# New Point Configurations for Round Punches & Die Buttons



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



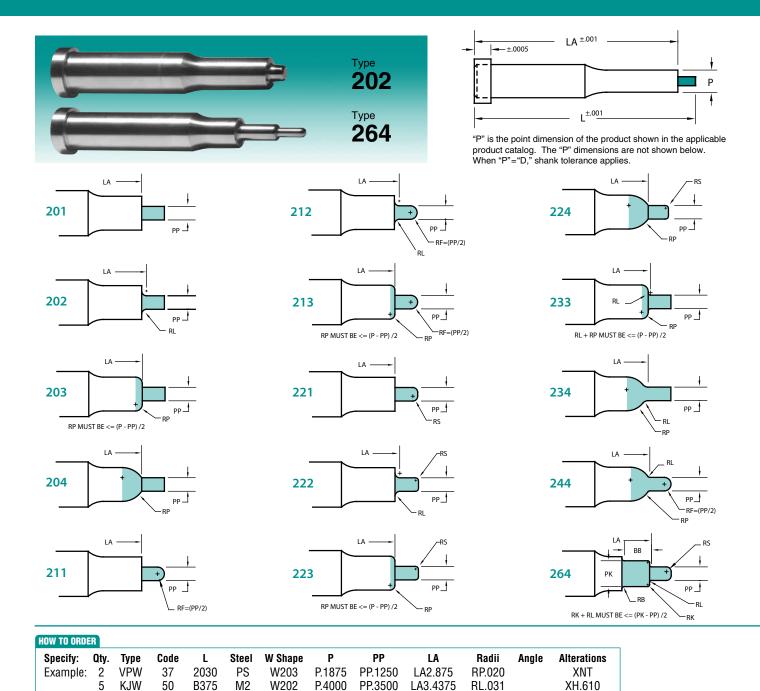


Global leader in providing fabrication and stamping solutions

a MISUMI Group Company

www.daytonlamina.com

## \*200 Series Form Punches



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

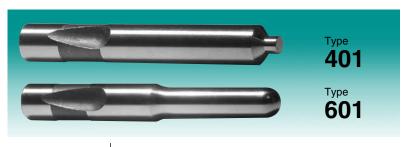
of embossing (producing a three-dimensional image or design) that produces a small, usually round, protrusion from the stock. No cutting action is involved.

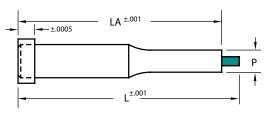
#### Extrude—a

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.

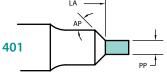
<sup>\*</sup>See our web site for current/additional shapes. For shapes not shown, detailed prints must be included with the order.

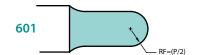
## \*400 & 600 Series Form Punches

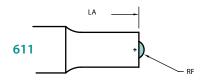


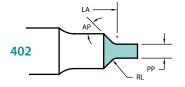


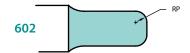
"P" is the point dimension of the product shown in the applicable product catalog. The "P" dimensions are not shown below. When "P"="D," shank tolerance applies.

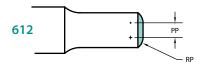


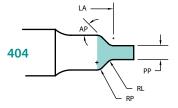


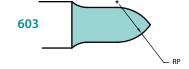


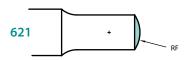












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Specify:	Qty.	Type	Code	L	Steel	W Shape	. P	PP	LA	Radii	Angle	Alterations
Example	: 2	<b>TPXF</b>	62	B425		W404	P.5000	PP.2500	LA3.950	RL.0600, RP.03200	AP42.0	
-	3	CPW	25	1990		W601	P19.500				XBR	21.500,LL89.750

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 or applications, and can be faster and more reliable using a punch rather than traditional methods.

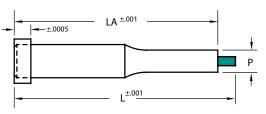
**Draw**—the process of thinning and stretching the stock into a cup shape. The stock is held flat under pressure while applying a radius-edge cavity.

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

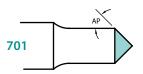
<sup>\*</sup>See our web site for current/additional shapes. For shapes not shown, detailed prints must be included with the order.

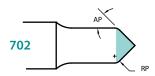
## \*700 & 800 Series Form Punches

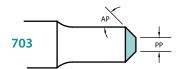


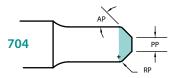


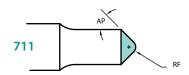
"P" is the point dimension of the product shown in the applicable product catalog. The "P" dimensions are not shown below. When "P"="D," shank tolerance applies.

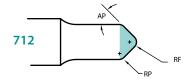


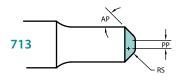


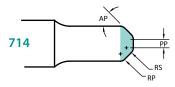


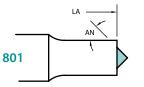


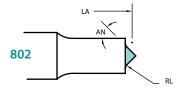


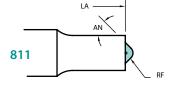


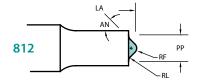


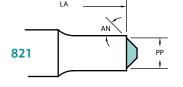












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Specify:	Qty.	Type	Code	L	Steel	W Shape	P	PP	LA	Radii	Angle	Alterations
Example:	4	DWW		71		W701	P3.250				AP39.5	
·	6	VPWP	50	75425	;	W801	P.3750	l	LA4.0625		AN60.0	

See catalogs for available alterations on round product.

#### 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

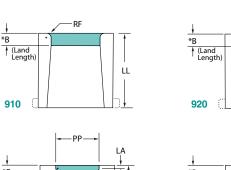
process of creating a threedimensional image or design. Embossing is often used for "raised letter" identification marking.

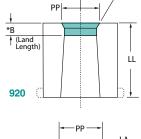
### **Projection**—a

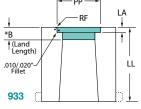
permanent
deformation of the
stock that results in a projected
cylinder. Projected surfaces
are used as a contact point for
assembly welding or as a locating
pin for a mating part.

## **Die Buttons and Ordering Information**

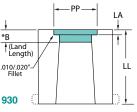
Dayton Die Buttons are available for all the Form Punches shown in this brochure, i.e., round punches designated as standard "X" shaped punches. When ordering, please refer to your individual product catalog, then change the "X" designator to a "W." Die Buttons are available as headed or headless with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

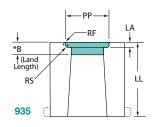












\*B (Land Length) will be per catalog standard, unless XB is ordered. O.A.L. will be held to LL tolerance, i.e., ±.001.

HOW TO ORD	DER												
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.

LL

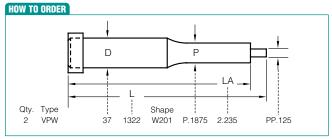
## **Ordering Information (punches)**

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 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.



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 valueadded products and services.



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

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