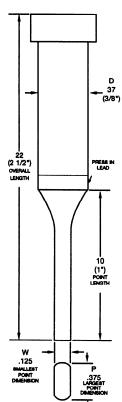


## PIVOT PUNCH CORPORATION / SELECTIVE SERIES

All heads of shoulder type punches are HOT FORGED to minimize breakage. Grain flow lines are uninterrupted and conform to the contour of the head, assuring maximum structural strength.



Note: Use of W and P to show largest and smallest point dimension is common to all items shown in this catalog.

IMPORTANT: When ordering Pilot Nose Punches specify length as same dimension as piercing punch. Pilot Nose punches are furnished with 1/4" pilot nose in addition to specified length.

## TONDRAG

applications

This exclusive surface treatment, available on all HSS punches and die buttons. imparts a glass hard surface (Rockwell 72-75) and offers the ultimate in resistance to abrasion, firing and galling. Performed after finished grinding, at temp. in excess of 1000°F, this treatment affords an excellent stress relieving and imparts maximum toughness for longer punch life. Recognized by its dull, mottled oxide finish. this treatment may be varied in depth for special ratio piercing, heading, forming, drawing and shaving



A-2 STEEL

This fine grain, high carbon, 5% chrome hardened tool steel offers superior wear resistance and is recommended for a variety of commercial applications.

**SELECTION CHART 38-39.** 



HIGH SPEED STEEL

Recommended for a greater greater variety of industrial uses, including many "hot cluding many applications, work" this Moly-tough, high vanadium, high speed (M-2) tool steel offers uniform hardening quality, superior wear resistance, and high impact strength.



Grind lines are parallel to the axis and perpendicular to the line of potential fractures. This patented feature, exclusive with Pivot, resists wear, mini-mizes "pick-up" and achieves maximum strength and punchability. Available in M2 and PM.

WHIPSLEEVE ®

FOR ADDITIONAL APPLICATION INFORMATION SEE COLOR-KEYED PUNCH



SLEEVE® punches are capable of piercing metal thicknesses which exceed the diameter of the punches. A vibration

absorbing, inert metal sleeve is cast at the point of the punch where failure normally occurs, thus greatly increasing punch life. When used with a bushing in the stripper it eliminates whipping or shifting and transfers side thrust to the stripper rather than

imposing all the force

on the working point.

Available in M2 and

PM

A unique high alloy Particle Metal Steel which provides exceptionally high wear resistance while maintaining very good toughness and

strength character-

PM STEEL

istics.

Due to their exceptionally high wear resistance, PM punches have also proven to cost-effective when replacing carbide in many applications. all Pivot PM products are triple tempered for maximum strength and toughness.



Shape

## **HOW TO ORDER**

THIS SIMPLIFIED CATALOG ORDER CODE IS DESIGNED TO MAKE PUNCH, DIE BUTTON AND GUIDE **BUSHING SELECTION EASIER AND** MORE ACCURATE FOR YOU!





ROUND

POINT



SQUARE

POINT



FLATTED

ROUND



OBLONG

POINT



RECTANGLE

POINT







**HEXAGON** 42 ADDITIONAL FORM FORM SHAPES AVAILABLE, **SEE PG. 51** 

POINT

STANDARD FORM SHAPES