



**Walson Woodburn™**

# Driving Precision. Powering Industries.

**Natural Diamond Wire  
Drawing Die**

An Indo-American Joint Venture.



# About Walson Woodburn Die

## CRAFTING PRECISION, BUILDING TRUST

Located in the Diamond capital of the world, Walson Woodburn is an Indo–American joint venture between Walson (India) and Woodburn (USA) - a partnership built on over sixty years of combined expertise in precision engineering.

Since 1970, we've shaped a reputation for uncompromising quality, consistency, and performance - making us a trusted name among leading wire and cable manufacturers worldwide.

Every die we craft begins with a deep understanding of our customer's process and ends with flawless performance - delivering results you can measure, and reliability you can feel.



## Size Ranges, Reductions & Tolerances

### PARAMETER

### SPECIFICATION



Hole Size

#### Ultra-Fine Dies

Dies down to 0.010 mm, crafted using high-tech drilling systems and precision finishing processes.

#### Large Dies

Die sizes up to 3 mm, a capability few die manufacturers can offer.



Surface Finish

Mirror polish with smooth wire flow geometry ensuring perfect die geometry and consistent performance.



Custom Sizes

Dies are tailored to specific wire materials, diameters, and applications, ensuring optimal results.

## Advantages / Key Benefits

### **Premium Natural Diamond Construction**

Direct access to the finest natural diamonds ensures dies of unmatched quality and consistency.

### **Benchmark Performance**

Dies set the benchmark for precision, performance, and longevity in wire drawing.

### **Superior Hardness & Long Life**

Strategic Surat location ensures unmatched control over sourcing, selection, and processing, producing dies with superior hardness and long life.

## WHY CHOOSE WALSON WOODBURN?

### Decades of Expertise

Deep experience in wire drawing die manufacturing.

### Precision Engineering

Dies with high durability and dimensional accuracy.

### Ethical & Sustainable

Diamonds sourced responsibly in line with international standards.

### Trusted Worldwide

Reliably serving wire manufacturers across the globe.

### Customer-Focused

Solutions tailored to production requirements for maximum efficiency.

## Quality Control

Each diamond undergoes microscopic inspection to verify structural integrity and low internal stress.

Custom selection based on wire material and diameter optimizes drawing efficiency and surface finish.

## Services Offered

Care for WDD

Stereo Zoom Die inspection


Ultrasonic Die Cleaning


## Craft your perfect Die

### How to Order


 Casing Dimensions


 Reduction Angle

 Hole Size (mm or inches)

 Bearing Length

 Hole Size Tolerance

 Input Wire

 Wire Material Drawn

*Our die performance  
starts with selection of  
premium quality diamond.*



# Natural Diamond Wire Drawing Die

PRECISION. DURABILITY. PERFORMANCE.

Founded in 1997, *Walson Woodburn Wire Die Pvt Ltd* brings decades of combined Indo-American expertise, delivering dies that set the benchmark for precision, performance, and longevity in wire drawing.

At Walson Woodburn Wire Die Pvt Ltd, we craft premium Natural Diamond Wire Drawing Dies in Surat the diamond capital of the world.

Being at the heart of the global diamond trade, we have direct access to the finest natural diamonds, giving us a unique advantage in manufacturing dies of unmatched quality and consistency.



**Walson Woodburn™**

[www.walsonwoodburn.com](http://www.walsonwoodburn.com)

**WALSON WOODBURN WIRE DIE PVT. LTD.**

929-932, Old Katargam G.I.D.C., Surat - 395 008. INDIA.

P: 91-261-2480446, 2481828, 2481793

E: [sales@walsonwoodburn.com](mailto:sales@walsonwoodburn.com)  
[marketing@walsonwoodburn.com](mailto:marketing@walsonwoodburn.com)

# Specification & Tolerances of Natural Diamond Die

## METRIC TABLE

Size Range (mm)	Total Tolerance (mm)	Ovality Tolerance (mm)	Casing Dimensions (mm)
0.015 - 0.025	0.00025	0.0001	25 or 28 × 6
0.0251 - 0.075	0.0005	0.0002	25 or 28 × 8
0.0751 - 0.300	0.001	0.0005	25 or 28 × 10
0.3001 - 0.750	0.002	0.001	25 or 28 × 10
0.7501 - 2.000	0.003	0.001	25 or 28 × 12
2.0001 - 3.000	0.004	0.002	25 or 28 × 15

Size Range (in)	Total Tolerance (in)	Ovality Tolerance (in)	Casing Dimensions (in)
.0006 - .0010	.00001	.00005	1 or 1.125 × .250
.00101 - .0030	.00002	.00008	1 or 1.125 × .312
.00031 - .0118	.00004	.00002	1 or 1.125 × .375
.01181 - .0291	.00008	.00002	1 or 1.125 × .375
.02911 - .0787	.00012	.00004	1 or 1.125 × .500
.07871 - .1181	.00016	.00008	1 or 1.125 × .625

*Note: We also supply dies as per customer's required Tolerance & Casing Size.*

## Performance / Metrics / Success Scenarios

**The performance of our dies begins with careful diamond selection and expert polishing**

Only top-grade, gem-quality diamonds with flawless crystal structure are chosen.

Diamonds are polished on the 111 crystallographic plane, which maximizes die life and ensures consistent wire drawing performance.

Advanced cutting, polishing, and finishing ensures perfect die geometry and smooth wire flow.

Each diamond undergoes microscopic inspection to verify structural integrity and low internal stress.

Custom selection based on wire material and diameter optimizes drawing efficiency and surface finish.

## SURAT ADVANTAGE

### Global Diamond Hub

Surat produces and trades the majority of the world's polished diamonds, giving us direct access to top-grade natural diamonds.

### Proximity to Raw Materials

Being at the source allows us to carefully select the highest-quality diamonds for our dies.

### Faster Innovation & Supply

Local access enables rapid prototyping, customization, and high-volume production while maintaining consistent quality.

### Strategic Advantage

Our location ensures unmatched control over sourcing, selection, and processing, producing dies with superior hardness and long life.

# Applications

## **Wire Manufacturing**

Ultra-fine and precision wires with smooth surfaces.

## **Jewellery**

Gold, silver, and platinum wires for premium jewellery applications.

## **Medical & Health**

Fine wires for syringe needles and medical instruments.

## **Electronics**

High-precision wires for sensitive electronic components.

## **Automotive**

Durable wires for critical applications.

## Certification

