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## CARBIDE PUNCHES & DIE INSERTS +.0002"/+.0004" TOLERANCE CATALOG



## **Oberg Slug Retention**

## Reduce Excessive Manufacturing Costs Associated With Slug Pulling In Your Stamping Operations

Downtime, broken die components and rejected parts can be extremely costly. Oberg's Slug Retention process can solve those nagging problems by reducing the risk of slugs being pulled to the die surface during withdrawal of the punch.



Slug Retention can be used on carbide bushings or die sections with counterbore, tapered or strait I.D. styles, in rounds and most shapes.



#### Our Method Is User Friendly

Because our process is based on your application, no redesigning of your current tooling is required. This process is very dependable and can be

precisely duplicated each time a component needs to be replaced.

#### Performance Is Guaranteed

Our Slug Retention method will totally eliminate or greatly reduce your slug pulling difficulties. Test our proven system and receive this guarantee: **Use Oberg Slug Retention and if you are not completely satisfied, we will refund the full cost** 

of the Slug Retention alteration. (This guarantee is limited to only round shapes with inside diameters greater than 0.040").

#### What It Does

Oberg Slug Retention is a solution for controlling slugs in carbide die bushings or die sections. This process places an exact amount of trap on the slug to maintain a smooth, even flow of slugs away from the working area of the die. Slug Retention is user friendly and requires no redesigning of your tooling and no special drawings.

#### **How It Works**

With our Slug Retention method, a series of carefully calculated interference points are produced on the slug that help to eliminate slug pulling. A precise amount of interference is applied to the blanked slug so that vacuum forces will not pull it back into the work area. The slug expands into a series of special grooves manufactured in the die bushing or die section effectively retaining the slug. These grooves are engineered to prevent the slug from pulling back onto the die face where damage can occur.

#### Features & Benefits

Eliminates or reduces the following:

- · Punch breakage due to double hits
- Use of ejector punches or air holes
- Slug marks on parts
- Press downtime
- Wasted material
- Die maintenance
- New die development

#### **How to Order**

Just send us your print via mail, fax or e-mail and include the following information:

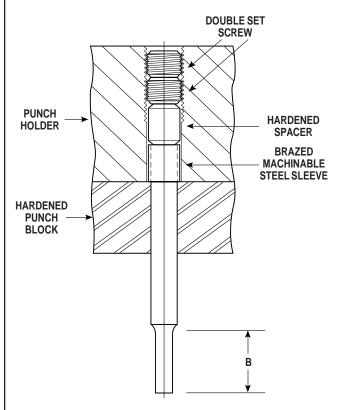
- Material type
- · Material thickness
- Material hardness
- Break clearance per side

Standard Tolerance Catalog 2

# Carbide Punches with Machinable Steel Sleeve Type Head

These punches are recommended for medium to heavy punching requirements. They will out-perform steel punches many times, and they perform best when used in good quality dies.

The length of the steel sleeve (head thickness "T") is standard at 1/2", but may be ordered at any specified dimension less than 1/2".

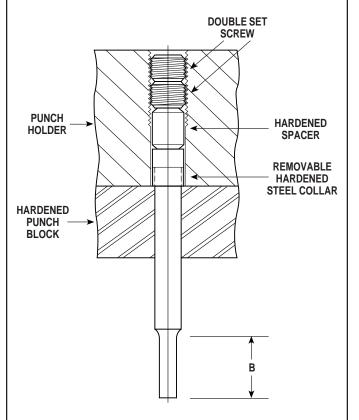


In the sectional view above, please note that:

- 1. Double set screws are recommended.
- 2. The hardened spacer next to the punch head is optional, and may be omitted.
- By turning or grinding the shoulder of the soft steel head, the effective body length of the punch may be increased.
- In most sizes, the length of the punch tip "B" may be renewed or increased by sending to OCP&D for regrinding, or by regrinding in your own shop.

### Carbide Punches with Carbide Head and Hardened Steel Collar

These punches are for the stamper who prefers one piece carbide punches with carbide heads. They will out-perform steel punches many times when used in good quality dies.



In the sectional view above, please note that:

- 1. Double set screws are recommended.
- 2. The hardened spacer is optional, and may be omitted.
- To facilitate adjustment, each punch is supplied with a hardened steel collar which may be removed and ground off.
- In most sizes, the length of the punch tip "B" may be renewed or increased by sending to OCP&D for regrinding, or by regrinding in your own shop.

Standard Tolerance Catalog

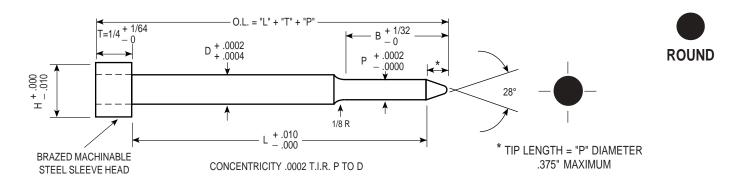
#### +.0002/+.0004" Tolerance Page

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This catalog covers +.0002/+.0004" tolerance die components. For +.00005/-.00000" tolerance die components, please refer to our precision catalog.



### Carbide Pilots with Machinable Steel Sleeve Head



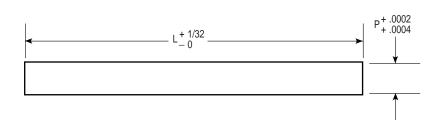
CATALOG	D BODY	P POINT	B POINT	H HEAD		L= L	_ENG1	TH UN	DER I	HEAD	
NUMBER	DIAMETER	DIAMETER	LENGTH	DIAMETER	2	21/4	2½	2¾	3	31/4	3½
1PNS-H18	.1875	.0611875	3/4"	.250	•	•	•	•	•	•	•
1PNS-H25	.250	.0601259	3/4"	.340	•	•	•	•	•	•	•
2PNS-H25	.250	.126250	1"	.340	•	•	•	•	•	•	•
1PNS-H31	.3125	.1252499	1"	.400	•	•	•	•	•	•	•
2PNS-H31	.3125	.2503125	1"	.400	•	•	•	•	•	•	•
1PNS-H37	.375	.1873139	1"	.460	•	•	•	•	•	•	•
2PNS-H37	.375	.314375	1"	.460	•	•	•	•	•	•	•
1PNS-H43	.4375	.3143749	1"	.562	•	•	•	•	•	•	
2PNS-H43	.4375	.3754375	1"	.562	•	•	•	•	•	•	
1PNS-H50	.500	.3754379	1"	.625	•	•	•	•	•	•	
2PNS-H50	.500	.438500	1"	.625	•	•	•	•	•	•	
1PNS-H62	.625	.4385299	1"	.750	•	•	•	•	•	•	
2PNS-H62	.625	.530625	1"	.750	•	•	•	•	•	•	
1PNS-H75	.750	.5306299	1"	.875	•	•	•	•	•	•	
2PNS-H75	.750	.630750	1"	.875	•	•	•	•	•	•	

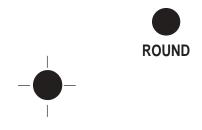


NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

Quantity	Catalog Number	L	Р		
7	1PNS-H37	3"	.2200"		

## **Carbide Round Blanks Precision Ground**





CATALOG	P POINT					L =	: LEN	GTH				
NUMBER	DIAMETER	1½	1¾	2	21/4	2½	2¾	3	31/4	3½	3¾	4
1PR-H	.0625	•	•	•	•	•	•	•	•	•	•	•
2PR-H	.125	•	•	•	•	•	•	•	•	•	•	•
3PR-H	.1875	•	•	•	•	•	•	•	•	•	•	•
4PR-H	.250	•	•	•	•	•	•	•	•	•	•	•
5PR-H	.3125	•	•	•	•	•	•	•	•	•	•	•
6PR-H	.375	•	•	•	•	•	•	•	•	•	•	•
7PR-H	.4375	•	•	•	•	•	•	•	•	•	•	•
8PR-H	.500	•	•	•	•	•	•	•	•	•	•	•
9PR-H	.625	•	•	•	•	•	•	•	•	•	•	•
10PR-H	.750	•	•	•	•	•	•	•	•	•	•	•



NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

#### WHEN ORDERING SPECIFY:

(	Quantity	Catalog Number	L
	12	8PR-H	21/2"

## **Carbide Round Blanks Precision Ground**

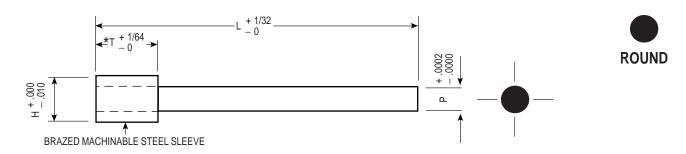
CATALOG NUMBER	P + .0002 0000 DIAMETER	$L = LENGTH + \frac{1}{32}$
SCR	.005"029"	AVAILABLE IN LENGTHS UP TO 6"

CATALOG NUMBER	P + .00005 P000 DIAMETER	$L = LENGTH + \frac{1}{32}$
SCR	.030"375"	AVAILABLE IN LENGTHS UP TO 6"

NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

Quantity	Catalog Number	L	P		
10	SCR	31/4"	.1212"		

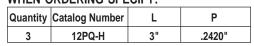
## Carbide Punches, Straight Ground with Machinable Steel Sleeve Head



CATALOG	P POINT	H HEAD	T HEAD					L=	= LENGT	Н				
NUMBER	DIAMETER	DIAMETER	LENGTH	1½	1¾	2	21/4	2½	23/4	3	31/4	3½	3¾	4
1PQ-H	.0450649	.125	3/16"	•	•	•	•	•	•	•	•	•	•	•
2PQ-H	.0650879	.125	3/16"	•	•	•	•	•	•	•	•	•	•	•
3PQ-H	.0881249	.171	3/16"	•	•	•	•	•	•	•	•	•	•	•
3PQA-H	.125	.171	3/16"	•	•	•	•	•	•	•	•	•	•	•
4PQ-H	.12511409	.203	1/4"	•	•	•	•	•	•	•	•	•	•	•
5PQ-H	.1411569	.218	1/4"	•	•	•	•	•	•	•	•	•	•	•
6PQ-H	.1571729	.234	1/4"	•	•	•	•	•	•	•	•	•	•	•
7PQ-H	.1731874	.250	1/4"	•	•	•	•	•	•	•	•	•	•	•
8PQ-H	.1875	.296	1/2"	•	•	•	•	•	•	•	•	•	•	•
9PQ-H	.18762049	.296	1/2"	•	•	•	•	•	•	•	•	•	•	•
10PQ-H	.2052199	.340	1/2"	•	•	•	•	•	•	•	•	•	•	•
11PQ-H	.2202359	.340	1/2"	•	•	•	•	•	•	•	•	•	•	•
12PQ-H	.2362499	.340	1/2"	•	•	•	•	•	•	•	•	•	•	•
13PQ-H	.250	.340	1/2"	•	•	•	•	•	•	•	•	•	•	•
14PQ-H	.25012669	.400	1/2"	•	•	•	•	•	•	•	•	•	•	•
15PQ-H	.2672829	.400	1/2"	•	•	•	•	•	•	•	•	•	•	•
16PQ-H	.2832979	.400	1/2"	•	•	•	•	•	•	•	•	•	•	•
17PQ-H	.2983124	.400	1/2"	•	•	•	•	•	•	•	•	•	•	•
18PQ-H	.3125	.400	1/2"	•	•	•	•	•	•	•	•	•	•	•
19PQ-H	.31263439	.460	1/2"	•	•	•	•	•	•	•	•	•	•	•
20PQ-H	.3443749	.460	1/2"	•	•	•	•	•	•	•	•	•	•	•
21PQ-H	.375	.460	1/2"	•	•	•	•	•	•	•	•	•	•	•
1PQ-H43	.4375	.562	1/2"	•	•	•	•	•	•	•	•	•	•	•
1PQ-H50	.500	.625	1/2"	•	•	•	•	•	•	•	•	•	•	•
1PQ-H62	.625	.750	1/2"	•	•	•	•	•	•	•	•	•	•	•
1PQ-H75	.750	.875	1/2"	•	•	•	•	•	•	•	•	•	•	•

NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

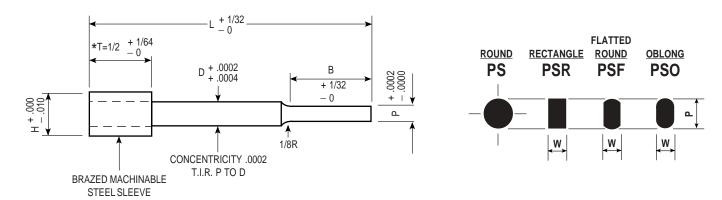




<sup>\*</sup>Also available with 3/16" head thickness - no additional charge.



## **Carbide Punches with Machinable Steel Sleeve Head**



CATALOG	D BODY	P POINT	B H POINT HEAD				L =	LEN	GTH				
NUMBER	DIAMETER	DIAMETER	LENGTH	DIAMETER	2	21/4	2½	2¾	3	31/4	3½	3¾	4
1PS-H12	.125	.0310609	5/16"	.171	•	•	•	•	•	•	•	•	•
2PS-H12	.125	.061125	3/4"	.171	•	•	•	•	•	•	•	•	•
1PS-H18	.1875	.0310609	5/16"	.250	•	•	•	•	•	•	•	•	•
2PS-H18	.1875	.0611875	3/4"	.250	•	•	•	•	•	•	•	•	•
1PS-H25	.250	.0601259	3/4"	.340	•	•	•	•	•	•	•	•	•
2PS-H25	.250	.126250	7/8"	.340	•	•	•	•	•	•	•	•	•
1PS-H31	.3125	.1252499	7/8"	.400	•	•	•	•	•	•	•	•	•
2PS-H31	.3125	.2503125	7/8"	.400	•	•	•	•	•	•	•	•	•
1PS-H37	.375	.1873139	7/8"	.460	•	•	•	•	•	•	•	•	•
2PS-H37	.375	.314375	7/8"	.460	•	•	•	•	•	•	•	•	•
1PS-H43	.4375	.3143749	7/8"	.562	•	•	•	•	•	•	•	•	•
2PS-H43	.4375	.3754375	7/8"	.562	•	•	•	•	•	•	•	•	•
1PS-H50	.500	.3754379	7/8"	.625	•	•	•	•	•	•	•	•	•
2PS-H50	.500	.438500	7/8"	.625	•	•	•	•	•	•	•	•	•
1PS-H62	.625	.4385299	7/8"	.750	•	•	•	•	•	•	•	•	•
2PS-H62	.625	.530625	7/8"	.750	•	•	•	•	•	•	•	•	•
1PS-H75	.750	.5306299	7/8"	.875	•	•	•	•	•	•	•	•	•
2PS-H75	.750	.630750	7/8"	.875	•	•	•	•	•	•	•	•	•

NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

All outside corners to be sharp unless otherwise specified by customer.

#### WHEN ORDERING SPECIFY:

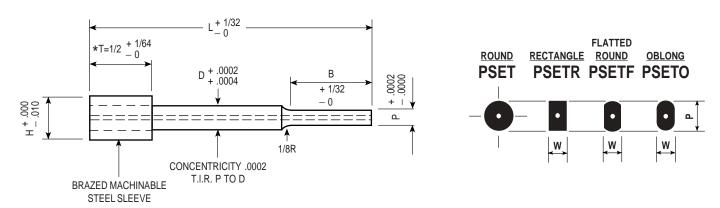
Quantity	Catalog Number	L	Р		
5	2PS-H43	31/2"	.4000"		

Quantity	Catalog Number	L	Point Dimensions
12	1PSF-H18	21/2"	W = .1320"
			P = .1875"

\*Also available with 3/16" head thickness - no additional charge.



## Carbide Punches with Air Hole and Machinable Steel Sleeve Head



CATALOG	D	P POINT	B POINT	H HEAD	AIR HOLE				L	= LENC	GTH			
NUMBER	DIAMETER	DIAMETER	LENGTH	DIAMETER	-	2	21/4	2½	2¾	3	31/4	3½	3¾	4
1PSET-H18	.1875	.0931259	3/4"	.250	3/64"	•	•	•	•	•	•	•	•	•
2PSET-H18	.1875	.1261875	7/8"	.250	3/64"	•	•	•	•	•	•	•	•	•
1PSET-H25	.250	.0931259	3/4"	.340	3/64"	•	•	•	•	•	•	•	•	•
2PSET-H25	.250	.126250	7/8"	.340	3/64"	•	•	•	•	•	•	•	•	•
1PSET-H31	.3125	.1252499	7/8"	.400	3/64"	•	•	•	•	•	•	•	•	•
2PSET-H31	.3125	.2503125	7/8"	.400	3/64"	•	•	•	•	•	•	•	•	•
1PSET-H37	.375	.1873139	7/8"	.460	5/64"	•	•	•	•	•	•	•	•	•
2PSET-H37	.375	.314375	7/8"	.460	5/64"	•	•	•	•	•	•	•	•	•
1PSET-H43	.4375	.3143749	7/8"	.562	7/64"	•	•	•	•	•	•	•	•	•
2PSET-H43	.4375	.3754375	7/8"	.562	7/64"	•	•	•	•	•	•	•	•	•
1PSET-H50	.500	.3754379	7/8"	.625	9/64"	•	•	•	•	•	•	•	•	•
2PSET-H50	.500	.438500	7/8"	.625	9/64"	•	•	•	•	•	•	•	•	•
1PSET-H62	.625	.4385299	7/8"	.750	9/64"	•	•	•	•	•	•	•	•	•
2PSET-H62	.625	.530625	7/8"	.750	9/64"	•	•	•	•	•	•	•	•	•

NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

WHEN ORDERING SPECIFY:

Quantity	Catalog Number	L	Р
3	1PSET-H50	3"	.4120"

Quantity	Catalog Number	L	Point Dimensions
12	1PSETO-H18	2"	W = .1270"
			P = .1800"

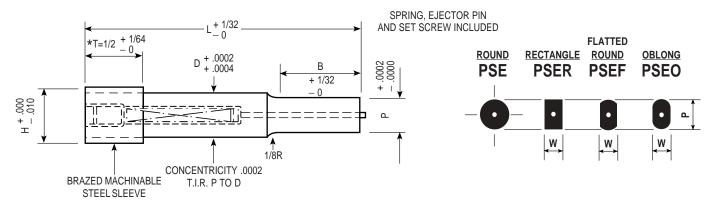
\*Also available with 3/16" head thickness - no additional charge.

Note: These punches are available with shaped points.

All outside corners to be sharp unless otherwise specified by customer.



### Carbide Punches with Self-Contained Ejector Pin and Machinable Steel Sleeve Head



CATALOG	D	P POINT	B POINT	H HEAD				L	= LENG	TH			
NUMBER	DIAMETER	DIAMETER	LENGTH	DIAMETER	2	21/4	2½	2¾	3	31/4	3½	3¾	4
1PSE-H18	.1875	.0931259	3/4"	.250	•	•	•	•	•	•	•	•	•
2PSE-H18	.1875	.1261875	7/8"	.250	•	•	•	•	•	•	•	•	•
1PSE-H25	.250	.0931259	3/4"	.340	•	•	•	•	•	•	•	•	•
2PSE-H25	.250	.126250	7/8"	.340	•	•	•	•	•	•	•	•	•
1PSE-H31	.3125	.1252499	7/8"	.400	•	•	•	•	•	•	•	•	•
2PSE-H31	.3125	.2503125	7/8"	.400	•	•	•	•	•	•	•	•	•
1PSE-H37	.375	.1873139	7/8"	.460	•	•	•	•	•	•	•	•	•
2PSE-H37	.375	.314375	7/8"	.460	•	•	•	•	•	•	•	•	•
1PSE-H43	.4375	.3143749	7/8"	.562	•	•	•	•	•	•	•	•	•
2PSE-H43	.4375	.3754375	7/8"	.562	•	•	•	•	•	•	•	•	•
1PSE-H50	.500	.3754379	7/8"	.625	•	•	•	•	•	•	•	•	•
2PSE-H50	.500	.438500	7/8"	.625	•	•	•	•	•	•	•	•	•
1PSE-H62	.625	.4385299	7/8"	.750	•	•	•	•	•	•	•	•	•
2PSE-H62	.625	.530625	7/8"	.750	•	•	•	•	•	•	•	•	•

NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

WHEN ORDERING SPECIFY:

Quantity	Catalog Number	L	Р
3	2PSE-H43	31/2"	.4020"

Quantity	Catalog Number	L	Point Dimensions
12	1PSER-H50	31/2"	W = .2500"
			P = .3750"

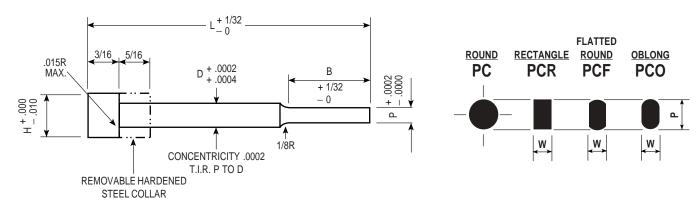
\*Also available with 3/16" head thickness - no additional charge.

Note: These punches are available with shaped points.

All outside corners to be sharp unless otherwise specified by customer.



### Carbide Punches with Carbide Head and Hardened Steel Collar



CATALOG	D BODY	P POINT	B POINT	H HEAD	L = LENGTH								
NUMBER	DIAMETER	DIAMETER	LENGTH	DIAMETER	2	21/4	2½	2¾	3	31/4	3½	3¾	4
* 1PC-H18	.1875	.0310609	5/16"	.250	•	•	•	•	•	•	•	•	•
* 2PC-H18	.1875	.0611875	3/4"	.250	•	•	•	•	•	•	•	•	•
1PC-H25	.250	.0601259	3/4"	.340	•	•	•	•	•	•	•	•	•
2PC-H25	.250	.126250	7/8"	.340	•	•	•	•	•	•	•	•	•
1PC-H31	.3125	.1252499	7/8"	.400	•	•	•	•	•	•	•	•	•
2PC-H31	.3125	.2503125	7/8"	.400	•	•	•	•	•	•	•	•	•
1PC-H37	.375	.1873139	7/8"	.460	•	•	•	•	•	•	•	•	•
2PC-H37	.375	.314375	7/8"	.460	•	•	•	•	•	•	•	•	•
1PC-H43	.4375	.3143749	7/8"	.562	•	•	•	•	•	•	•	•	•
2PC-H43	.4375	.3754375	7/8"	.562	•	•	•	•	•	•	•	•	•
1PC-H50	.500	.3754379	7/8"	.625	•	•	•	•	•	•	•	•	•
2PC-H50	.500	.438500	7/8"	.625	•	•	•	•	•	•	•	•	•
1PC-H62	.625	.4385299	7/8"	.750	•	•	•	•	•	•	•	•	•
2PC-H62	.625	.530625	7/8"	.750	•	•	•	•	•	•	•	•	•
1PC-H75	.750	.5306299	7/8"	.875	•	•	•	•	•	•	•	•	•
2PC-H75	.750	.630750	7/8"	.875	•	•	•	•	•	•	•	•	•

NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

All outside corners to be sharp unless otherwise specified by customer.

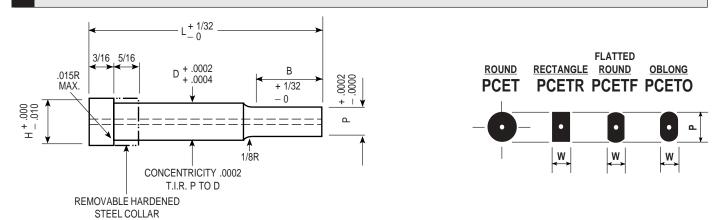
Quantity	Catalog Number	L	Р
3	1PC-H31	3"	.1260"

Quantity	Catalog Number	L	Point Dimensions
12	2PCF-H25	31/2"	W = .1775"
			P = .2250"

<sup>\*</sup> Head thickness = 1/8" with 3/8" steel collar.



### Carbide Punches with Air Hole, Carbide Head and Hardened Steel Collar



CATALOG	D	P POINT	B POINT	H HEAD	AIR HOLE				L = 1	ENGTH				
NUMBER	DIAMETER	DIAMETER	LENGTH	DIAMETER	DIA.	2	21/4	2½	2¾	3	31/4	3½	3¾	4
* 1PCET-H18	.1875	.0931259	3/4"	.250	3/64"	•	•	•	•	•	•	•	•	•
* 2PCET-H18	.1875	.1261875	7/8"	.250	3/64"	•	•	•	•	•	•	•	•	•
1PCET-H25	.250	.0931259	3/4"	.340	3/64"	•	•	•	•	•	•	•	•	•
2PCET-H25	.250	.126250	7/8"	.340	3/64"	•	•	•	•	•	•	•	•	•
1PCET-H31	.3125	.1252499	7/8"	.400	3/64"	•	•	•	•	•	•	•	•	•
2PCET-H31	.3125	.2503125	7/8"	.400	3/64"	•	•	•	•	•	•	•	•	•
1PCET-H37	.375	.1873139	7/8"	.460	5/64"	•	•	•	•	•	•	•	•	•
2PCET-H37	.375	.314375	7/8"	.460	5/64"	•	•	•	•	•	•	•	•	•
1PCET-H43	.4375	.3253749	7/8"	.562	7/64"	•	•	•	•	•	•	•	•	•
2PCET-H43	.4375	.3754375	7/8"	.562	7/64"	•	•	•	•	•	•	•	•	•
1PCET-H50	.500	.3754379	7/8"	.625	9/64"	•	•	•	•	•	•	•	•	•
2PCET-H50	.500	.438500	7/8"	.625	9/64"	•	•	•	•	•	•	•	•	•
1PCET-H62	.625	.500579	7/8"	.750	9/64"	•	•	•	•	•	•	•	•	•
2PCET-H62	.625	.575625	7/8"	.750	9/64"	•	•	•	•	•	•	•	•	•

NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

All outside corners to be sharp unless otherwise specified by customer.

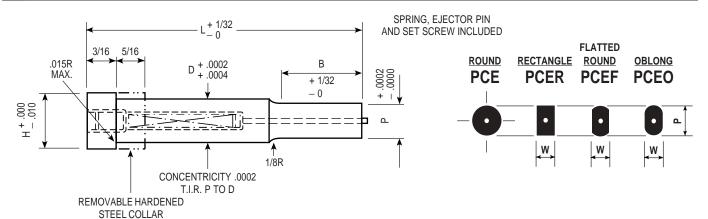
Quantity	Catalog Number	L	Р
3	1PCET-H25	3"	.1000"

Quantity	Catalog Number	L	Point Dimensions
12	1PCETR-H31	3"	W = .1875"
			P = .1500"

<sup>\*</sup> Head Thickness = 1/8" with 3/8" Steel Collar.



### Carbide Punches with Self-Contained Ejector Pin, Carbide Head and Hardened Steel Collar



CATALOG	D	P POINT	B POINT	H HEAD				L	= LENG	TH			
NUMBER	DIAMETER	DIAMETER	LENGTH	DIAMETER	2	21/4	21/2	23/4	3	31/4	3½	3¾	4
* 1PCE-H18	.1875	.0931259	3/4"	.250	•	•	•	•	•	•	•	•	•
* 2PCE-H18	.1875	.1261875	7/8"	.250	•	•	•	•	•	•	•	•	•
1PCE-H25	.250	.0931259	3/4"	.340	•	•	•	•	•	•	•	•	•
2PCE-H25	.250	.126250	7/8"	.340	•	•	•	•	•	•	•	•	•
1PCE-H31	.3125	.1252499	7/8"	.400	•	•	•	•	•	•	•	•	•
2PCE-H31	.3125	.2503125	7/8"	.400	•	•	•	•	•	•	•	•	•
1PCE-H37	.375	.1873139	7/8"	.460	•	•	•	•	•	•	•	•	•
2PCE-H37	.375	.314375	7/8"	.460	•	•	•	•	•	•	•	•	•
1PCE-H43	.4375	.3143749	7/8"	.562	•	•	•	•	•	•	•	•	•
2PCE-H43	.4375	.3754375	7/8"	.562	•	•	•	•	•	•	•	•	•
1PCE-H50	.500	.3754379	7/8"	.625	•	•	•	•	•	•	•	•	•
2PCE-H50	.500	.438500	7/8"	.625	•	•	•	•	•	•	•	•	•
1PCE-H62	.625	.4385299	7/8"	.750	•	•	•	•	•	•	•	•	•
2PCE-H62	.625	.530625	7/8"	.750	•	•	•	•	•	•	•	•	•

NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

All outside corners to be sharp unless otherwise specified by customer.

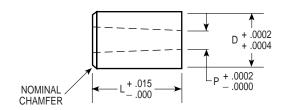
Quantity	Catalog Number	L	Р
3	1PCE-H31	21/2"	.1265"

Quantity	Catalog Number	L	Point Dimensions
12	1PCER-H31	3"	W = .1875"
			P = .1500"

<sup>\*</sup> Head Thickness = 1/8" with 3/8" Steel Collar.



## Carbide Die Inserts with Full Length Taper







CONCENTRICITY O.D. AND I.D., .0002" T.I.R. TAPER IN "P," .0025" PER INCH PER SIDE

CATALOG	D P BODY INSIDE	·	L = LENGTH		
NUMBER	DIAMETER	DIAMETER	1	1¼	
1DT-H18	.1875	.0300519	•	•	
2DT-H18	.1875	.0520749	•	•	
3DT-H18	.1875	.0750969	•	•	
1DT-H25A	.250	.0300519	•	•	
1DT-H25	.250	.0520749	•	•	
2DT-H25	.250	.0750969	•	•	
3DT-H25	.250	.0971199	•	•	
4DT-H25	.250	.120156	•	•	
1DT-H31	.3125	.0300519	•	•	
2DT-H31	.3125	.0520749	•	•	
3DT-H31	.3125	.0750969	•	•	
4DT-H31	.3125	.0971199	•	•	
5DT-H31	.3125	.120206	•	•	
1DT-H37	.375	.0300519	•	•	
2DT-H37	.375	.0520749	•	•	
3DT-H37	.375	.0750969	•	•	
4DT-H37	.375	.0971199	•	•	
5DT-H37	.375	.120206	•	•	



NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

#### WHEN ORDERING SPECIFY:

Quantity	Catalog Number	L	Р
3	5DT-H37	1"	.1620"

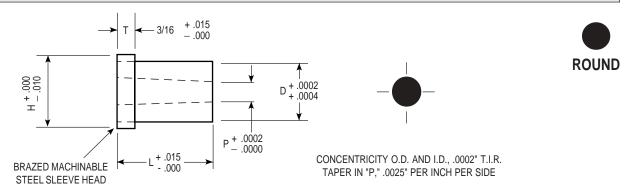
CATALOG	D P BODY INSIDE	L = LENGTH		
NUMBER	DIAMETER	DIAMETER	1	11/4
1DT-H43	.4375	.1562009	•	•
2DT-H43	.4375	.201248	•	•
3DT-H43	.4375	.2481336	•	•
1DT-H50	.500	.1562009	•	•
2DT-H50	.500	.201248	•	•
3DT-H50	.500	.2481336	•	•
1DT-H62	.625	.260396	•	•
1DT-H75	.750	.3125526	•	•
1DT-H87	.875	.375590	•	•
1DT-H100	1.000	.375690	•	•



NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

Quantity	Catalog Number	L	Р
2	3DT-H50	11/4"	.2520"

### Carbide Die Inserts with Full Length Taper and Machinable Steel Sleeve Head



CATALOG	D BODY	P INSIDE	H HEAD	L = 1	LENGTH
NUMBER	DIAMETER	DIAMETER	DIAMETER	1	1¼
1DTS-H18	.1875	.0300519	.296	•	•
2DTS-H18	.1875	.0520749	.296	•	•
3DTS-H18	.1875	.0750969	.296	•	•
1DTS-H25A	.250	.0300519	.340	•	•
1DTS-H25	.250	.0520749	.340	•	•
2DTS-H25	.250	.0750969	.340	•	•
3DTS-H25	.250	.0971199	.340	•	•
4DTS-H25	.250	.120156	.340	•	•
1DTS-H31	.3125	.0300519	.400	•	•
2DTS-H31	.3125	.0520749	.400	•	•
3DTS-H31	.3125	.0750969	.400	•	•
4DTS-H31	.3125	.0971199	.400	•	•
5DTS-H31	.3125	.120206	.400	•	•
1DTS-H37	.375	.0300519	.460	•	•
2DTS-H37	.375	.0520749	.460	•	•
3DTS-H37	.375	.0750969	.460	•	•
4DTS-H37	.375	.0971199	.460	•	•
5DTS-H37	.375	.120206	.460	•	•



NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

#### WHEN ORDERING SPECIFY:

Quantity	Catalog Number	L	Р
6	3DTS-H37	11/4"	.0960"

CATALOG	D BODY	P INSIDE	H HEAD	L = l	.ENGTH
NUMBER	DIAMETER	DIAMETER	DIAMETER	1	1¼
1DTS-H43	.4375	.1562009	.562	•	•
2DTS-H43	.4375	.201248	.562	•	•
3DTS-H43	.4375	.2481336	.562	•	•
1DTS-H50	.500	.1562009	.625	•	•
2DTS-H50	.500	.201248	.625	•	•
3DTS-H50	.500	.2481336	.625	•	•
1DTS-H62	.625	.260396	.750	•	•
1DTS-H75	.750	.3125526	.875	•	•
1DTS-H87	.875	.375590	1.000	•	•
1DTS-H100	1.000	.375690	1.125	•	•

NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

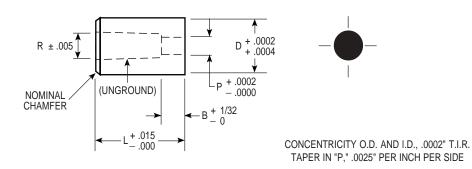
#### WHEN ORDERING SPECIFY:

Quantity	Catalog Number	L	Р
6	3DTS-H50	11/4"	.2960"

For +.00005/-.00000" tolerance die components, please refer to our precision catalog.

**ROUND** 

## **Carbide Die Inserts** with Counterbore





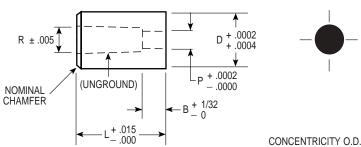
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CATALOG	D	Р	R	р.	L = LE	NGTH
CATALOG NUMBER	BODY DIAMETER	INSIDE DIAMETER	RELIEF DIAMETER	B LAND	1	11/4
1DC-H18A	.1875	.0520619	.080	1/8"	•	•
1DC-H18B	.1875	.062070	.090	1/8"	•	•
2DC-H18A	.1875	.0701077	.100	1/8"	•	•
2DC-H18B	.1875	.0771087	.108	3/16"	•	•
3DC-H18A	.1875	.0871092	.114	3/16"	•	•
1DC-H25	.250	.0520619	.080	1/8"	•	•
1DC-H25A	.250	.062070	.090	1/8"	•	•
1DC-H25B	.250	.0701077	.100	1/8"	•	•
2DC-H25A	.250	.0771087	.108	3/16"	•	•
2DC-H25B	.250	.0871092	.114	3/16"	•	•
3DC-H25A	.250	.0921108	.125	3/16"	•	•
3DC-H25B	.250	.1081124	.144	3/16"	•	•
4DC-H25	.250	.1241140	.159	1/4"	•	•
1DC-H31A	.3125	.062070	.090	1/8"	•	•
1DC-H31B	.3125	.0701077	.100	1/8"	•	•
2DC-H31A	.3125	.0771087	.108	3/16"	•	•
2DC-H31B	.3125	.0871092	.114	3/16"	•	•
3DC-H31A	.3125	.0921108	.125	3/16"	•	•
3DC-H31B	.3125	.1081124	.144	3/16"	•	•
4DC-H31	.3125	.1241140	.159	1/4"	•	•
5DC-H31	.3125	.1401180	.209	1/4"	•	•
6DC-H31	.3125	.1801195	.219	1/4"	•	•
1DC-H37A	.375	.062070	.090	1/8"	•	•
1DC-H37B	.375	.0701077	.100	1/8"	•	•
2DC-H37A	.375	.0771087	.108	3/16"	•	•
2DC-H37B	.375	.0871092	.114	3/16"	•	•
3DC-H37A	.375	.0921108	.125	3/16"	•	•
3DC-H37B	.375	.1081124	.144	3/16"	•	•
4DC-H37	.375	.1241140	.159	1/4"	•	•
5DC-H37	.375	.1401180	.209	1/4"	•	•
6DC-H37	.375	.1801195	.219	1/4"	•	•

NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

Quantity	Catalog Number	L	Р
6	4DC-H31	1"	.1250"

## **Carbide Die Inserts** with Counterbore





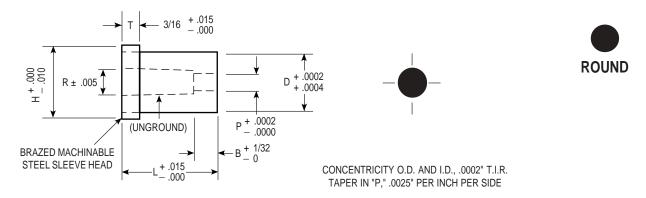
CONCENTRICITY O.D. AND I.D., .0002" T.I.R. TAPER IN "P," .0025" PER INCH PER SIDE

CATALOG	D BODY	P INSIDE	R RELIEF	В	L = LE	NGTH
NUMBER	DIAMETER	DIAMETER	DIAMETER	LAND	1	1¼
1DC-H43	.4375	.156200	.219	1/4"	•	•
2DC-H43	.4375	.2001248	.269	3/8"	•	•
3DC-H43	.4375	.2481300	.319	3/8"	•	•
1DC-H50A	.500	.156200	.219	1/4"	•	•
2DC-H50	.500	.201248	.269	3/8"	•	•
3DC-H50	.500	.248300	.319	3/8"	•	•
1DC-H62A	.625	.260310	.399	3/8"	•	•
2DC-H62	.625	.310375	.399	3/8"	•	•
3DC-H62	.625	.375 - UP	.469	3/8"	•	•
1DC-H75	.750	.3125510	P + .02	3/8"	•	•
1DC-H87	.875	.375515	P + .02	3/8"	•	•
1DC-H100	1.000	.375675	P + .02	3/8"	•	•

NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

Quantity	Catalog Number	L	Р
6	1DC-H50A	11/4"	.1830"

## Carbide Die Inserts with Counterbore and Machinable Steel Sleeve Head



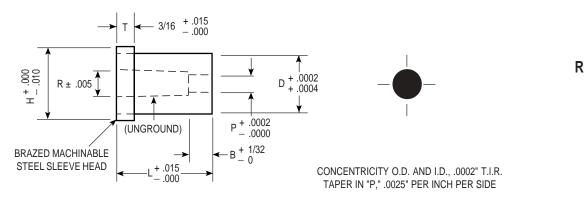
CATALOG	D BODY	P INSIDE	R RELIEF	В	H HEAD	L = Ll	ENGTH
NUMBER	DIAMETER	DIAMETER	DIAMETER	LAND	DIAMETER	1	11/4
1DCS-H18A	.1875	.0520619	.080	1/8"	.296	•	•
1DCS-H18B	.1875	.062070	.090	1/8"	.296	•	•
2DCS-H18A	.1875	.0701077	.100	1/8"	.296	•	•
2DCS-H18B	.1875	.0771087	.108	3/16"	.296	•	•
3DCS-H18A	.1875	.0871092	.114	3/16"	.296	•	•
1DCS-H25	.250	.0520619	.080	1/8"	.340	•	•
1DCS-H25A	.250	.062070	.090	1/8"	.340	•	•
1DCS-H25B	.250	.0701077	.100	1/8"	.340	•	•
2DCS-H25A	.250	.0771087	.108	3/16"	.340	•	•
2DCS-H25B	.250	.0871092	.114	3/16"	.340	•	•
3DCS-H25A	.250	.0921108	.125	3/16"	.340	•	•
3DCS-H25B	.250	.1081124	.144	3/16"	.340	•	•
4DCS-H25	.250	.1241140	.159	1/4"	.340	•	•
1DCS-H31A	.3125	.062070	.090	1/8"	.400	•	•
1DCS-H31B	.3125	.0701077	.100	1/8"	.400	•	•
2DCS-H31A	.3125	.0771087	.108	3/16"	.400	•	•
2DCS-H31B	.3125	.0871092	.114	3/16"	.400	•	•
3DCS-H31A	.3125	.0921108	.125	3/16"	.400	•	•
3DCS-H31B	.3125	.1081124	.144	3/16"	.400	•	•
4DCS-H31	.3125	.1241140	.159	1/4"	.400	•	•
5DCS-H31	.3125	.1401180	.209	1/4"	.400	•	•
6DCS-H31	.3125	.1801195	.219	1/4"	.400	•	•
1DCS-H37A	.375	.062070	.090	1/8"	.460	•	•
1DCS-H37B	.375	.0701077	.100	1/8"	.460	•	•
2DCS-H37A	.375	.0771087	.108	3/16"	.460	•	•
2DCS-H37B	.375	.0871092	.114	3/16"	.460	•	•
3DCS-H37A	.375	.0921108	.125	3/16"	.460	•	•
3DCS-H37B	.375	.1081124	.144	3/16"	.460	•	•
4DCS-H37	.375	.1241140	.159	1/4"	.460	•	•
5DCS-H37	.375	.1401180	.209	1/4"	.460	•	•
6DCS-H37	.375	.1801195	.219	1/4"	.460	•	•



NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

Quantity	Catalog Number	L	Р
6	3DCS-H31A	1"	.1000"

## Carbide Die Inserts with Counterbore and Machinable Steel Sleeve Head

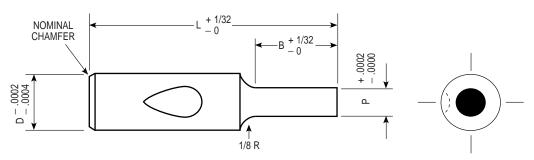


CATALOG	D BODY	P INSIDE	R RELIEF	В	H HEAD	L = LE	ENGTH
NUMBER	DIAMETER	DIAMETER	DIAMETER	LAND	DIAMETER	1	11/4
1DCS-H43	.4375	.156200	.219	1/4"	.562	•	•
2DCS-H43	.4375	.2001248	.269	3/8"	.562	•	•
3DCS-H43	.4375	.2481300	.319	3/8"	.562	•	•
1DCS-H50A	.500	.156200	.219	1/4"	.625	•	•
2DCS-H50	.500	.201248	.269	3/8"	.625	•	•
3DCS-H50	.500	.248300	.319	3/8"	.625	•	•
1DCS-H62A	.625	.260310	.399	3/8"	.750	•	•
2DCS-H62	.625	.310375	.399	3/8"	.750	•	•
3DCS-H62	.625	.375 - UP	.469	3/8"	.750	•	•
1DCS-H75	.750	.3125510	P + .02	3/8"	.875	•	•
1DCS-H87	.875	.375515	P + .02	3/8"	1.000	•	•
1DCS-H100	1.000	.375675	P + .02	3/8"	1.125	•	•

NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

Quantity	Catalog Number	L	Р
6	3DCS-H50	1"	.2500"

## Carbide Punches, Ball Retainer Type – Light Duty





CONCENTRICITY .0002" T.I.R. POINT TO SHANK

CATALOG	D	P POINT	B POINT			L	= LENG	STH		
NUMBER	DIAMETER	DIAMETER	LENGTH	2	21/4	2½	2¾	3	31/4	31/2
1PB-25	.250	.060090	3/8"	•	•	•	•	•	•	•
2PB-25	.250	.0901125	3/8"	•	•	•	•	•	•	•
3PB-25	.250	.1251250	3/8"	•	•	•	•	•	•	•
1PB-37	.375	.187250	1/2"	•	•	•	•	•	•	•
2PB-37	.375	.2501313	1/2"	•	•	•	•	•	•	•
3PB-37	.375	.3131375	1/2"	•	•	•	•	•	•	•
1PB-50	.500	.250325	5/8"	•	•	•	•	•	•	•
2PB-50	.500	.3251400	5/8"	•	•	•	•	•	•	•
3PB-50	.500	.4001500	5/8"	•	•	•	•	•	•	•

NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

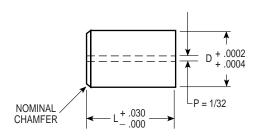


Quantity	Catalog Number	L	Р
3	1PB-50	21/2"	.2630"





### Carbide Die Inserts, Wire EDM Blanks With Starter Hole



CATALOG	D BODY	L = LI	ENGTH
NUMBER	DIAMETER	1"	1¼"
1DTW-H18	.1875	•	•
1DTW-H25	.250	•	•
1DTW-H31	.3125	•	•
1DTW-H37	.375	•	•
1DTW-H43	.4375	•	•
1DTW-H50	.500	•	•
1DTW-H62	.625	•	•
1DTW-H75	.750	•	•
1DTW-H87	.875	•	•
1DTW-H100	1.000	•	•

NOTE: ANY DIMENSION OTHER THAN THOSE SHOWN QUOTED ON REQUEST

#### WHEN ORDERING SPECIFY:

Quantity	Catalog Number	L
4	1DTW-31	1"

#### BRAZED MACHINABLE STEEL SLEEVE HEAD AVAILABLE



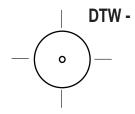
Please specify locating devices by the following designations:

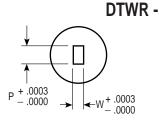
DS = Dowel Slot = .125

F1 = Single Flat  $\left(\frac{D}{2} - .0625\right)$ 

F2 = Double Flat  $\left(\frac{D}{2} - .0625\right)$ 

All locating devices will be parallel to the longest dimension. (See page 18.) Special locations or devices will be furnished if fully dimensioned print is provided.







INTERNAL TAPER 0° 9' PER SIDE\*

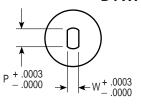
CORNER RADIUS = .007"

CONCENTRICITY O.D. AND I.D. .0003" T.I.R.

#### WHEN ORDERING SPECIFY:

Quantity	Catalog Number	L	Hole Size		Locating
			W	Р	Device
7	1DTWR-H87	1"	.130	.175	F1





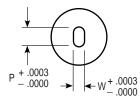


INTERNAL TAPER 0° 9' PER SIDE\*
CORNER RADIUS = .007"
CONCENTRICITY O.D. AND I.D. .0003" T.I.R.

#### WHEN ORDERING SPECIFY:

Quantity	Catalog Number	L	Hole Size		Locating
			W	Р	Device
5	1DTWF-H87	1"	.205	.400	F1

#### DTWO-

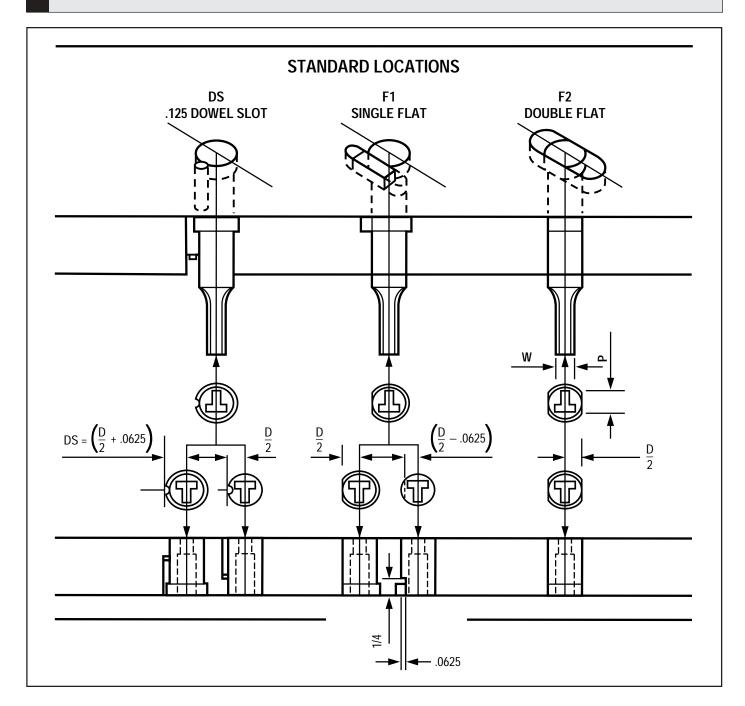




INTERNAL TAPER 0° 9' PER SIDE\* CONCENTRICITY O.D. AND I.D. .0003" T.I.R.

	Quantity	Catalog Number	L	Hole Size		Locating
				W	Р	Device
	5	1DTWO-H62	11/4"	.123	.300	F1

### **Locating Devices**



#### STANDARD LOCATIONS

Standard dowel and key locations are located parallel to the longest dimension ("P") for positive alignment.

#### **HOW TO ORDER**

Use code — DS, F1, or F2 after item ordered.

Please specify locating devices by the following designations:

DS = Dowel Slot = .125

F1 = Single Flat 
$$\left(\frac{D}{2} - .0625\right)$$

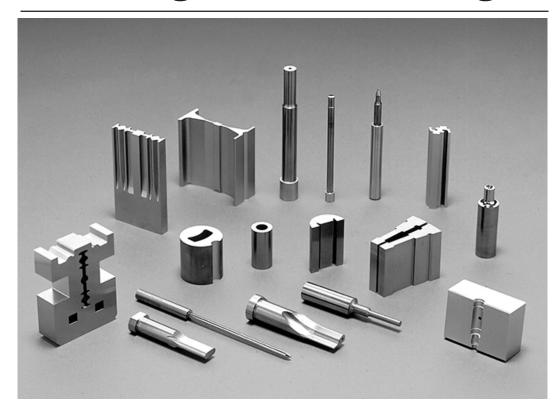
F2 = Double Flat 
$$\left(\frac{D}{2} - .0625\right)$$

All locating devices will be parallel to the longest dimension.

Special locations or devices will be furnished if fully dimensioned print is provided.



## **Oberg Precision Tooling**



Oberg Industries manufactures carbide die components specifically to your print or drawing, regardless of shape or size. In many instances your special die components can be either precision ground or manufactured utilizing traveling wire electrical discharge machining (EDM).

Since 1948 Oberg Industries has been recognized as the world's leading manufacturer of precision carbide stamping die components, tooling and carbide wear parts. We specialize in the design and build of precision dies to make both flat and formed parts, especially those producing one or multiple parts with each press stroke.

With the finest manufacturing facilities and equipment, operated by the best trained craftsmen available, we've committed ourselves to maintaining our industry leadership position well into the 21st Century.