

# New Point Configurations for Round Punches & Die Buttons

Inch & Metric.



Dayton Progress is now offering a full line of “standard” form punches and die buttons that deliver a wide range of piercing and extruding applications. These new point configurations are available on all Dayton Progress round punches—Versatile, Kommercial, Ball Lock, TuffPunch®, and VersaPlus®. Instead of ordering as “specials,” these new form punches and die buttons can be ordered with a simple “W” designator. (See Ordering Information inside.) No drawings are required.

## The Shape of Things to Come

More  
piercing and  
extruding  
applications

# FORM Punches

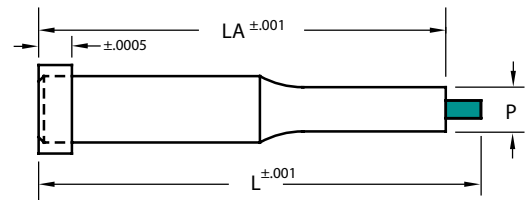
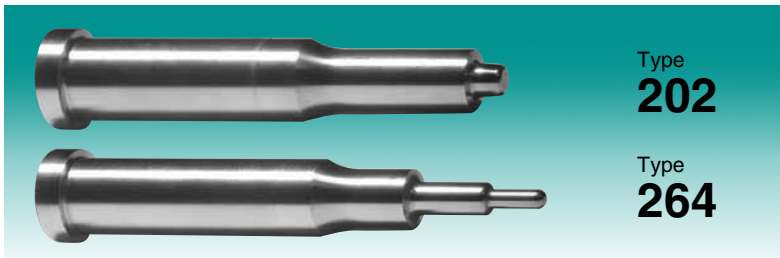


Global leader in  
providing fabrication  
and stamping solutions

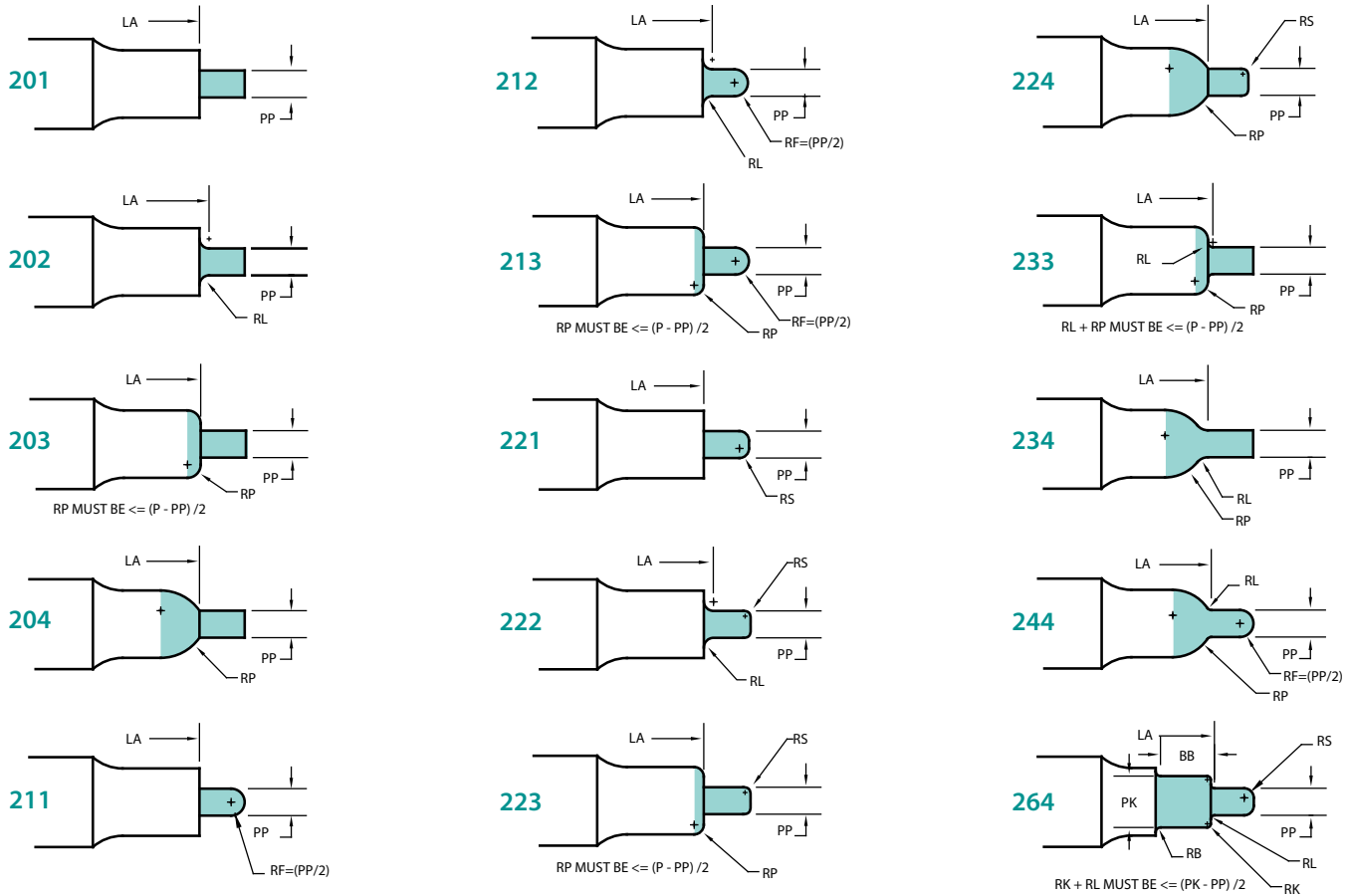
a MISUMI Group Company

[www.daytonlamina.com](http://www.daytonlamina.com)

# \*200 Series Form Punches



"P" is the point dimension of the product shown in the applicable product catalog. The "P" dimensions are not shown below. When "P"="D," shank tolerance applies.



## HOW TO ORDER

Specify:	Qty.	Type	Code	L	Steel	W Shape	P	PP	LA	Radii	Angle	Alterations
Example:	2	VPW	37	2030	PS	W203	P.1875	PP.1250	LA2.875	RP.020		XNT
	5	KJW	50	B375	M2	W202	P.4000	PP.3500	LA3.4375	RL.031		XH.610



1-19, 5 Days

See catalogs for available alterations on round product.

## Definitions and Applications

The punch points shown above can be used for a variety of piercing, forming, and fabricating operations. The following definitions and applications provide general guidelines for selecting the shape(s) that work best in your operation.

**Dimple**—a type of embossing (producing a three-dimensional image or design) that produces a small, usually round, protrusion from the stock. No cutting action is involved.

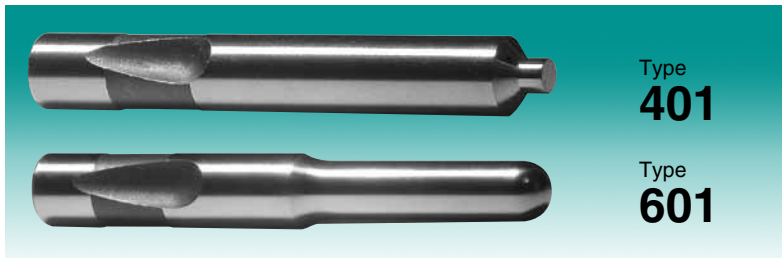


**Extrude**—a secondary operation on a perforated hole designed to produce a flange around the hole. Extruding is often used to increase the lateral bearing surface of the hole or to develop enough length for tapping the hole.



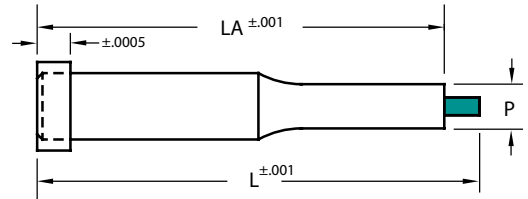
\*See our web site for current/additional shapes. For shapes not shown, detailed prints must be included with the order.

# \*400 & 600 Series Form Punches

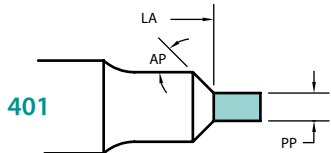


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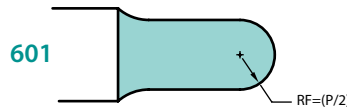
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**601**



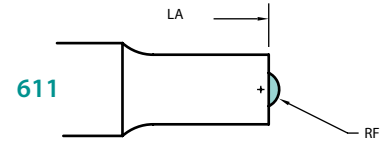
"P" is the point dimension of the product shown in the applicable product catalog. The "P" dimensions are not shown below. When "P"="D," shank tolerance applies.



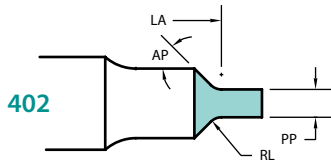
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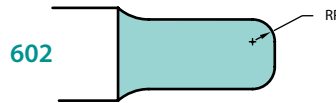
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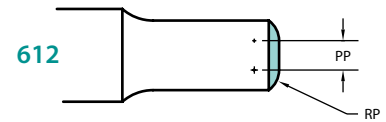
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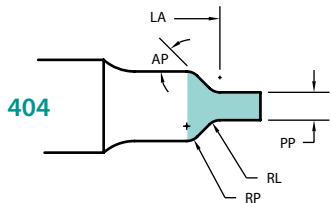
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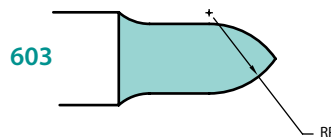
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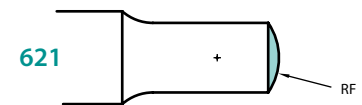
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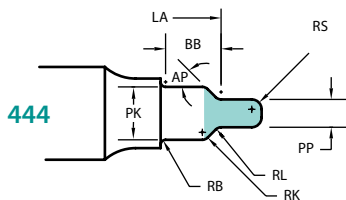
**404**



**603**



**621**



**444**

## HOW TO ORDER

Specify:	Qty.	Type	Code	L	Steel	W Shape	P	PP	LA	Radii	Angle	Alterations
Example:	2	TPXF	62	B425	W404	P.5000	PP.2500	LA3.950	RL.0600, RP.03200	AP42.0		
	3	CPW	25	1990	W601	P19.500					XBR21.500, LL89.750	

See catalogs for available alterations on round product.



**Countersink**—the process of enlarging and/or beveling the side of a hole to allow a screw head or other device to be sunk below the surface of the hole. Countersinking has a wide range of applications, and can be faster and more reliable using a punch rather than traditional methods.



**Draw**—the process of thinning and stretching the stock into a cup shape. The stock is held flat under pressure while applying a radius-edge cavity.

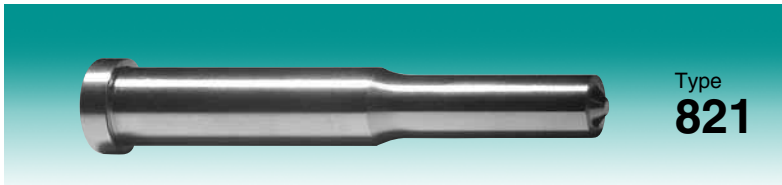


**Coin**—a permanent deformation (thickening and/or thinning of the stock). Coining operations require heavy tonnage and pressure. Most stenciling is a coining operation.

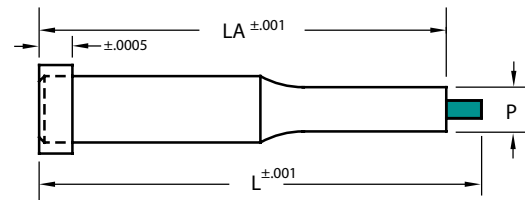


\*See our web site for current/additional shapes. For shapes not shown, detailed prints must be included with the order.

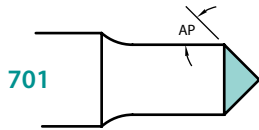
# \*700 & 800 Series Form Punches



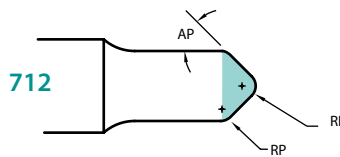
Type  
**821**



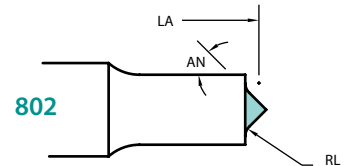
"P" is the point dimension of the product shown in the applicable product catalog. The "P" dimensions are not shown below. When "P"="D," shank tolerance applies.



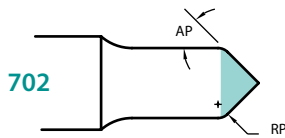
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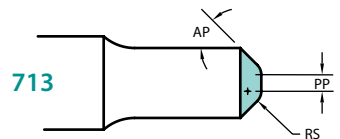
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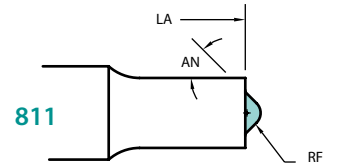
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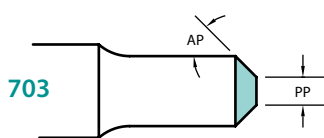
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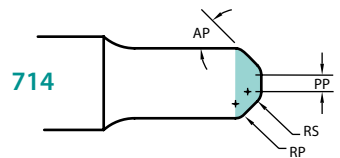
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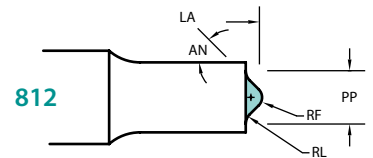
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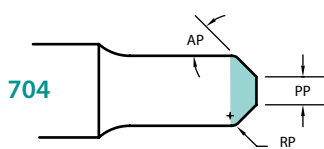
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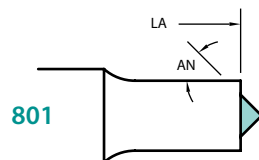
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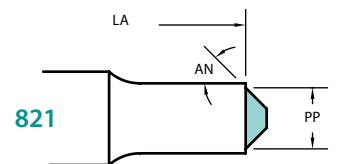
812



704



801



821

## HOW TO ORDER

Specify:	Qty.	Type	Code	L	Steel	W Shape	P	PP	LA	Radii	Angle	Alterations
Example:	4	DWW	71			W701	P3.250				AP39.5	
	6	VPWP	50	75425		W801	P.3750		LA4.0625		AN60.0	

See catalogs for available alterations on round product.

**FDS**  
FIRM DELIVERY SCHEDULE  
1-19, 5 Days

**Stake**—a coining operation that is typically used to permanently assemble stamped parts to other parts. The staking process usually consists of deformation of surfaces around a perforated hole, tab, or shaft.



**Emboss**—the process of creating a three-dimensional image or design. Embossing is often used for "raised letter" identification marking.

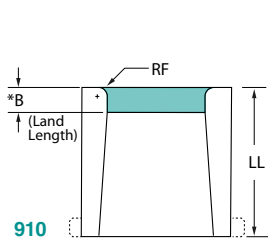


**Projection**—a permanent deformation of the stock that results in a projected cylinder. Projected surfaces are used as a contact point for assembly welding or as a locating pin for a mating part.

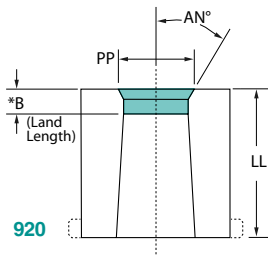


# Die Buttons and Ordering Information

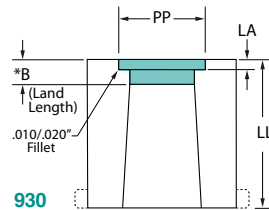
Dayton Die Buttons are available for all the Form Punches shown in this brochure, i.e., round punches designated as standard "X" shaped punches. When ordering, please refer to your individual product catalog, then change the "X" designator to a "W." Die Buttons are available as headed or headless with a counterbore relief, or as headed or headless with a tapered relief.



910

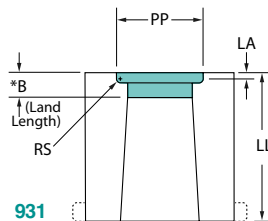


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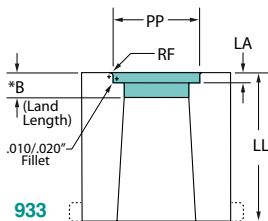


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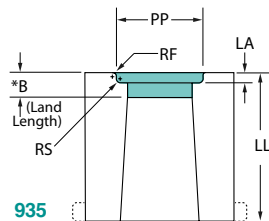
\*B (Land Length) will be per catalog standard, unless XB is ordered. O.A.L. will be held to LL tolerance, i.e.,  $\pm .001$ .



931



933



935



## HOW TO ORDER

Specify:	Qty.	Type	Code	LL	Steel	W Shape	P	PP	LA	RS	RF	AN°	Alterations
Example:	4	KDW	100	100	M2	W935	.50	.625	.15	.05	.03		XNT

See catalogs for available alterations on round product.

## Ordering Information (punches)

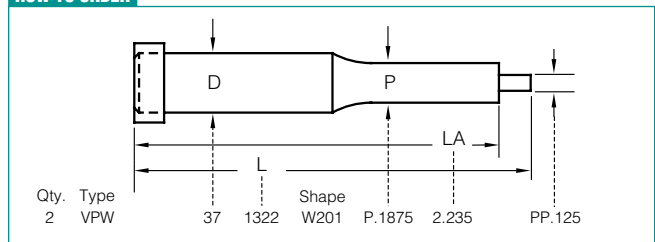
Dayton Progress Form Punches are available on Versatile, Kommercial, Ball Lock, TuffPunch®, and VersaPlus® round punches, i.e., those designated as standard "X" shaped punches, as shown in Dayton product catalogs.

When ordering, please refer to your individual product catalog, then change the "X" designator to a "W." In addition, specify other dimensions, as shown in the example below. Specify alterations, if applicable.

The shapes shown inside are standard, but are not the only shapes Dayton provides. Others are available with a detailed drawing attached to the order. Check [daytonlamina.com](http://daytonlamina.com) for the latest standard shapes.

Form Punches are available on standard punch blanks as shown in the individual Dayton product catalogs. Form Punches other than those are available as specials. Drawings (prints) are required.

## HOW TO ORDER



See catalogs for available alterations on round product.

## Commitment to Quality & Customer Satisfaction

*Dayton Lamina is a leading manufacturer of tool, die and mold components for the metal-working and plastics industries. As a customer-focused, world-class supplier of choice, we provide the brands, product breadth, distribution network and technical support for all your metal forming needs.*

*Our goal is to give our customers the most innovative and value-added products and services.*



# DAYTON Lamina™

a MISUMI Group Company



IEM®



Lamina® LEMPCO

\*Dayton Lamina's line of Danly products is available only to North America.

[www.daytonlamina.com](http://www.daytonlamina.com)