

# Strong Points of Conic Turret Punch Press Tools



# Material difference

1

We use the best quality highspeed steel materials.

#### Conic uses carefully selected high speed steel for punch.

This material compared to D2, it is a material excellent in abrasion resistance, impact resistance and toughness.

It is suitable materials such as stainless steel and a large amount production. And we have own heat treatment furnace. it makes stronger tools and keeps same hardness quality.



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 and hardness is higher than general D2 steel. (HRC 58 to 60)

Also more better anti- chipping and crack than standard D2 steel. This improved D2 steel has good performance for wire EDM because material does not have residual stress in the material.



Frictional

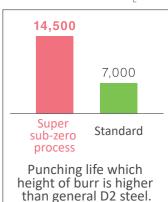
Spring character

(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.



Punching test

Silicon steel plate

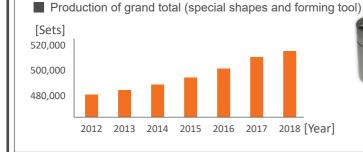
0.35mm thickness

Punch material D2 steel(SKD-11)

### Special tool specialist

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 30 years, so that, it is easy to order repeatedly.

# Specification difference

### 1 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.

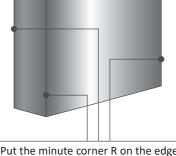


### 2 Minute Corner R on the punching side edges.

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.

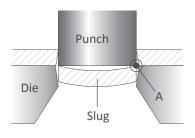




Put the minute corner R on the edge of the punching side edges.

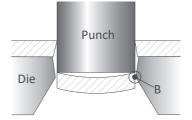
### 3 Conic tool is using slug catcher shape for die as standard specification.

This specification is effective to anti slug comes up.



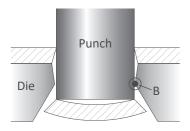
### 1

Material is cut at "A" position.



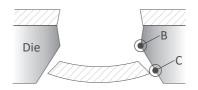
#### 2

Slug is push and pressed to coming process to "B" position.



#### 3

After slug is lower than position "B" scrap is released to the scrap box.



#### \_\_\_\_\_

Area of "B" position is smaller than "C" position therefore slug would not comes up to upper area.

#### Price example (Japanese Yen)

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

### Various types of CONIC original high quality coating

#### Super Dry Punch [SDP]



#### **CONIC Hard Punch [CHP]**



#### Heavy Duty Punch [HDP]



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

Coating	Average hardness (HV)	Detail		
SDP	2,800	Perfect tool for Stainless steel! Conic No.1 wear resistance tool. Shows high performance for hard processed material.		
HDP	3,000	The coating is not easily peeled off even by the heat generated by continuous striking of high tensile steel plate such as stainless steel!		
CLP	3,000	High performance for all purpose, especially for mild steel, galvanized steel with high corrosion resistance! Special shapes are also available for this treatment.		
СНР	1,000	Reasonable price and suitable for all purpose, especially for aluminum with high performance reducing adhesion(galling).		

Total performance	Type of treatment	Aptitude			
		SUS	SPCC	AL	Galvanized
High performance	Super Dry Punch [SDP]	••••	••••	•••	•••
$\wedge$	Heavy Duty Punch [HDP]	••••	••••	•••••	•••••
Cost performance	Conic Long Life Punch [CLP]	•••	••••	•••••	•••••
	Conic Hard Punch [CHP]	•••	•••	••••	••••
	HSS	• •	•••	•••	•••
	D2	•	•	• •	•

The Most Popular Tooling

PROTECH3 THICK TURRET TOOLING"

New Style for Easy Operation!

Anybody can maintain this tool safety, accurately and speedy!





# High Quality & Technology For The Future Since 1976 / Japan

#### **CONIC CO., LTD**

10-5 Taihei-dai, Shoo-cho, Katsuta-gun, Okayama 709-4321 Japan Tel: (+81) 868 38 6154 | Fax: (+81) 868 38 6331

....a... to one @ commerce.jp | The boarter transfer of the

#### Email: tools@conic.co.jp | Website: www.conic.co.jp | Conic Co.,Ltd |

#### **CONIC PRECISION CO., LTD**

55/22 moo 4. Buengkumphroy, Lumlukka, Phatumthani 12150 Thailand Tel: (+66) 2 159 9870-1 | Fax: (+66) 2 159 9872 Email: conic\_thai@conic.co.jp | Website: www.conic.co.jp/thai/

#### THE REPRESENTATIVE OFFICE OF CONIC CO., LTD. IN HO CHI MINH CITY

No. 362/19 Ung Van Khiem St., Ward 25, Binh Thanh Dist., H.C.M.C, Vietnam Tel: (+84) 28 7300 0250 | Email: conic\_vn@conic.co.jp