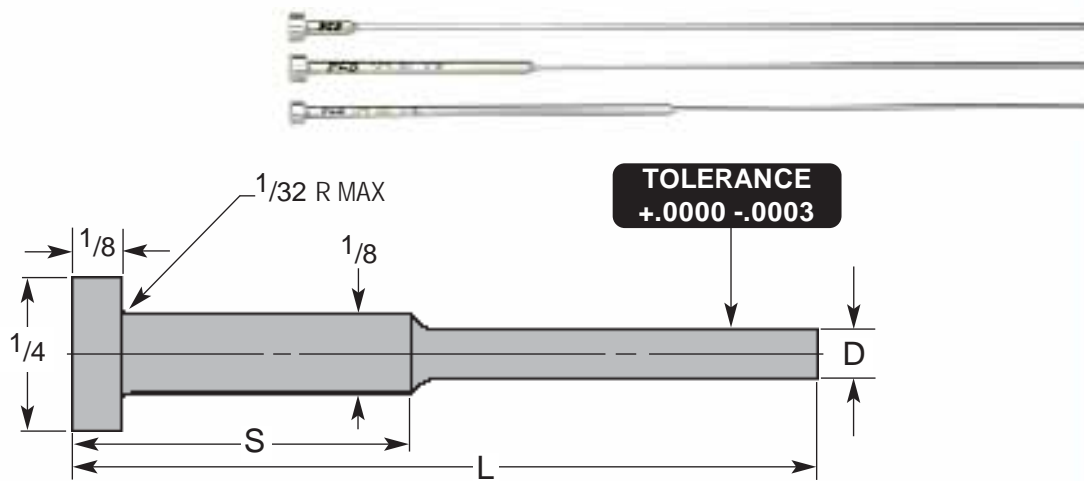
- Non-brittle and non-chipping surface eliminates flashing problems associated with nitrided pins
- Surface is hardened to 65-70 Rc
- Core is hardened to 50-52 Rc
- Precision ground to 4-10 micro-inch finish
- Manufactured from premium hotwork steel
- **Etched for Easy Identification**



For oversize add "OS" to the end of the catalog number (i.e. SP3-6 1/2OS)

# Step Pins

## Hardened Throughout™ Pin



FOR APPLICABLE REAMER, SEE PAGES C-19

### WE CUT PINS TO LENGTH

Tolerances	
Pin Diameter (D)	+ .0000 - .0003
Shoulder Diameter	+ .000 - .001
Shoulder Length (S)	+ .010 - .010
Head Diameter	+ .000 - .010
Head Thickness	+ .000 - .002
Length (L)	+ .062 - .000

CATALOG NUMBER	D PIN DIA	+ .0000 - .0003 ACTUAL SIZE	L LENGTH	S SHOULDER LENGTH	STD	.005 OS
SP4-102	3/64	.0464	10	2	•	•
SP5-102	1/16	.0620	10	2	•	•
SP6-102	5/64	.0776	10	2	•	•
SP7-102	3/32	.0933	10	2	•	•
SP8-102	7/64	.1089	10	2	•	•
SP5-142	1/16	.0620	14	2	•	•
SP6-142	5/64	.0776	14	2	•	•
SP7-142	3/32	.0933	14	2	•	•
SP8-142	7/64	.1089	14	2	•	•
SP3-83	1/32	.0307	8	3	•	•
SP4-83	3/64	.0464	8	3	•	•
SP5-83	1/16	.0620	8	3	•	•
SP6-83	5/64	.0776	8	3	•	•
SP7-83	3/32	.0933	8	3	•	•
SP8-83	7/64	.1089	8	3	•	•
SP3-84	1/32	.0307	8	4	•	•
SP4-84	3/64	.0464	8	4	•	•
SP5-84	1/16	.0620	8	4	•	•
SP6-84	5/64	.0776	8	4	•	•
SP7-84	3/32	.0933	8	4	•	•
SP8-84	7/64	.1089	8	4	•	•
SP4-104	3/64	.0464	10	4	•	•
SP5-104	1/16	.0620	10	4	•	•
SP6-104	5/64	.0776	10	4	•	•
SP7-104	3/32	.0933	10	4	•	•
SP8-104	7/64	.1089	10	4	•	•

- Non-brittle and non-chipping surface eliminates flashing problems associated with nitrided pins
- Surface is hardened to 65-70 Rc
- Core is hardened to 50-52 Rc
- Precision ground to 4-10 micro-inch finish
- Manufactured from premium hotwork steel
- **Etched for Easy Identification**



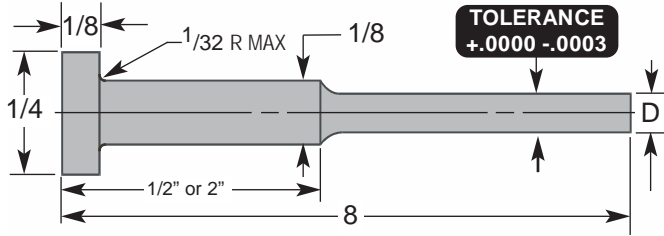
For oversize add "OS" to the end of the catalog number (i.e. SP4-102OS)



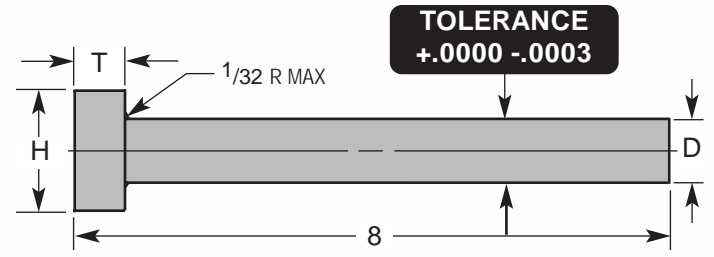


# Oversized Ejector Pins

## .001 Increments



WE CUT PINS TO LENGTH



Tolerances	
Pin Diameter (D)	+ .0000 - .0003
Head Diameter (H)	+ .000 - .010
Head Thickness (T)	+ .000 - .002
Length	+ .062 - .000

CATALOG NUMBER	PIN DIA
SP4-8½ OS-1	.0474
SP4-8½ OS-2	.0484
SP4-8½ OS-3	.0494
SP4-8½ OS-4	.0504
SP5-8½ OS-1	.0630
SP5-8½ OS-2	.0640
SP5-8½ OS-3	.0650
SP5-8½ OS-4	.0660
SP6-8½ OS-1	.0786
SP6-8½ OS-2	.0796
SP6-8½ OS-3	.0806
SP6-8½ OS-4	.0816
SP7-8½ OS-1	.0943
SP7-8½ OS-2	.0953
SP7-8½ OS-3	.0963
SP7-8½ OS-4	.0973
SP3-82 OS-1	.0317
SP3-82 OS-2	.0327
SP3-82 OS-3	.0337
SP3-82 OS-4	.0347
SP4-82 OS-1	.0474
SP4-82 OS-2	.0484
SP4-82 OS-3	.0494
SP4-82 OS-4	.0504
SP5-82 OS-1	.0630
SP5-82 OS-2	.0640
SP5-82 OS-3	.0650
SP5-82 OS-4	.0660
SP6-82 OS-1	.0786
SP6-82 OS-2	.0796
SP6-82 OS-3	.0806
SP6-82 OS-4	.0816
SP7-82 OS-1	.0943
SP7-82 OS-2	.0953
SP7-82 OS-3	.0963
SP7-82 OS-4	.0973
SP8-82 OS-1	.1099
SP8-82 OS-2	.1109
SP8-82 OS-3	.1119
SP8-82 OS-4	.1129

- Our Hardened Throughout™ Pin
- Surface is hardened to 65-70 Rc
- Core is hardened to 50-52 Rc
- Etched for Easy Identification

- Surface is hardened to 65-70 Rc
- Core is hardened to 50-52 Rc
- Etched for Easy Identification

Tolerances	
Pin Diameter (D)	+ .0000 - .0003
Head Diameter (H)	+ .000 - .010
Head Thickness (T)	+ .000 - .002
Length	+ .062 - .000

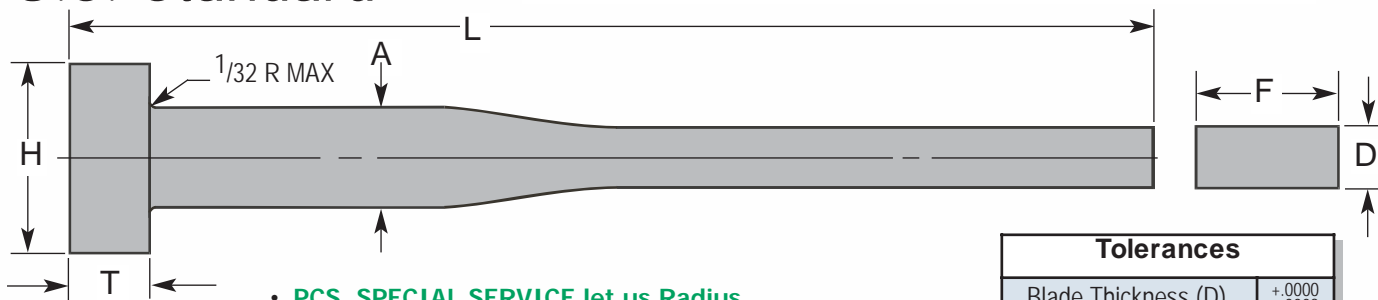
CATALOG NUMBER	PIN DIA	HEAD DIA	HEAD THICK
P9-8 OS-1	.1255	1/4	1/8
P9-8 OS-2	.1265	1/4	1/8
P9-8 OS-3	.1275	1/4	1/8
P9-8 OS-4	.1285	1/4	1/8
P11-8 OS-1	.1567	9/32	5/32
P11-8 OS-2	.1577	9/32	5/32
P11-8 OS-3	.1587	9/32	5/32
P11-8 OS-4	.1597	9/32	5/32
P13-8 OS-1	.1880	3/8	3/16
P13-8 OS-2	.1890	3/8	3/16
P13-8 OS-3	.1900	3/8	3/16
P13-8 OS-4	.1910	3/8	3/16
P17-8 OS-1	.2505	7/16	3/16
P17-8 OS-2	.2515	7/16	3/16
P17-8 OS-3	.2525	7/16	3/16
P17-8 OS-4	.2535	7/16	3/16
P17-8 OS-6	.2555	7/16	3/16
P17-8 OS-7	.2565	7/16	3/16
P17-8 OS-8	.2575	7/16	3/16

Home of the Hardened Throughout™ Pin



# Ejector Blades

## U.S. Standard



- **PCS SPECIAL SERVICE let us Radius and cut your Blades**
- One piece construction to improve strength
- Blade hardness 50 - 52 Rc
- Special sizes available upon request
- For Metric Blades - See Metric Section

Tolerances	
Blade Thickness (D)	+ .0000 - .0003
Blade Width (F)	+ .0000 - .0003
Pin Diameter (A)	+ .000 - .001
Head Diameter (H)	+ .000 - .010
Head Thickness (T)	+ .000 - .002
Blade Length	+ .062 - .000
Overall Length (L)	+ .062 - .000

### WE CUT PINS TO LENGTH

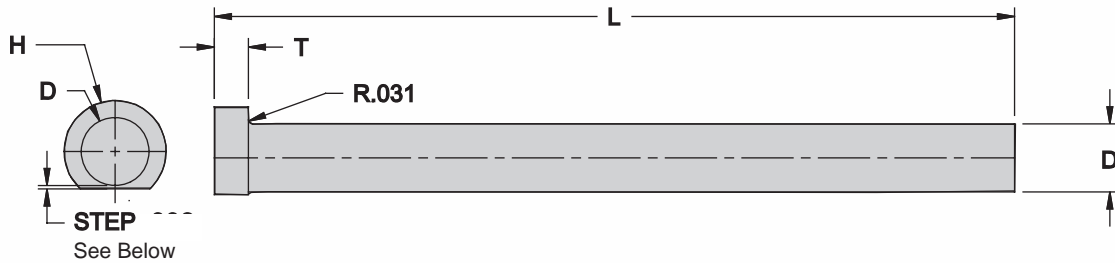
CATALOG NUMBER	D BLADE THICK.	F BLADE WIDTH	A PIN DIA	BLADE LENGTH	H HEAD DIA	T HEAD THICK.	L = OVERALL LENGTH							
							5	6	6-3/8	7-3/8	8	8-3/8	9-3/8	10-3/8
BE9-244	.024	.100	.125	4-3/8	1/4	1/8			•					
BE9-323	.032	.100	.125	3	1/4	1/8	•	•						
BE9-324	.032	.100	.125	4-3/8	1/4	1/8			•	•				
BE9-463	.046	.100	.125	3	1/4	1/8	•	•						
BE9-464	.046	.100	.125	4-3/8	1/4	1/8			•	•				
BE11-244	.024	.140	.156	4-3/8	9/32	5/32			•					
BE11-323	.032	.140	.156	3	9/32	5/32		•		•				
BE11-324	.032	.140	.156	4-3/8	9/32	5/32			•	•		•		
BE11-463	.046	.140	.156	3	9/32	5/32		•		•				
BE11-464	.046	.140	.156	4-3/8	9/32	5/32			•	•		•		
BE13-244	.024	.172	.187	4-3/8	3/8	3/16			•	•				
BE13-323	.032	.172	.187	3	3/8	3/16		•		•				
BE13-324	.032	.172	.187	4-3/8	3/8	3/16			•	•		•		
BE13-463	.046	.172	.187	3	3/8	3/16		•		•				
BE13-464	.046	.172	.187	4-3/8	3/8	3/16			•	•		•		
BE13-623	.062	.172	.187	3	3/8	3/16		•		•				
BE13-624	.062	.172	.187	4-3/8	3/8	3/16			•	•		•		
BE17-323	.032	.234	.250	3	7/16	3/16	•	•			•			
BE17-324	.032	.234	.250	4-3/8	7/16	3/16			•	•		•	•	•
BE17-463	.046	.234	.250	3	7/16	3/16	•	•			•			
BE17-464	.046	.234	.250	4-3/8	7/16	3/16			•	•		•	•	•
BE17-623	.062	.234	.250	3	7/16	3/16	•	•			•			
BE17-624	.062	.234	.250	4-3/8	7/16	3/16			•	•		•	•	•
BE21-324	.032	.296	.312	4-3/8	1/2	1/4			•	•		•	•	•
BE21-464	.046	.296	.312	4-3/8	1/2	1/4			•	•		•	•	•
BE21-624	.062	.296	.312	4-3/8	1/2	1/4			•	•		•	•	•
BE21-784	.078	.296	.312	4-3/8	1/2	1/4			•	•		•	•	•
BE25-324	.032	.359	.375	4-3/8	5/8	1/4			•	•		•	•	•
BE25-464	.046	.359	.375	4-3/8	5/8	1/4			•	•		•	•	•
BE25-624	.062	.359	.375	4-3/8	5/8	1/4			•	•		•	•	•
BE25-784	.078	.359	.375	4-3/8	5/8	1/4			•	•		•	•	•
BE33-625	.062	.484	.500	5-3/8	3/4	1/4						•	•	•
BE33-785	.078	.484	.500	5-3/8	3/4	1/4						•	•	•

\* Add length to the end of the catalog number (i.e. BE9-3236, BE13-3247)



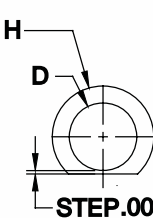
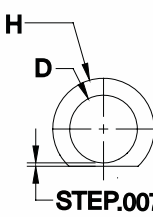


# Nitrided D-Headed™ Pins



- IN STOCK
- Save Time and Money let us key your pins
- Etched for easy identification
- **Diameters not shown Available Upon Request**

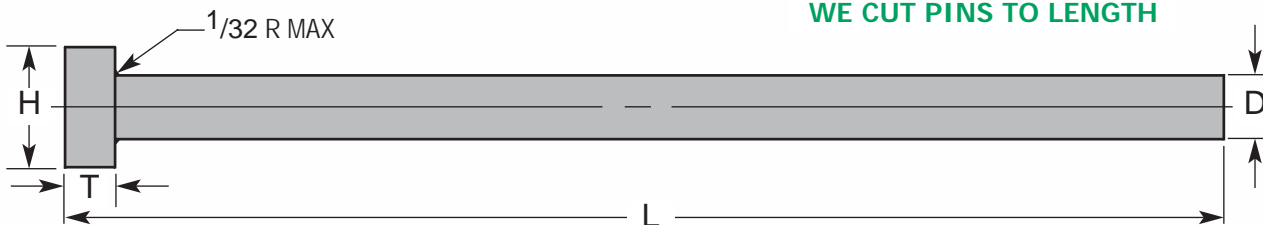
Tolerances	
Pin Diameter (D)	+0.000 -0.001
Head Diameter (H)	+0.000 -0.010
Head Thickness (T)	+0.000 -0.002
Length (L)	+0.062 -0.000

TOLERANCES	CATALOG NUMBER	D PIN DIA	H HEAD DIA	T HEAD THICK	6" STD	10" STD	14" STD	18" STD	25" STD
 STEP.006 ±.002	DNP9-	1/8	1/4	1/8	▪	▪	▪		
	DNP11-	5/32	9/32	5/32	▪	▪	▪	▪	▪
	DNP13-	3/16	3/8	3/16	▪	▪	▪	▪	▪
	DNP17-	1/4	7/16	3/16	▪	▪	▪	▪	▪
	DNP21-	5/16	1/2	1/4	▪	▪	▪	▪	▪
 STEP.007 ±.003	DNP25-	3/8	5/8	1/4	▪	▪	▪	▪	▪
	DNP33-	1/2	3/4	1/4	▪	▪	▪	▪	▪
	DNP37-	5/8	7/8	1/4	▪	▪	▪	▪	▪
	DNP41-	3/4	1	1/4	▪	▪	▪	▪	▪
	DNP47-	1	1-1/4	1/4	▪	▪	▪	▪	▪

Diameters not shown in 6,10,14,18,25 lengths also available upon request.



# Nitrided Ejector Pins



- Precision ground hotwork steel
- Surface nitrided to 65 - 74 Rc
- Core hardness of 35 - 40 Rc
- 4 - 10 micro-inch finish minimizes wear & prolongs life
- All heads annealed
- **Etched for Easy Identification**

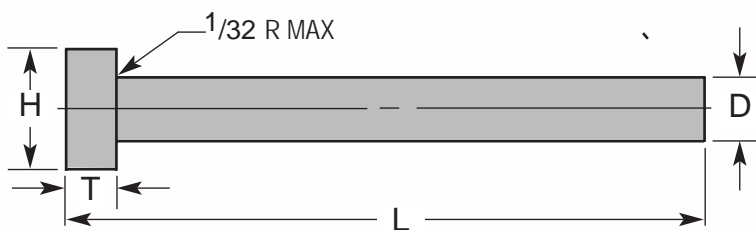
Tolerances	
Pin Diameter (D)	+0.000 -0.001
Head Diameter (H)	+0.000 -0.010
Head Thickness (T)	+0.000 -0.002
Length (L)	+0.062 -0.000

CATALOG NUMBER	D PIN DIA	H HEAD DIA	T HEAD THICK	L = LENGTH										
				6"		10"		14"		18"		25"	36"	39"
				STD	.005 OS	STD	.005 OS	STD	.005 OS	STD	.005 OS	STD	STD	STD
NP9-	1/8	1/4	1/8	.	.	.	.	.	.	.	.	.	.	.
NP10-	9/64	1/4	1/8	.	.	.	.	.	.	.	.	.	.	.
NP11-	5/32	9/32	5/32	.	.	.	.	.	.	.	.	.	.	.
NP12-	11/64	11/32	3/16	.	.	.	.	.	.	.	.	.	.	.
NP13-	3/16	3/8	3/16	.	.	.	.	.	.	.	.	.	.	.
NP14-	13/64	3/8	3/16	.	.	.	.	.	.	.	.	.	.	.
NP15-	7/32	13/32	3/16	.	.	.	.	.	.	.	.	.	.	.
NP16-	15/64	13/32	3/16	.	.	.	.	.	.	.	.	.	.	.
NP17-	1/4	7/16	3/16	.	.	.	.	.	.	.	.	.	.	.
NP18-	17/64	7/16	1/4	.	.	.	.	.	.	.	.	.	.	.
NP19-	9/32	7/16	1/4	.	.	.	.	.	.	.	.	.	.	.
NP20-	19/64	1/2	1/4	.	.	.	.	.	.	.	.	.	.	.
NP21-	5/16	1/2	1/4	.	.	.	.	.	.	.	.	.	.	.
NP22-	21/64	9/16	1/4	.	.	.	.	.	.	.	.	.	.	.
NP23-	11/32	9/16	1/4	.	.	.	.	.	.	.	.	.	.	.
NP24-	23/64	5/8	1/4	.	.	.	.	.	.	.	.	.	.	.
NP25-	3/8	5/8	1/4	.	.	.	.	.	.	.	.	.	.	.
NP27-	13/32	11/16	1/4	.	.	.	.	.	.	.	.	.	.	.
NP29-	7/16	11/16	1/4	.	.	.	.	.	.	.	.	.	.	.
NP31-	15/32	3/4	1/4	.	.	.	.	.	.	.	.	.	.	.
NP33-	1/2	3/4	1/4	.	.	.	.	.	.	.	.	.	.	.
NP35-	9/16	13/16	1/4	.	.	.	.	.	.	.	.	.	.	.
NP37-	5/8	7/8	1/4	.	.	.	.	.	.	.	.	.	.	.
NP39-	11/16	15/16	1/4	.	.	.	.	.	.	.	.	.	.	.
NP41-	3/4	1	1/4	.	.	.	.	.	.	.	.	.	.	.
NP45-	7/8	1 1/8	1/4	.	.	.	.	.	.	.	.	.	.	.
NP47-	1	1 1/4	1/4	.	.	.	.	.	.	.	.	.	.	.

For oversize add "OS" to the end of the catalog number (i.e. NP9-14OS)



# Core Pins



**What's Important**

- .0005 Diameter Tolerance
- Etched for easy Identification!*

Tolerances	
Pin Diameter (D)	+0.010 +0.005
Head Diameter (H)	+0.000 -0.010
Head Thickness (T)	+0.000 -0.002
Length (L)	+0.062 -0.000

- Air hardening premium hotwork steel  
Recommended heat treatment:
  - Heat to 1800° - 1850° F and air quench
  - Temper between 900° - 1100° F

**WE CUT PINS TO LENGTH**

**50 - 55 Rc  
HARD - PRECISION GROUND**

**30 - 35 Rc  
SOFT - PRECISION GROUND**

CATALOG NUMBER	D PIN DIA	H HEAD DIA	T HEAD THICK.	L = LENGTH			
				* 3"	6"	10"	14"
CPH7-	3/32	1/4	1/8	•	•	•	
CPH8-	7/64	1/4	1/8	•	•	•	
CPH9-	1/8	1/4	1/8	•	•	•	•
CPH10-	9/64	1/4	1/8	•	•	•	•
CPH11-	5/32	9/32	5/32	•	•	•	•
CPH12-	11/64	11/32	3/16	•	•	•	•
CPH13-	3/16	3/8	3/16	•	•	•	•
CPH14-	13/64	3/8	3/16	•	•	•	•
CPH15-	7/32	13/32	3/16	•	•	•	•
CPH17-	1/4	7/16	3/16	•	•	•	•
CPH19-	9/32	7/16	1/4	•	•	•	•
CPH21-	5/16	1/2	1/4	•	•	•	•
CPH23-	11/32	9/16	1/4	•	•	•	•
CPH25-	3/8	5/8	1/4	•	•	•	•
CPH27-	13/32	11/16	1/4	•	•	•	•
CPH29-	7/16	11/16	1/4	•	•	•	•
CPH31-	15/32	3/4	1/4	•	•	•	•
CPH33-	1/2	3/4	1/4	•	•	•	•
CPH35-	9/16	13/16	1/4	•	•	•	•
CPH37-	5/8	7/8	1/4	•	•	•	•
CPH41-	3/4	1	1/4	•	•	•	•
CPH45-	7/8	1 1/8	1/4		•	•	•
CPH47-	1	1 1/4	1/4		•	•	•

CATALOG NUMBER	D PIN DIA	H HEAD DIA	T HEAD THICK.	L = LENGTH			
				3"	6"	10"	14"
CPS7-	3/32	1/4	1/8	•	•	•	
CPS8-	7/64	1/4	1/8	•	•	•	
CPS9-	1/8	1/4	1/8	•	•	•	•
CPS10-	9/64	1/4	1/8	•	•	•	•
CPS11-	5/32	9/32	5/32	•	•	•	•
CPS12-	11/64	11/32	3/16	•	•	•	•
CPS13-	3/16	3/8	3/16	•	•	•	•
CPS14-	13/64	3/8	3/16	•	•	•	•
CPS15-	7/32	13/32	3/16	•	•	•	•
CPS17-	1/4	7/16	3/16	•	•	•	•
CPS19-	9/32	7/16	1/4	•	•	•	•
CPS21-	5/16	1/2	1/4	•	•	•	•
CPS23-	11/32	9/16	1/4	•	•	•	•
CPS25-	3/8	5/8	1/4	•	•	•	•
CPS27-	13/32	11/16	1/4	•	•	•	•
CPS29-	7/16	11/16	1/4	•	•	•	•
CPS31-	15/32	3/4	1/4	•	•	•	•
CPS33-	1/2	3/4	1/4	•	•	•	•
CPS35-	9/16	13/16	1/4	•	•	•	•
CPS37-	5/8	7/8	1/4	•	•	•	•
CPS41-	3/4	1	1/4	•	•	•	•
CPS45-	7/8	1 1/8	1/4		•	•	•
CPS47-	1	1 1/4	1/4		•	•	•

Add length to the end of the catalog number (i.e. CPH10-10)  
CPH9 - CPH47 6" and over have annealed heads  
\*3" Heads are not annealed.

Add length to the end of the catalog number (i.e. CPS10-10)

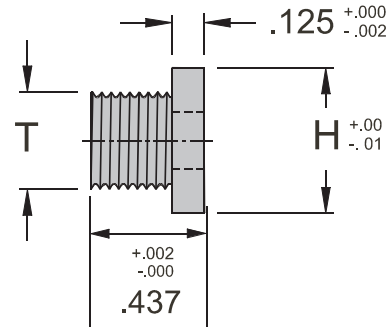
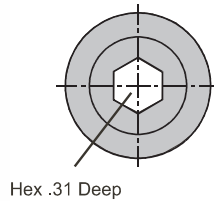


# Steel Core Pin Retainers



## What's Important

- Four Sizes available to more closely match the core pin head diameter



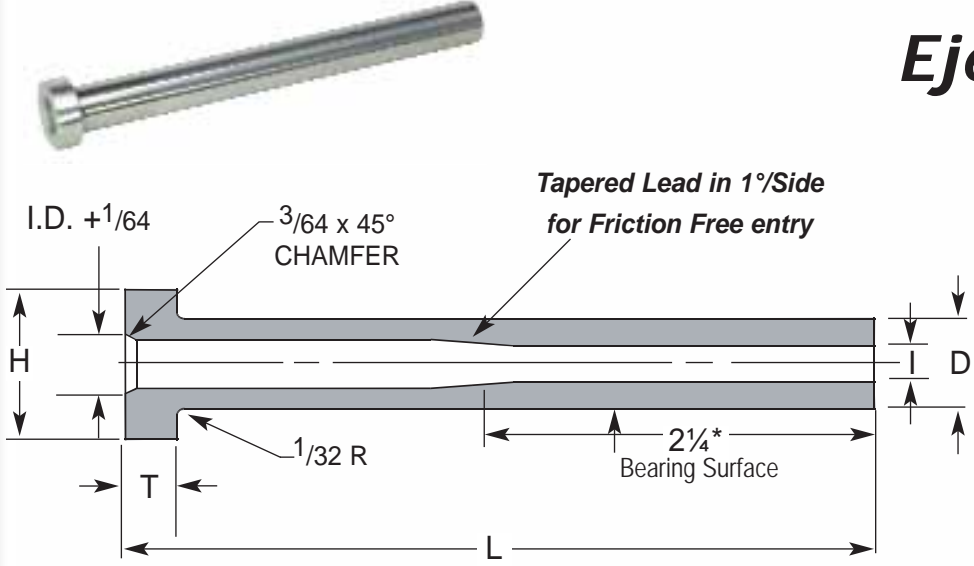
Distributed by



1-800-968-6868

CATALOG NUMBER	H	T	HEX	Recommended Pin Usage
CPR-375	.56	3/8-24	3/16	3/32 thru 5/32 Diameter Pins
CPR-500	.68	1/2-20	1/4	11/64 thur 9/32 Diameter Pins
CPR-750	.93	3/4-16	3/8	5/16 thru 7/16 Diameter Pins
CPR-875	1.06	7/8-14	3/8	15/32 thru 9/16 Diameter Pins

# Ejector Sleeves



Tolerances	
Sleeve O.D. (D)	+0.000 -0.001
Sleeve I.D. (I)	+0.0005 -0.0000
Head Diameter (H)	+0.000 -0.010
Head Thickness (T)	+0.000 -0.002
Length (L)	+0.032 -0.000

CATALOG NUMBER	I I.D.	D O.D.	H HEAD DIA	T HEAD THICK.	L = LENGTH													
					3"	4"	5"	6"	7"	8"	9"	10"	11"	12"	13"	14"		
SL13-*	3/32	3/16	3/8	3/16	.	.	.	.	.	.	.	.	.	.	.	.	.	
SL15-*	1/8	7/32	13/32	3/16	.	.	.	.	.	.	.	.	.	.	.	.	.	
SL17-	5/32	1/4	7/16	3/16	.	.	.	.	.	.	.	.	.	.	.	.	.	
SL21-	3/16	5/16	1/2	1/4	.	.	.	.	.	.	.	.	.	.	.	.	.	
SL23-	7/32	11/32	9/16	1/4	.	.	.	.	.	.	.	.	.	.	.	.	.	
SL25-	1/4	3/8	5/8	1/4	.	.	.	.	.	.	.	.	.	.	.	.	.	
SL29-	5/16	7/16	11/16	1/4	.	.	.	.	.	.	.	.	.	.	.	.	.	
SL33-	3/8	1/2	3/4	1/4	.	.	.	.	.	.	.	.	.	.	.	.	.	
SL37-	7/16	5/8	7/8	1/4	.	.	.	.	.	.	.	.	.	.	.	.	.	
SL39-	1/2	11/16	15/16	1/4	.	.	.	.	.	.	.	.	.	.	.	.	.	
SL41-	9/16	3/4	1	1/4	.	.	.	.	.	.	.	.	.	.	.	.	.	
SL45-	5/8	7/8	1 1/8	1/4	.	.	.	.	.	.	.	.	.	.	.	.	.	
SL47-	3/4	1	1 1/4	1/4	.	.	.	.	.	.	.	.	.	.	.	.	.	

- O.D. 65 - 74 Rc nitrided
- I.D. 65 - 74 Rc nitrided
- Etched for Easy Identification

\* SL13 & SL15 bearing length is 1-3/4" Add length to catalog number (i.e. SL25-5)



## .005 Oversize O.D. Ejector Sleeves



- O.D. 65 - 74 Rc nitrided
- I.D. 65 - 74 Rc
- Etched for Easy Identification

CATALOG NUMBER	+0005 -.0000 I I.D.	+000 -.001 D O.D.**	H HEAD DIA	T HEAD THICK.	L = LENGTH							
					4"	5"	6"	7"	8"	9"	10"	
OSL13-*	3/32	.1925	3/8	3/16	.	.	.	.	.	.	.	.
OSL15-*	1/8	.2238	13/32	3/16	.	.	.	.	.	.	.	.
OSL17-	5/32	.2550	7/16	3/16	.	.	.	.	.	.	.	.
OSL21-	3/16	.3175	1/2	1/4	.	.	.	.	.	.	.	.
OSL25-	1/4	.3800	5/8	1/4	.	.	.	.	.	.	.	.
OSL29-	5/16	.4425	11/16	1/4	.	.	.	.	.	.	.	.
OSL33-	3/8	.5050	3/4	1/4	.	.	.	.	.	.	.	.

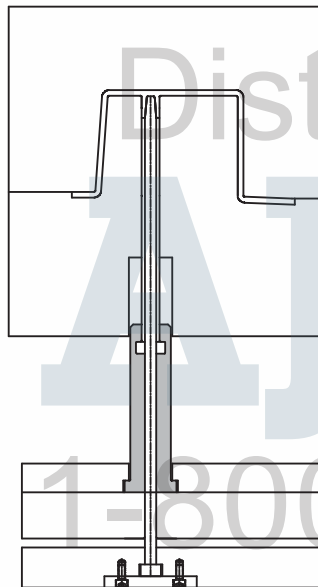
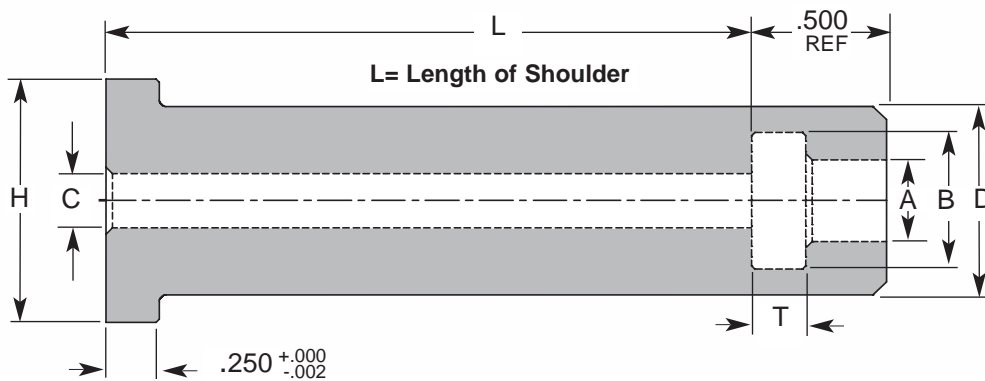
\* OSL13 and OSL15 bearing length is 1-3/4" \*\*O.D. size is +.005 over standard O.D. size  
Add length to catalog number (i.e. OSL25-5)

Home of the Hardened Throughout™ Pin





# Sleeve Extensions



**What's Important**

- Lengthens Sleeves quickly and inexpensively
- Four Lengths for more versatility
- Special Lengths upon request

1-800-968-6868

CATALOG NUMBER	NOMINAL SLEEVE I.D.	D +.000 -.002	A +.002 -.000	B +.005 -.000	T +.002 -.000	C +.03 -.00	H +.000 -.010	L = LENGTH +.005 -.000			
								2.00	2.50	3.00	3.50
SLX13-	3/32	.625	.193	.385	.188	.17	.875	•	•	•	
SLX15-	1/8	.625	.224	.416	.188	.17	.875	•	•	•	
SLX17-	5/32	.625	.255	.448	.188	.17	.875	•	•	•	•
SLX21-	3/16	.875	.318	.510	.251	.22	1.125	•	•	•	•
SLX23-	7/32	.875	.349	.570	.251	.25	1.125	•	•	•	•
SLX25-	1/4	.875	.380	.630	.251	.28	1.125	•	•	•	•
SLX29-	5/16	1.000	.443	.698	.251	.34	1.250	•	•	•	•
SLX33-	3/8	1.000	.505	.760	.251	.41	1.250	•	•	•	•

\* NOTE: Add length to end of part number i.e. SLX13-25

\*\*NOTE: L= Length of Shoulder.

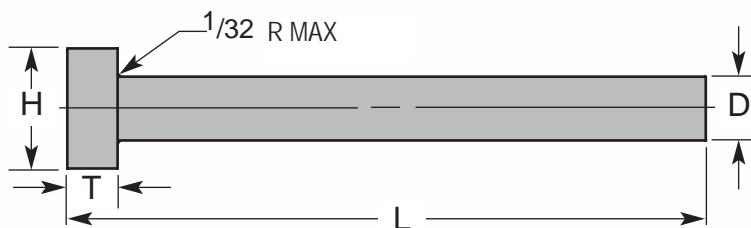




# Armor\* Pins

The Original

"Hardened Throughout™ Pin" with Armorclad Coating\*



## What's Important

- **Armorclad\* surface treatment reduces wear, friction, and inhibits corrosion.**
- Armorclad\* coating will not chip, crack, or peel from base metal
- Enhances metal hardness, adds lubricity
- As-deposited equivalent hardness of 70 - 72 Rc
- Armorclad\* coating has a deposited thickness of 0.000050 to 0.000070
- **Etched for Easy Identification**

**WE CUT PINS TO LENGTH**

## Tolerances

Pin Diameter (D) AR9 - AR33	+0.000 -0.003
Pin Diameter (D) AR37 - AR41	+0.000 -0.005
Head Diameter (H)	+0.000 -0.010
Head Thickness (T)	+0.000 -0.002
Length (L)	+0.062 -0.000

Special Size?  
Not a Problem!



CATALOG NUMBER	D PIN DIA	+0.000 -0.003 ACTUAL SIZE	H HEAD DIA	T HEAD THICK.	L = LENGTH		
					6" STD	10" STD	10" .005 OS
AR9-	1/8	.1245	1/4	1/8	•	•	•
AR11-	5/32	.1557	9/32	5/32	•	•	•
AR13-	3/16	.1870	3/8	3/16	•	•	•
AR15-	7/32	.2183	13/32	3/16	•	•	•
AR17-	1/4	.2495	7/16	3/16	•	•	•
AR21-	5/16	.3120	1/2	1/4	•	•	•
AR25-	3/8	.3745	5/8	1/4	•	•	•
AR33-	1/2	.4995	3/4	1/4	•	•	•
AR37-	5/8	.6245	7/8	1/4	•	•	•
AR41-	3/4	.7495	1	1/4	•	•	•

For oversize pins add "OS" to the end of the catalog number (i.e. AR9-10 OS)

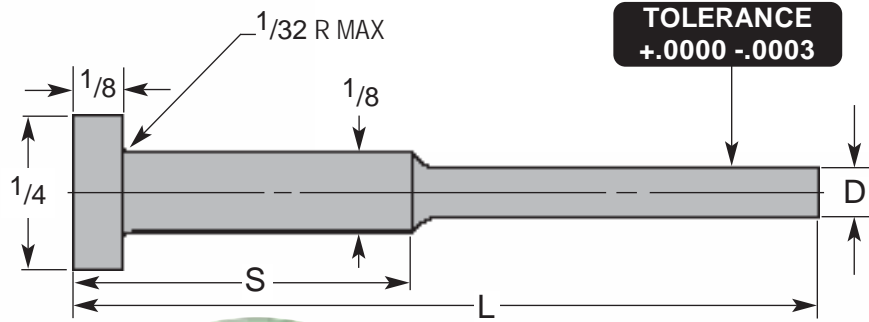
\*Armorclad Coating of Michigan.

Home of the Hardened Throughout™ Pin

**PCS**  
COMPANY

# Armor Step Pins

The Hardened Throughout™ Pin with Armorclad\* Coating



- **Armorclad® surface treatment reduces wear, friction, and inhibits corrosion.**
- Armorclad® coating will not chip, crack, or peel from base metal
- Enhances metal hardness, adds lubricity
- As-deposited equivalent hardness of 70 - 72 Rc
- Armorclad® coating has a deposited thickness of 0.000050 to 0.000070
- **Etched for Easy Identification**

Tolerances	
Pin Diameter (D)	+ .0000 - .0003
Shoulder Diameter	+ .000 - .001
Shoulder Length (S)	+ .010 - .010
Head Diameter	+ .000 - .010
Head Thickness	+ .000 - .002
Length (L)	+ .062 - .000

CATALOG NUMBER	D PIN DIA	+.0000 -.0003 ACTUAL SIZE	L LENGTH	S SHOULDER LENGTH	STOCK	
					STD	.005 OS
ARS3-6 1/2	1/32	.0307	6	1/2	•	•
ARS4-6 1/2	3/64	.0464	6	1/2	•	•
ARS5-6 1/2	1/16	.0620	6	1/2	•	•
ARS6-6 1/2	5/64	.0776	6	1/2	•	•
ARS7-6 1/2	3/32	.0933	6	1/2	•	•
ARS8-6 1/2	7/64	.1089	6	1/2	•	•
ARS3-62	1/32	.0307	6	2	•	•
ARS4-62	3/64	.0464	6	2	•	•
ARS5-62	1/16	.0620	6	2	•	•
ARS6-62	5/64	.0776	6	2	•	•
ARS7-62	3/32	.0933	6	2	•	•
ARS8-62	7/64	.1089	6	2	•	•
ARS4-102	3/64	.0464	10	2	•	•
ARS5-102	1/16	.0620	10	2	•	•
ARS6-102	5/64	.0776	10	2	•	•
ARS7-102	3/32	.0933	10	2	•	•
ARS8-102	7/64	.1089	10	2	•	•

WE CUT PINS TO LENGTH



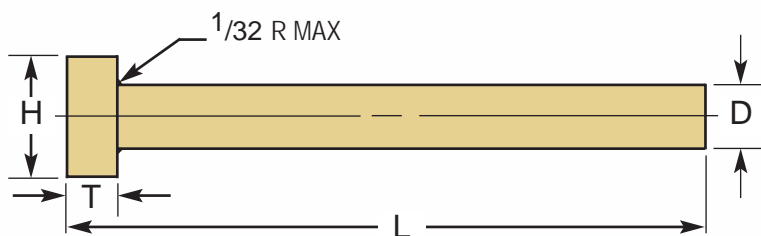
For oversize pins add "OS" to the end of catalog number (i.e. ARS8-102OS)

\*Armorclad Coating of Michigan.





# **moldMAX** Pins



Tolerances	
Pin Diameter (D)	+0.000 -0.001
Head Diameter (H)	+0.000 -0.015
Head Thickness (T)	+0.000 -0.002
Length (L)	+0.062 -0.000

**WE CUT PINS TO LENGTH**

### What's Important

- Hardness 36- 42 RC
- Resists corrosion, galling, and seizing
- Rapid and uniform heat removal reduces post cycle shrinkage and warpage
- Shorter cycle times with enhanced dimensional control
- High strength alloyed copper with superior thermal conductivity
- Special diameters available upon request

Material	Thermal Conductivity	Wear Resistance	Thermal Expansion	Hardness	Weldability	Machinability	Polishability	Corrosion Resistance	Total Score
<b>moldMAX</b>	4	7	9.0	7	10	7	10	10	55
P20 Tool Steel	1	5	6.5	6	4	3	5	5	29
Hardened Steel	1	10	6.5	10	2	1	2	5	31
420 Stainless	1	5	6.5	6	4	2	4	8	30

The mold materials shown in this chart were rated on their relative performance as experienced by mold makers on a scale from 1-10 with 10 indicating top performance. Thermal Expansion coefficient  $10^{-6}/F$  is 9.7

CATALOG NUMBER	D PIN DIA	H HEAD DIA	T HEAD THICK.	L = LENGTH			
				4"	8"	12"	18"
CPM9-	.1250	1/4	1/8	•	•	•	•
CPM11-	.1563	9/32	5/32	•	•	•	•
CPM13-	.1875	3/8	3/16	•	•	•	•
CPM15-	.2188	13/32	3/16	•	•	•	•
CPM17-	.2500	7/16	3/16	•	•	•	•
CPM19-	.2812	7/16	1/4	•	•	•	•
CPM21-	.3125	1/2	1/4	•	•	•	•
CPM25-	.3750	5/8	1/4	•	•	•	•
CPM29-	.4375	11/16	1/4	•	•	•	•
CPM33-	.5000	3/4	1/4	•	•	•	•
CPM35-	.5625	13/16	1/4	•	•	•	•
CPM37-	.6250	7/8	1/4	•	•	•	•
CPM41-	.7500	1	1/4	•	•	•	•

Special Size?  
Not a Problem!

Add length to catalog number (i.e. CPM9-4)

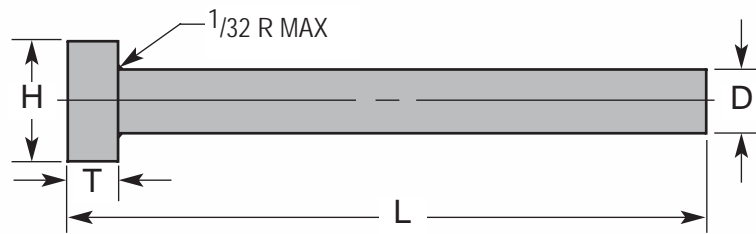
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Home of the Hardened Throughout™ Pin





# Return Pins



Tolerances	
Pin Diameter (D)	+0.000 -0.001
Head Diameter (H)	+0.000 -0.010
Head Thickness (T)	+0.000 -0.002
Length (L)	+0.013 +0.008

- Precision ground premium hotwork steel
- Nitrided 65 - 74 Rc

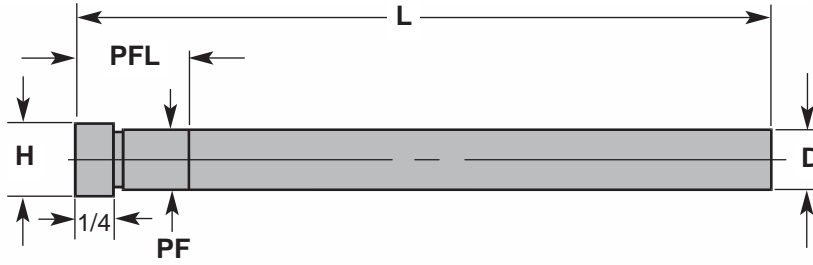
**WE CUT PINS TO LENGTH**

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CATALOG NUMBER	D PIN DIA	H HEAD DIA	T HEAD THICK.	L OVERALL LENGTH
RP-50	.500	.750	.250	3-9/16
RP-51	.500	.750	.250	4-1/16
RP-52	.500	.750	.250	4-9/16
RP-53	.500	.750	.250	5-1/16
RP-54	.500	.750	.250	5-9/16
RP-55	.500	.750	.250	6-1/16
RP-56	.500	.750	.250	6-9/16
RP-60	.625	.875	.250	4-1/16
RP-61	.625	.875	.250	4-9/16
RP-62	.625	.875	.250	5-1/16
RP-63	.625	.875	.250	5-9/16
RP-64	.625	.875	.250	6-1/16
RP-65	.625	.875	.250	6-9/16
RP-66	.625	.875	.250	7-1/16
RP-67	.625	.875	.250	7-9/16
RP-68	.625	.875	.250	8-1/16
RP-70	.750	1.000	.250	4-15/16
RP-71	.750	1.000	.250	5-7/16
RP-72	.750	1.000	.250	5-15/16
RP-73	.750	1.000	.250	6-7/16
RP-74	.750	1.000	.250	6-15/16
RP-75	.750	1.000	.250	7-7/16
RP-76	.750	1.000	.250	7-15/16
RP-77	.750	1.000	.250	8-7/16
RP-78	.750	1.000	.250	8-15/16
RP-79	.750	1.000	.250	9-7/16



# Angle Pins

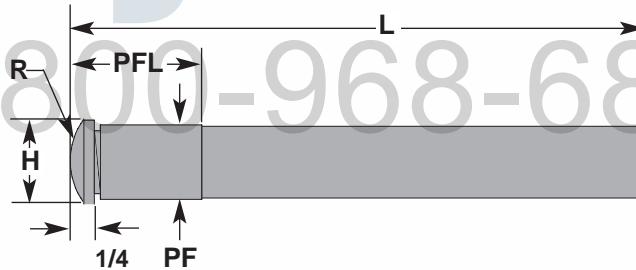


Tolerances	
Pin Diameter (D)	+ .0000 - .0005
Press Fit Diameter (PF)	+ .0005 - .0000
Head Diameter	+ .000 - .010
Head Thickness (T)	+ .000 - .005
Overall Length (L)	+ .125 + .000

CATALOG NUMBER	NOMINAL DIA	D ACTUAL SIZE	PF PRESS FIT DIA	H HEAD DIA	PFL PRESS FIT LENGTH	L OVERALL LENGTH
A25-L6	3/8	.374	.376	1/2	7/8	6
A25-L10	3/8	.374	.376	1/2	1-3/8	10
A33-L6	1/2	.499	.501	5/8	7/8	6
A33-L10	1/2	.499	.501	5/8	1-3/8	10
A37-L6	5/8	.624	.626	3/4	7/8	6
A37-L10	5/8	.624	.626	3/4	1-3/8	10
A41-L10	3/4	.749	.751	7/8	1-3/8	10

- Premium hotwork steel
- Surface hardness 65-74 Rc
- Core hardness 35 - 40 Rc
- Ground, Nitrided
- Above Applies to Radius Angle Pin

# Radius Angle Pins



Tolerances	
Pin Diameter (D)	+ .0000 - .0005
Press Fit Diameter (PF)	+ .0005 - .0000
Head Diameter (H)	+ .000 + .010
Head Thickness (T)	+ .000 + .005
Overall Length (L)	+ .125 + .000

Counterbore Depth		
D PIN DIA	ANGLE	C'Bore DEPTH
.375	10°	.258
	15°	.265
	20°	.276
	25°	.291
.500	10°	.260
	15°	.270
	20°	.284
	25°	.304
.625	10°	.262
	15°	.274
	20°	.292
	25°	.316
.750	10°	.264
	15°	.278
	20°	.300
	25°	.329

CATALOG NUMBER	NOMINAL DIA	D ACTUAL SIZE	PF PRESS FIT DIA	R HEAD RADIUS	H HEAD DIA	PFL PRESS FIT LENGTH	L OVERALL LENGTH
APR25-L6	3/8	.374	.376	3/8	1/2	7/8	6
APR25-L10	3/8	.374	.376	3/8	1/2	1-3/8	10
APR33-L6	1/2	.499	.501	1/2	5/8	7/8	6
APR33-L10	1/2	.499	.501	1/2	5/8	1-3/8	10
APR37-L6	5/8	.624	.626	5/8	3/4	7/8	6
APR37-L10	5/8	.624	.626	5/8	3/4	1-3/8	10
APR41-L10	3/4	.749	.751	3/4	7/8	1-3/8	10
APR41-L14	3/4	.749	.751	3/4	7/8	1-3/8	14

# Carbide Reamers



- Designed to work with PCS Oversized Ejector Pins
- Straight flute
- Material: Micro - Grain Carbide
- Extra long shank for easy access to holes within a deep cavity
- Four or six flutes to check size precisely
- Extra long flute lengths for greater hole straightness
- Shank diameters smaller than reamer diameter to avoid seizing



Tolerances	
Reamer Diameter	+ .0002 - .0000
Shank Diameter	+ .0000 - .0005

.005 Oversize	CATALOG NUMBER	FRACTIONAL SIZE	DECIMAL SIZE	NO. OF FLUTES	FLUTE LENGTH	OVERALL LENGTH	SHANK DIA
	ROS-4	3/64 OS	.0517	4	1/2	4	.046
	ROS-5	1/16 OS	.0673	4	1/2	4	.062
	ROS-6	5-64 OS	.0829	4	1/2	4	.077
	ROS-7	3/32 OS	.0986	4	3/4	4	.093
	ROS-9	1/8 OS	.1298	4	7/8	4	.125
	ROS-10	9/64 OS	.1454	6	1	4	.140
	ROS-11	5/32 OS	.1610	6	1	4	.155
	ROS-13	3/16 OS	.1923	6	1	4-1/2	.187
	ROS-15	7/32 OS	.2236	6	1-1/8	5	.218
	ROS-17	1/4 OS	.2548	6	1-1/8	5	.249
	ROS-21	5/16 OS	.3173	6	1-3/8	5	.312
	ROS-25	3/8 OS	.3798	6	1-1/2	5	.374

On Size	CATALOG NUMBER	FRACTIONAL SIZE	DECIMAL SIZE	NO. OF FLUTES	FLUTE LENGTH	OVERALL LENGTH	SHANK DIA
	RC-5	1/16	.0625	4	1/2	4	.057
	RC-7	3/32	.0938	4	3/4	4	.088
	RC-9	1/8	.1250	4	7/8	4	.120
	RC-11	5/32	.1562	6	1	4	.151
	RC-13	3/16	.1875	6	1	4-1/2	.182
	RC-15	7/32	.2188	6	1-1/8	5	.213
	RC-17	1/4	.2500	6	1-1/8	5	.245
	RC-19	9/32	.2812	6	1-3/8	5	.276
	RC-21	5/16	.3125	6	1-3/8	5	.307

## Ejector Pin Counterbores Hardened & Precision Ground



- Angled Pilot for easy pickup of holes
- Built in 45° Chamfer provides clearance for radius under Ejector Pin head
- Manufactured from high speed steel with precision ground cutting edges for even chip load and fast smooth chip clearance

CATALOG NUMBER	EJECTOR PIN DIA	OVERALL LENGTH	BODY DIA	SHANK DIA	PILOT LENGTH
ECB-9	1/8	2-5/8	9/32	1/4	3/16
ECB-11	5/32	2-3/4	5/16	1/4	3/16
ECB-13	3/16	3-1/4	13/32	3/8	3/16
ECB-15	7/32	3-3/8	7/16	3/8	1/4
ECB-17	1/4	3-9/16	15/32	7/16	1/4
ECB-19	9/32	3-9/16	15/32	7/16	1/4
ECB-21	5/16	3-7/8	17/32	1/2	5/16
ECB-23	11/32	4-1/4	19/32	1/2	5/16
ECB-25	3/8	4-1/2	21/32	5/8	5/16
ECB-29	7/16	4-3/4	23/32	5/8	5/16
ECB-33	1/2	5-1/8	25/32	5/8	5/16
ECB-37	5/8	5-5/8	29/32	5/8	5/16
ECB-41	3/4	6-1/4	1-1/32	5/8	5/16
ECB-47	1	6-1/4	1-9/32	3/4	5/16



# Pin Reference Chart

REFERENCE CHART			
DESCRIPTION	TOLERANCE FROM NOMINAL	SURFACE HARDNESS Rc	CORE HARDNESS Rc
<b>P &amp; SP</b> HARDENED THROUGHOUT EJECTOR PIN 1/32" THRU 1/2"	-.0005 -.0008	65 - 70	50 - 52
<b>P</b> HARDENED THROUGHOUT EJECTOR PIN 17/32" THRU 1"	-.0005 -.0010	65 - 70	50 - 52
<b>NP</b> NITRIDED EJECTOR PIN	+.000 -.001	65 - 74	35 - 40
<b>CPH</b> HARD CORE PIN	+.0010 +.0005	50 - 55	50 - 55
<b>CPS</b> SOFT CORE PIN	+.0010 +.0005	30 - 35	30 - 35
<b>SL</b> NITRIDED SLEEVE	O.D. +.000 -.001 I.D. +.0005 -.0000	65 - 74	30 - 35
<b>BE</b> EJECTOR BLADE	BLADE THICK. +.0000 AND WIDTH -.0003	50 - 52	50 - 52
<b>AR</b> STRAIGHT ARMOR PIN	1/8-1/2 = -.0005 -.0008 5/8-3/4 = -.0005 -.0010	70 - 72	50 - 52
<b>ARS</b> STEP ARMOR PIN	-.0005 -.0008	70 - 72	50 - 52
<b>CPM</b> moldMAX® PIN	+.000 -.001	36 - 42	36 - 42
<b>RP</b> NITRIDED RETURN PIN	+.000 -.001	65 - 74	35 - 40
<b>A</b> NITRIDED ANGLE PIN	-.0010 -.0015	65 - 74	35 - 40

## PRICING

ALL ITEMS ARE BILLED AT PRICES IN EFFECT ON THE DATE OF SHIPMENT. PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE.

## TERMS

NET 30 DAYS

## TRANSPORTATION

ALL SHIPMENTS ARE MADE F.O.B. SHIPPING POINT.

## CLAIMS

CLAIMS FOR ANY ERRORS, SHORTAGES, OR DEFECTS MUST BE MADE WITHIN TEN (10) DAYS FROM RECEIPT OF SHIPMENT.

ALL ITEMS CLAIMED DEFECTIVE MUST BE INSPECTED BY PCS PRIOR TO REPLACEMENT OR CREDIT.

## RETURNS

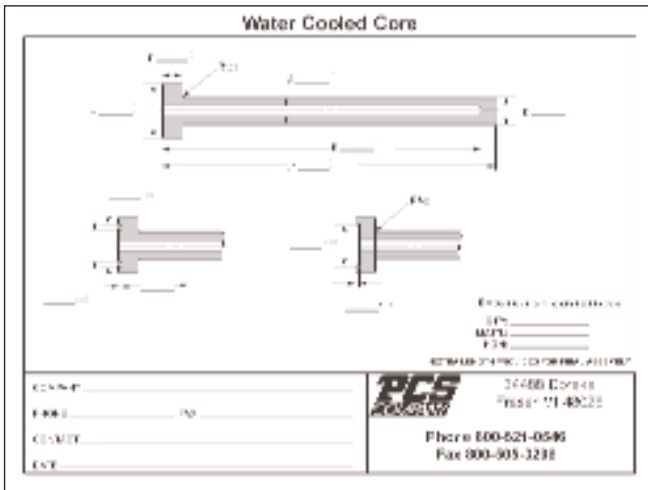
APPROVAL MUST BE OBTAINED FROM PCS, PRIOR TO RETURNING ANY MERCHANDISE. SPECIAL ORDERS I.E., SPECIAL SLEEVES, PINS AND WEAR PLATES ARE NOT SUBJECT TO RETURN.

SEE Tab for Section K for Complete Terms & Conditions



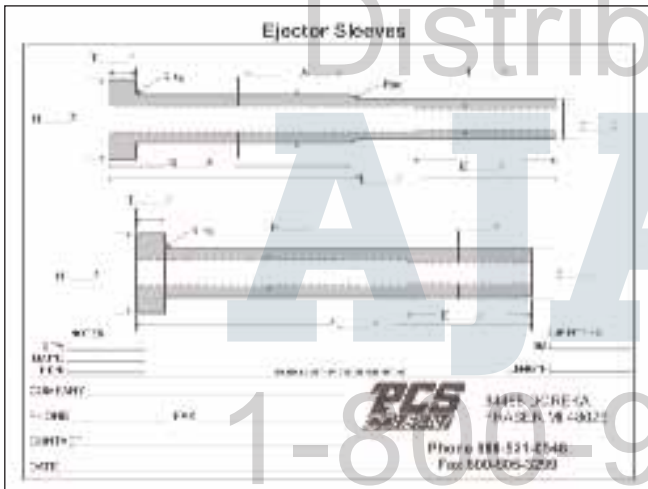


# Water Cooled Cores, Cores



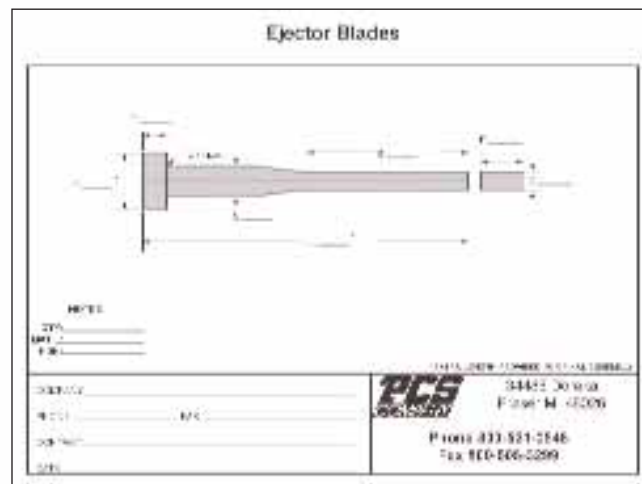
## Advantages of PCS quality Special Water Cooled Cores

- PCS water cooled cores are precision ground to the size and tolerance required.
- Threaded holes and O-ring grooves can be machined to your specifications.
- PCS water cooled cores can be manufactured from our standard "Hardened Throughout™ Pins" as well as other materials (Stainless Steel, S-7, moldMax®, etc.).



## Advantages of PCS quality Special Ejector Sleeves

- PCS sleeves are precision ground to any size & tolerance with as little as .030" wall thickness and can be supplied with PCS pins for a matched slip fit set.
- Any steel specified (A-10, S-7, H-13, A-2 etc.) will be heat treated to a high hardness I.D. and O.D. eliminating the galling found in 30-38 Rc I.D. sleeves.
- The I.D. is precision honed or lapped to size, then the O.D. is ground concentric to the I.D.

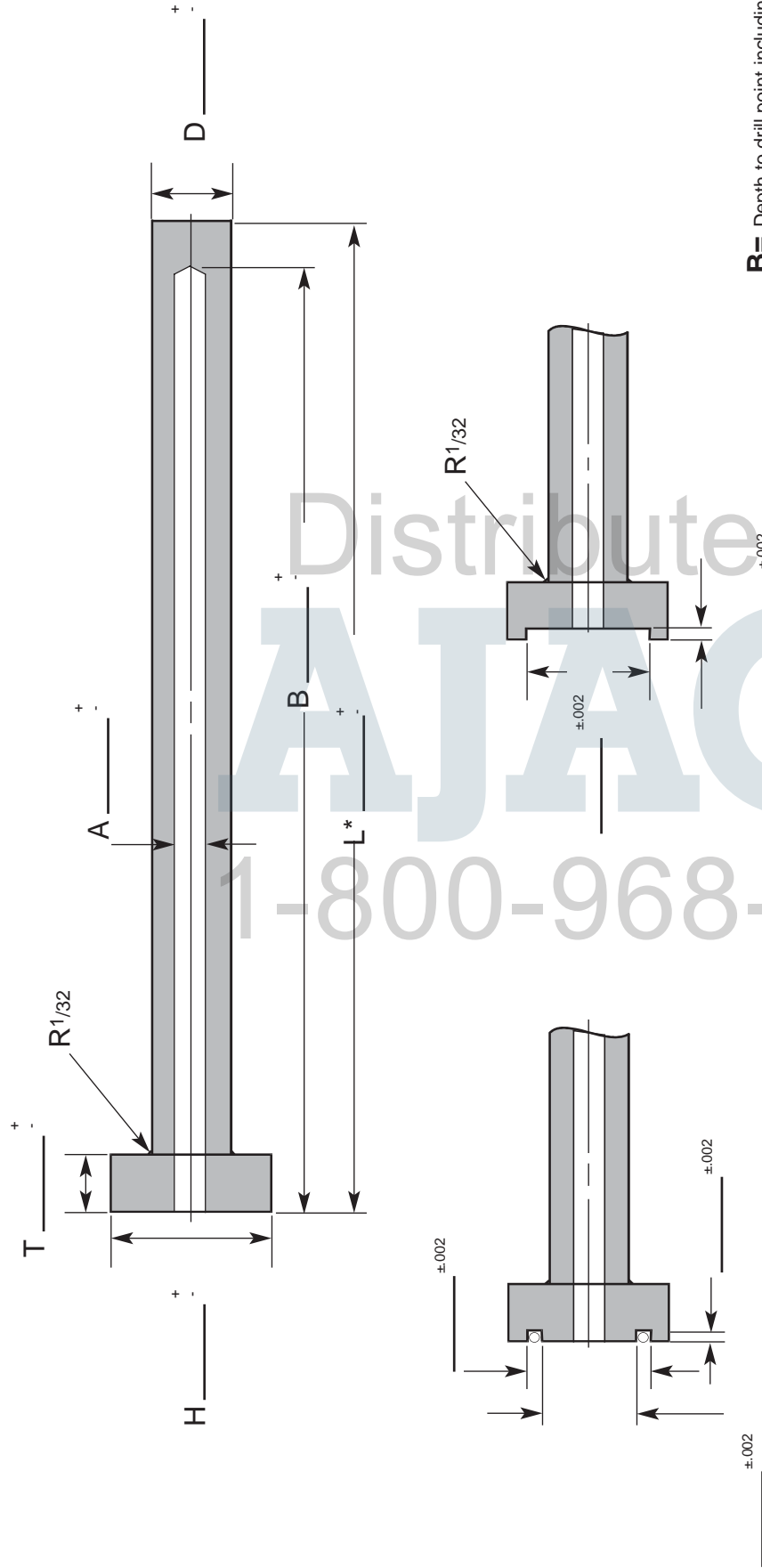


## Advantages of PCS quality Special Ejector Blades

- PCS blades are of one piece construction alleviating problems associated with other type blades.
- PCS blades are precision ground, concentric with the main body, to any tolerance requirement.
- PCS blades can be manufactured from our standard "Hardened Throughout™ Pins" as well as other materials (M-2, S-7, A-2 & A-10).



# Water Cooled Core



**B=** Depth to drill point including head thickness.

QTY: \_\_\_\_\_  
 MAT'L: \_\_\_\_\_  
 HDN: \_\_\_\_\_

\*EXTRA LENGTH PROVIDED FOR FINAL ASSEMBLY



34488 Doreka  
 Fraser MI 48026

Phone 800-521-0546  
 Fax 800-505-3299

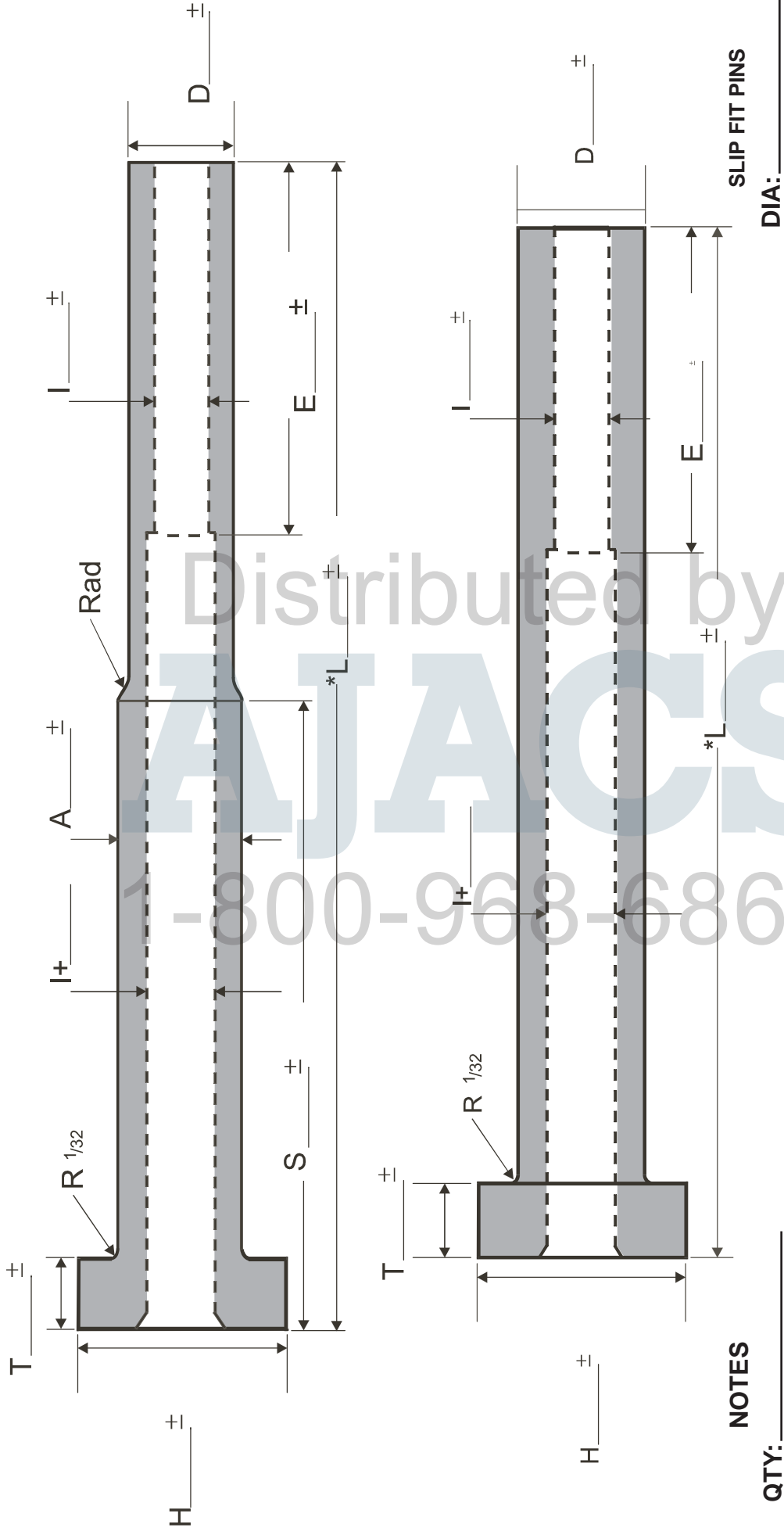
COMPANY \_\_\_\_\_

PHONE \_\_\_\_\_ FAX \_\_\_\_\_

CONTACT \_\_\_\_\_

DATE \_\_\_\_\_

# Ejector Sleeves



**NOTES**

QTY: \_\_\_\_\_  
 MAT'L: \_\_\_\_\_  
 HDN: \_\_\_\_\_

\*EXTRA LENGTH PROVIDED FOR FITTING

SLIP FIT PINS  
 DIA: \_\_\_\_\_

LENGTH: \_\_\_\_\_



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Phone 800-521-0546  
 Fax 800-505-3299

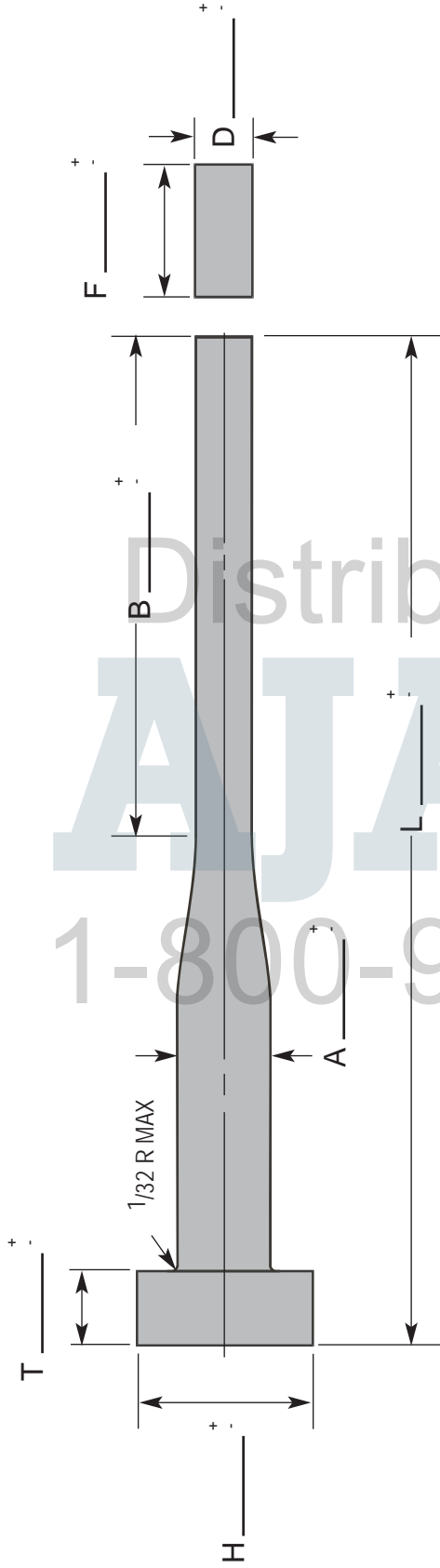
COMPANY \_\_\_\_\_

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# Ejector Blades



## NOTES

QTY: \_\_\_\_\_  
 MAT'L: \_\_\_\_\_  
 HDN: \_\_\_\_\_

\*EXTRA LENGTH PROVIDED FOR FINAL ASSEMBLY



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