



ESTEVES
GROUP

www.estevesgroup.com

Diamond Coated Dies

for steel wire manufacturing



Highlights

- Smooth surface
- Low friction coefficient
- Exceptional durability
- More cost effective than TC dies
- Maintenance-free (no recuts)



We Specialize in...

- Wire Drawing Dies
- Bunching, Stranding & Compacting
- Split Dies
- Tubing Dies
- Shaped Dies
- Extrusion Tooling
- Die Reconditioning Tools
- Engineering Services
- Customer Support

Excellent durability, extremely smooth wire surface, and energy savings due to low friction drawing.

DC dies are ideal for manufacturing steel wire and steel welding wire. Expect significant productivity improvements compared to using tungsten carbide dies. DC dies outlast TC dies typically by over 10x resulting in far fewer change-overs and a higher machine uptime. Additionally, diamond coated dies need less power to draw steel wire due to their lowered frictional forces.

The ultra-smooth layer of diamond on a tungsten carbide die ensures the smoothest wire surface that is possible today. The diamond coated die is the perfect combination of large-size availability of tungsten carbide and the ideal surface properties of randomly oriented synthetic diamond.

Suitable for:

- Low and medium carbon steel
- Stainless steel
- Welding wire

Maintenance, inventory, and cost:

- Diamond coated dies do not need to be recut and are simply discarded after use, reducing logistics and stock keeping, and shipping cost-savings of not having to return the product for refurbishing.
- Cost differences vs. TC dies are quickly offset due to lowered running costs (lowered cost of ownership), you will start saving money from the start!

Test dies, free of charge, are available for customers that have never tried Esteves **Diamond Coated dies for Steel**. Please contact Esteves Group customer service and ask for a free trial.



Diamond Coated Dies

for steel wire manufacturing

Key Features

- Exceptional durability
- Low friction coefficient
- High diameter accuracy
- Available even for large diameters

Benefits

- Improved diameter stability
- High machine uptime
- Reduced energy consumption
- Excellent wire surface
- Maintenance-free (no recuts, easy handling)

DC dies for steel		
Standard size range	0.65 - 40.00 mm [.0256 - 1.575"]	
Standard tolerance	+0.01 / -0.01 mm [+0.00039 / -0.00039"]	
Available angles	Matched to drawing process	
Standard casing size	Per your request	

Standard casing sizes	Metric [mm]			Imperial [inch]		
	Diameter	Casing dimensions [Ø x height]		Diameter	Casing dimensions [Ø x height]	
		standard	minimum		standard	minimum
	0.65 - 1.00	53 x 35	27 x 13	.026 - .039	2.09 x 1.38	1.06 x .51
	1.00 - 2.00	53 x 35	30 x 15	.039 - .079	2.09 x 1.38	1.18 x .59
	2.00 - 3.00	53 x 35	31 x 18	.079 - .118	2.09 x 1.38	1.22 x .71
	3.00 - 4.00	53 x 35	35 x 22	.118 - .157	2.09 x 1.38	1.38 x .87
	4.00 - 5.00	53 x 35	40 x 23	.158 - .197	2.09 x 1.38	1.57 x .91
	5.00 - 8.00	53 x 35	45 x 26	.197 - .315	2.09 x 1.38	1.77 x 1.02
	8.00 - 10.00	60 x 35	50 x 27	.315 - .394	2.36 x 1.38	1.97 x 1.06
	10.00 - 16.00	70 x 40	55 x 30	.394 - .630	2.76 x 1.57	2.17 x 1.18
	16.00 - 20.00	70 x 40	60 x 30	.630 - .787	2.76 x 1.57	2.36 x 1.18
	20.00 - 25.00	70 x 40	65 x 35	.787 - .984	2.76 x 1.57	2.56 x 1.38
	25.00 - 27.00	80 x 45	70 x 35	.984 - 1.063	3.15 x 1.77	2.76 x 1.38
	27.00 - 35.00	80 x 50	75 x 40	1.063 - 1.378	3.15 x 1.97	2.95 x 1.57
	35.00 - 40.00	100 x 55	85 x 45	1.378 - 1.575	3.94 x 2.17	3.35 x 1.77

Virtually any diamond coated die size is available.
Please contact **Esteves Group** for a quotation for your wire and cable tooling.

