



since 1968

Taiwan Diamond Industrial Co., Ltd.

248 Hwa-Kong St., Pa-Deh City, Tao-Yuan Hsien, Taiwan, R. O. C.

TEL: 886-3-3636971 E-mail address: sales@taiwandiamond.com

FAX: 886-3-3620709 Web site URL: <http://taiwandiamond.com>



Diamond Dies

”Quality Is Our Best Product”

Our 35 years Experience Can Provide Solutions
To Solve your Various Applications

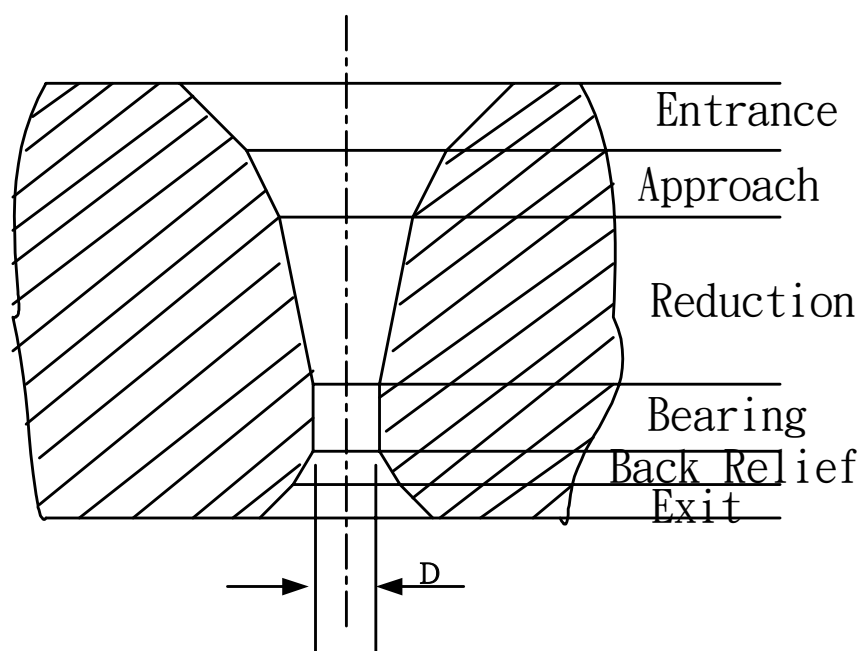
- Natural Diamond Dies
(Size: ϕ 0.013mm ~ ϕ 2.500mm)
- Polycrystalline Diamond Dies
(Size: ϕ 0.050mm ~ ϕ 20.000mm)
- Single Crystal Synthetic Diamond Dies
(Size: ϕ 0.013mm ~ ϕ 0.599mm)
- Shaving Dies
- Multi Wire Elongation Set of Dies
- Guiding Dies for Wire EDM
- Nipple Dies for Vinyl-Coated Wire



MAJOR PRODUCTS



Dies Profile



Guide Dies for Tin-Coated

1. For Hot Tin-Coated Wires
2. For Tin Electroplated Wires

In the case of hot Tin-Coated Wires, We use Titanium Alloy casings. The specific weight of Titanium is smaller than that of Tin, and it can minimize the trouble that Tin chips tend to stick to the die.

Size Ranges :

Size (mm)	Tolerance (μm)	Roundness (μm)	Sizes of Casing	
			Diameter (mm)	Thickness (mm)
ϕ 0.0400 ~ 0.0699	1	1	25	7
ϕ 0.070 ~ 0.399	1	1	25	8
ϕ 0.400 ~ 0.799	2	2	25	10
ϕ 0.800 ~ 2.500	3	2	25	10

We can also supply other sizes of casing and the dies with the tolerance of hole diameter specified by the customer.

Standard profile design for various materials : (We can also make dies based on customer's own designs)

Wire Materials	Hot Tin-Coated	Tin Electroplated
Shape Factors		
Entrance	80°	80°
Approach	40°	35°
Reduction	$18^\circ \pm 2^\circ$	$16^\circ \pm 2^\circ$
Bearing	$0.15D \sim 0.3D$	$0.25D \sim 0.35D$
Back Relief	$30^\circ \pm 5^\circ$	$25^\circ \pm 5^\circ$
Exit	60°	60°

(D=Bearing Diameter)

Single Crystal Synthetic Diamond Dies Range of Application :

Soft Wire Drawing Dies

Wire Materials : Gold , Silver , Platinum , Brass , Copper ,
Phosphor-Bronze , Aluminum ◦

Size Ranges :

Size (mm)	Tolerance (μm)	Roundness (μm)	Sizes of Casing	
			Diameter (mm)	Thickness (mm)
ϕ 0.0150 ~ 0.0399	0.5	0.5	25	7
ϕ 0.0400 ~ 0.0699	0.5	0.5	25	8
ϕ 0.0700 ~ 0.3990	1	1	25	8
ϕ 0.4000 ~ 0.5990	2	2	25	10

We can also supply other sizes of casing and the dies with the tolerance of hole diameter specified by the customer ◦

Single Crystal Synthetic Diamond



Uniqueness of Our Products

We can produce dies using natural diamonds and single crystal synthetic diamond for very fine wire drawing ◦ The minimum hole diameter can be as small as 0.0130 mm and it's tolerance and roundness can be as small as $0.3 \mu\text{m}$ ◦

We use very high-quality diamond which are selected based on a very tight standard ◦ To assure the quality we use many different instrument to inspect the diamonds to make sure no crack , no impurity , no internal stress ◦

Our Beliefs :

1. Quality :

High Precision and Reliability ◦

2. Delivery :

Fast and Satisfy Customer's Needs ◦

3. Price :

Reasonable and Competitive ◦

4. Service :

Cordial and Responsible ◦