

About us

Zhengzhou IW Diamond Co., Ltd. (IWD for short) is a High-New Technology joint enterprise, specializing in the manufacture, supply and service of wire drawing dies and related tools&equipment. IWD sets two locations, IWD China and IWD USA for better local services.

IWD's adhering to the concept: The Profile and the Surface make all the difference. To ensure the proper shape of diamonds and maximize the durability of our drawing dies, all diamonds are strictly selected, grinded and polished by ourselves.

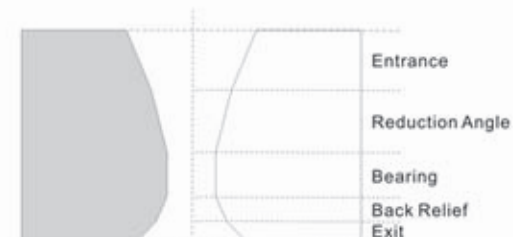


Due to our rigorous processing and quality system, IWD offer our customers the efficient solutions for wire production, meeting the increasing demand for wire-drawing dies from different industries worldwide.

Diamond Dies

In accordance with customers' different requirements,IWD supplies the following wire drawing dies:

- Natural Diamond Dies
- Monocrystalline Diamond Dies
- Polycrystalline Diamond Dies(PCD)
- Tungsten Carbide Dies
- Enameling Dies
- Extrusion Tips & Dies





Diamond Dies

Recommendation of reduction angles by material

Area Reduction	Application (%)							
	Aluminium Silver Gold Lead Zinc	Copper Al alloys	Hard Al alloys NI-Cr alloys	Cu alloys Brass Non Alloyed steels Stainless steel	Non Alloyed steels, Molybdenum Stainless steel alloys	Cu alloy Brass Non Alloyed steels	Non Alloyed steels, Alloyed steels	Hot Tungsten
5-8%	14	12	10	9	8	7	6	10
8-12%	16	14	12	11	10	9	8	10
12-16%	18	16	14	13	12	11	10	12
16-25%	21	18	18	16	15	14	12	12
25-35%	24	22	20	19	18	17	15	14

The datas are only recommended parameters, it should be adjusted according to the specific production process.



Standard Tolerance and Case of Diamond Dies

Hole Size Range(inch)	Hole Size Range(mm)	Standard Tolerance(mm)	Standard Case	
			Outside Diameter (mm)	Thickness(mm)
≤0.0008	≤0.020	0.0006	25	6
0.0008-0.0019	0.020-0.050	0.0006	25	8
0.0020-0.0079	0.051-0.200	0.0010	25	8
0.0080-0.0199	0.021-0.500	0.0015	25	8
0.0200-0.0399	0.501-1.000	0.0020	25	10
0.0400-0.0599	1.001-1.500	0.0025	25	12
0.0600-0.0869	1.501-2.200	0.0030	28	14
0.0870-0.1299	2.201-3.300	0.0040	30	16
0.1300-0.1799	3.301-4.500	0.0050	30	18
0.1800-0.2299	4.501-5.800	0.0060	43	26
0.2300-0.3150	5.801-8.000	0.0070	43	30

DIE RECUTTING SERVICES

IWD Wire Die recutting services provide like-new performance from your worn single crystal diamond dies, polycrystalline diamond dies and tungsten carbide dies. Expert technology and precision craftsmanship used in the original manufacturing process ensure that the accuracy of die geometry and bearing lengths meets your specifications.



Specialty Wire Dies

Extrusion Tips and Dies

IWD's Extrusion tips and dies are individually engineered to your precise specifications. Each custom-manufactured extrusion tip is engineered with unique applications expertise, to ensure proper wire centering.

- Tungsten carbide: 0.020inch to 0.500inch or 0.50mm to 12.5mm
- Tool steel: up to 1.0inch or up to 25mm



IWD offers enamelling die with natural diamond core, PCD core, and tungsten carbide core.



Others

Die Room Equipment and Accessories

IWD offers recutting machinery and accessories to ensure the wire drawing dies continue to perform to the specifications you need.

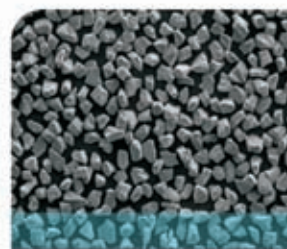
- Diamond Powder and Compound
- Die Recutting Machinery
- Die inspection equipment including microscopes, die cleaning equipment and accessories.



Diamond Grinding Wheels



Diamond Files



Diamond Powder



Diamond Dressers



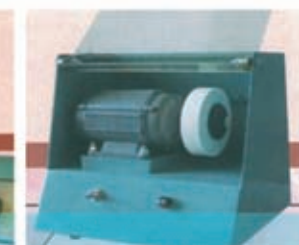
Diamond Paste



Polishing Machine



Ultrasonic Machine



Grinding Machine