PUNCH PRESS HIGH PERFORMANCE TOOLING



AMADA TYPE (SET PRESS) TOOLING





COMPANY GUIDANCE

ABOUT US

Conic has been produced quality punch tools since 1976 in Okayama Japan.

Our tools are used worldwide in the sheetmetal market and that quality is really satisfied from various production customers. Our policy is that we make a high quality tools in timely, in reasonable price to helping customers manufacture sheet metal parts in high productivity and reliability.

We have done a lot of development of new products such as Super Dry Punch(SDP), Conic Long life Punch(CLP), Conic Hard Punch(CHP) for last long tools.

We recently introduced PROTECH series tool to the market and market reflect strong praise.

Conic would like to be your punch press tool partner. We look forward to serving you.

QUALITY



Okayama factory:

ISO 9001:2015 provide superior Quality Management System in 1998 Conic Corp, received ISO9001 authorization, and it has been recognized as a very reliable company, both on the international front and Japan.

COMPANY HISTORY

- 1976 Established.
- 1979 Tokyo Sales Office opened.
- 1985 Okayama Factory opened.
- 1990 "International Sheet Metal Symposium" held by the company.
- 1992 Tool information and order receiving office was opened.
- 1993 Osaka Branch opened in Higashi-Osaka city.
- 1993 Head Office moved into Okayama Factory.
- 1998 Okayama factory was registered under required operation of international quality management system "ISO-9001".
- 1999 "Super Dry Punch" newly developed and launched.
- 2000 Internet order and quote receiving system was opened.
- 2002 "Conic Hard Punch" newly developed and launched.
- 2009 PROTECH series tooling newly developed and launched.
- 2012 Thailand Factory opened.
- 2013 "Conic Long life Punch" newly developed and launched.
- 2018 The Representative office in Vietnam opened.

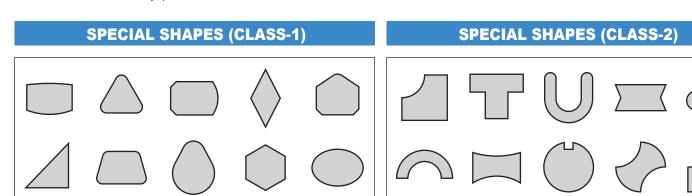


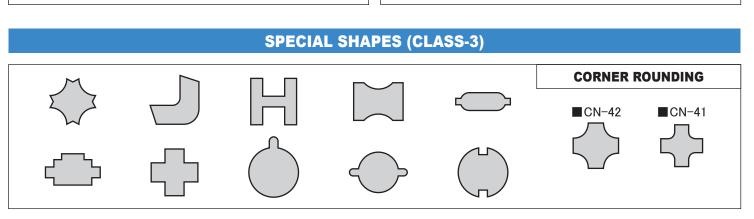
SPECIFICATION OF CONIC TOOLING

■Various Shapes

STANDARD SHAPES ROUND (RO) SQUARE (SQ) RECTANGLE (RE) SQUARE WITH RADIUS CORNERS OBROUND (OB) SINGLE D (SD) DOUBLE D (DD) RECTANGLE WITH RADIUS CORNERS

Note: Square and Rectangle punch corner has small radius (R0.2) for prevent crack of punch tip. If it is not necessary, please inform us.





SPECIAL SHAPES (CLASS-4)

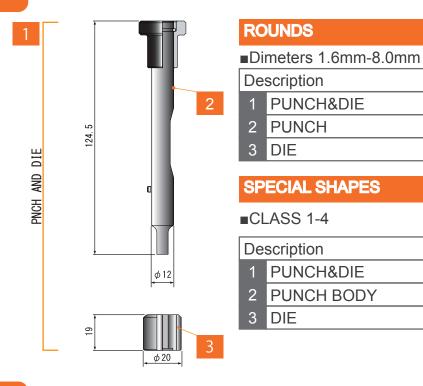
More complicated figure

When make order, please inform to us the center position of the tool. CONIC is possible to produce other than this form list, please contact us.

A26, A32 STATION TOOLING

A26

Diameters Up to 8.0mm



STANDERD SHAPES

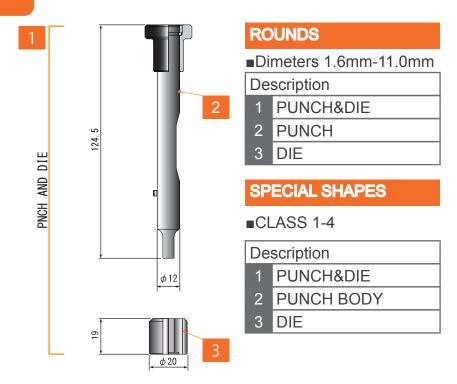
■Diagonal size 2.4mm-8.0mm

Description

- 1 PUNCH&DIE
- 2 PUNCH BODY
- 3 DIE

A32

Diameters Up to 11.0mm



STANDERD SHAPES

■Diagonal size 2.4mm-11.0mm

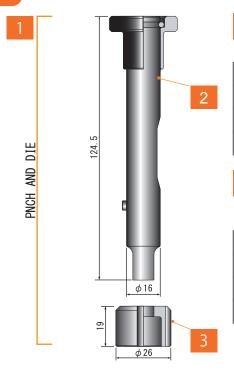
Description

- 1 PUNCH&DIE
- 2 PUNCH BODY
- 3 DIE

A38, A50 STATION TOOLING

A38

Diameters Up to 15.5mm



ROUNDS

■Dimeters 1.6mm-15.5mm

Description

- 1 PUNCH&DIE
- 2 PUNCH
- 3 DIE

SPECIAL SHAPES

■CLASS 1-4

Description

- 1 PUNCH&DIE
- 2 PUNCH BODY
- 3 DIE

STANDERD SHAPES

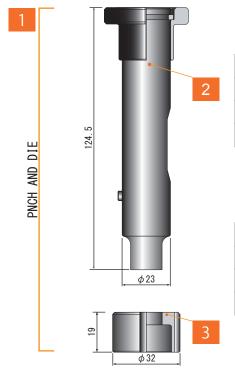
■Diagonal size 2.4mm-15.5mm

Description

- 1 PUNCH&DIE
- 2 PUNCH BODY
- 3 DIE

A50

Diameters Up to 22.0mm



ROUNDS

■Dimeters 2.6mm-22.0mm

- 1 PUNCH&DIE
- 2 PUNCH
- 3 DIE

SPECIAL SHAPES

■CLASS 1-4

Description

- 1 PUNCH&DIE
- 2 PUNCH BODY
- 3 DIE

STANDERD SHAPES

■Diagonal size 6.3mm-22.0mm

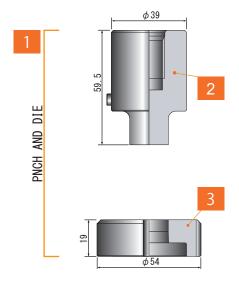
Description

- 1 PUNCH&DIE
- 2 PUNCH BODY
- 3 DIE

A64, A90 STATION TOOLING

A64

Diameters Up to 38.0mm



ROUNDS

■Dimeters 12.0-38.0mm

Description

- 1 PUNCH&DIE
- 2 PUNCH
- 3 DIE

SPECIAL SHAPES

■CLASS 1-4

Description

- 1 PUNCH&DIE
- 2 PUNCH BODY
- 3 DIE

STANDERD SHAPES

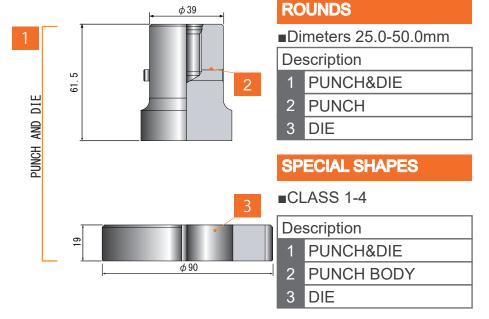
■Diagonal size 12.0-38.0mm

Description

- 1 PUNCH&DIE
- 2 PUNCH BODY
- 3 DIE

A90

Diameters Up to 50.0mm



STANDERD SHAPES

■Diagonal size 25.0-50.0mm

Description

- 1 PUNCH&DIE
- 2 PUNCH BODY
- 3 DIE



TECHNICAL INFORMATION

CALCULATE PUNCHING FORCE (TONNAGE)

Tonnage capacity is different depending on machines. Use the calculation formula below to prevent from over tonnage.

Tonnage (ton) =
$$\frac{\text{Circumference (mm) } \times \text{Material thickness (mm) } \times \text{Shear resistance (kg/mm}^2)}{1000}$$

Circumference

| Round | Shaped | | | | | |
|--------------------------|--|--|--|--|--|--|
| Diameter x 3.14 | (Length dimension + Width dimension) x 2 | | | | | |
| D -> | B -> | | | | | |
| Circumference = D x 3.14 | Circumference = (A + B) x 2 | | | | | |

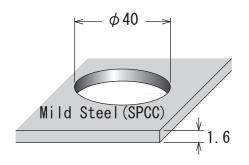
Shear resistance by material

| Material | Shear resistance | | | | |
|-----------------|------------------|--|--|--|--|
| | (kg/mm²) | | | | |
| Mild Steel | 26~35 | | | | |
| SS400 | 33~42 52~56 | | | | |
| Stainless Steel | | | | | |
| Aluminum | 7~16 18~30 | | | | |
| Copper | | | | | |
| Brass | 22~40 | | | | |

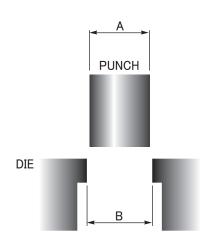
<Calculation example>

The tonnage when piercing Φ 40 to Mild Steel T=1.6mm.

| Circumference | | Material thickness | Shear resistance | | | | |
|---------------|----|-----------------------|---------------------|----|---|---|---------|
| 40 x 3.14 | Χ | 1.6 | Χ | 35 | _ | 7 | (+ 010) |
| | 10 | 00 | | | _ | 1 | (ton) |



DIE CLEARANCE



■ DIE CLERANCE IS · · ·

Die clearance is difference between punch diameter and die diameter.

Die clearance = B - A

■ RECOMMENDED DIE CLERANCE

Die clearance = Material thickness x Clearance Ratio

| | Material | Clearance Ratio | Material thickness | | | | | | |
|--|-----------------|--------------------|--------------------|------|------|-----|------|------|--|
| | | | 0.5~1.0 | 1.2 | 1.5 | 2.0 | 2.3 | 3.2 | |
| | Mild steel | 0.15 | 0.15 | 0.2 | 0.25 | 0.3 | 0.4 | 0.5 | |
| | Stainless steel | 0.2 | 0.2 | 0.25 | 0.3 | 0.4 | 0.5 | 0.6 | |
| | Aluminum | 0.1 | 0.15 | 0.15 | 0.15 | 0.2 | 0.25 | 0.35 | |
| | Copper | 0.1 | 0.15 | 0.15 | 0.15 | 0.2 | 0.25 | 0.35 | |

CONIC HIGH PERFORMANCE TOOLING

- Amada type tooling
- Murata type tooling
- Trumpf type tooling
- Komatsu type tooling also available.



CONIC Co., Ltd.

ISO9001:2008 ASR Q2517 / Okayama factory

10-5 Taiheidai, Shoo-cho, Katsuta-gun,

Okayama 709-4321 Japan

TEL: +81 868 38 6154 FAX: +81 868 38 6331

E-mail: tools@conic.co.jp http://www.conic.co.jp/

CONIC PRECISION Co., Ltd.

55/22 Moo 4, Buengkumphroy, Lumlukka,

Phatumthani 12150 Thailand

TEL: +66 2 159 9870-1 FAX: +66 2 159 9872

E-mail: conic_thai@conic.co.jp http://www.conic.co.jp/thai/

The Representative office in Vietnam

4F VIN OFFICE Building No. 362/19 Ung Van Khiem Street, Ward 25, Binh Thanh District, Ho Chi Minh City, Vietnam

TEL: +84(0)285 7300 0250 E-mail: conic vn@conic.co.jp Download for your mobile.









Dealer