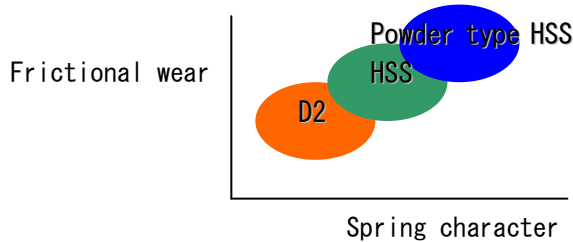


# Strong Point of Conic Turret Punchpress Tools

## "Material difference"

### 1. We use the best quality high speed steel materials for punch.

Conic uses powder type high speed steel for punch body. Structure of this material is very much fine and does not have unevenness of ingredient. Shock resistant ratio is double strong and frictional wear is 50% better than standard high speed steel (HSS).

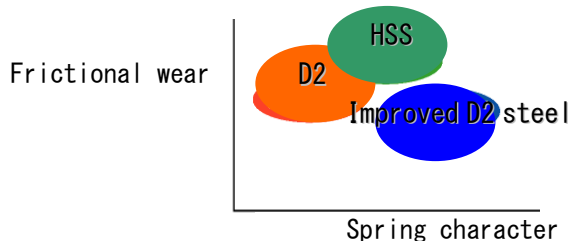


### 2. Even D2 steel (SKD-11) is different from standard.

a) Conic uses improved D2 steel for die.

This material has twice of spring character, hardness is higher (HRC1 to 2). Also much better anti-chipping and crack than standard D2 steel.

This improved D2 steel has good performance for wire EDM because material dose not have residual stress in the material.



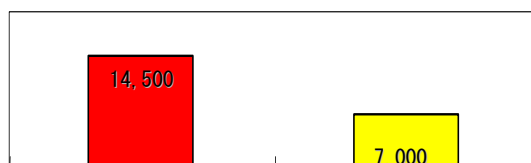
b) Conic uses super sub-zero heat treatment process on D2 steel for standard punch.

Material is put into -130cent degree just after heat treatment.

This process gives material structure fine and better for stability and hardness. Normally sub-zero process is done only for precision equipment or gages.

**"Super sub-zero process"**      "Standard"

**Punching test** : Silicon steel plate 0.35mm thickness  
Punch material : D2 steel (SKD-11)

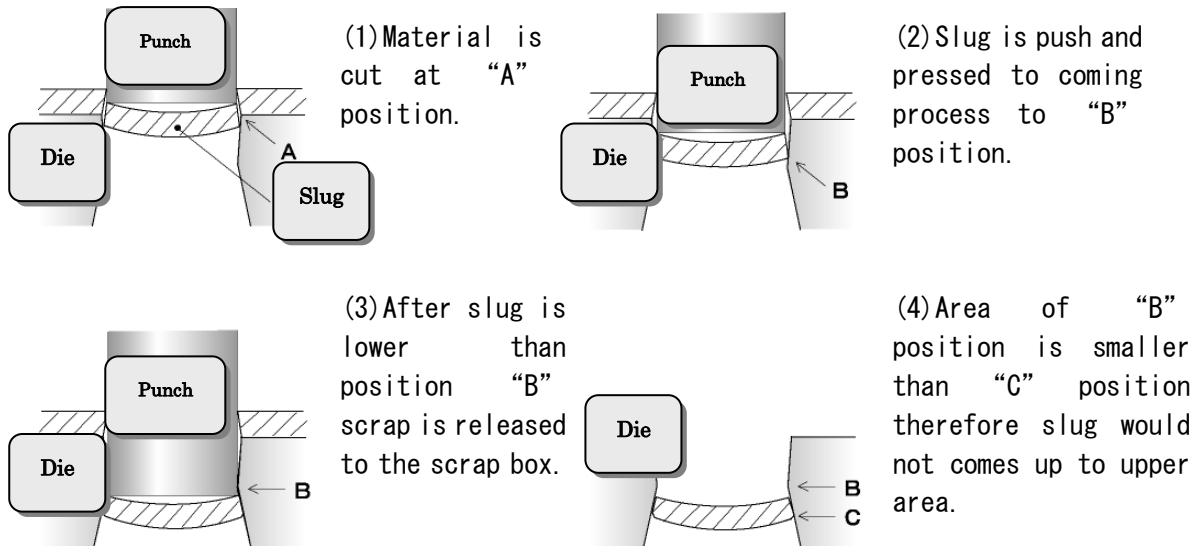


(Punching life which height of burr is high than standard )

# "Specification difference"

## 1. Conic tool is using slug catcher shape for die as standard specification.

This specification is effective to anti slug comes up.

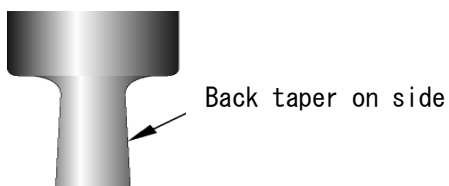


" Price example (Japanese Yen) "

Maker	Standard price	Additional anti-slug comes up	Total
Conic Company	5,000JPY	0JPY	5,000JPY
Company "A"	10,000JPY	3,000JPY	13,000JPY

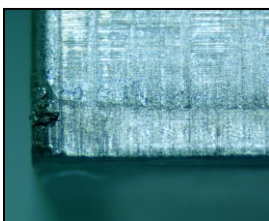
## 2. Back taper on side of the punch.

This specification makes better performance for less touching area on the side face of punch body and less sticking material on the side face.

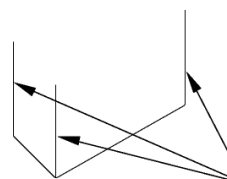


## 3. Minute Corner R on the punching side edges.

Conic put the minute corner R on the edge of the punching side edges because this corner is the weakest point of shaped tools. After put small R on the corner tool life is much longer and prevent the unusual wear of the punch body.



Example of damage of the corner.



Put the minute corner R on the edge of the punching side edges.

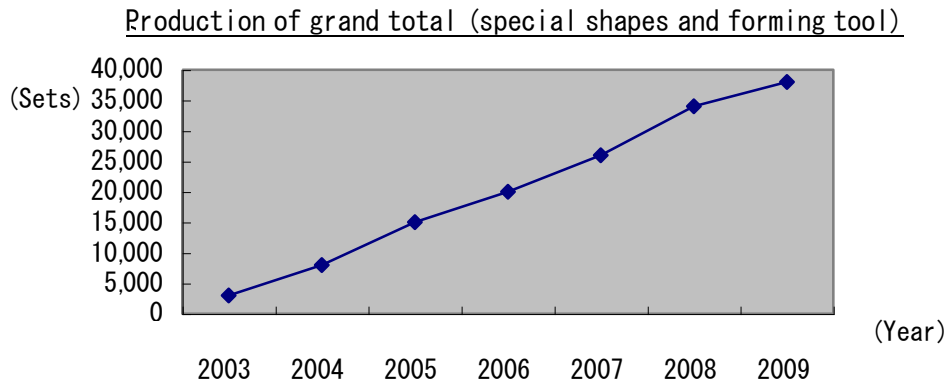
"Special tool specialist"

CONIC

Conic makes a lot of special tools.

Our sales result of special tools are proof of quality and customer satisfaction.

Conic keeps drawings of special tools for 20 years, so that, it is easy to order repeatedly.



## "Reference" (Type of surface quality change)



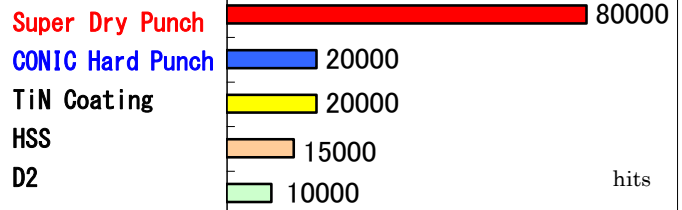
Super Dry Punch (SDP)



CONIC Hard Punch (CHP)

### Tool life

(Stainless steel plate 2.0mm thickness)



◆ Material surface quality change (it does not have peeling off such as PVD coating)

Name	Color	Average hardness (HV)	Note	Good for
SDP	Mat Gray	2,800	No lub oil necessary	Stainless...
CHP	Material	1,000	Smooth surface no sticking	Aluminum, Color...

◆ PVD coating (thickness 2 to 3 microns)

Name	Color	Average hardness (HV)	Note	Good for
TiN	Gold	2,000	General use	Mild steel...
TiCN	Dark yellow	3,000	High hardness	Coated material...
TiAlN	Dark purple	2,500	Anti heating	Coated material...