





Binocular and trinocular microscopes for full-die profile inspection meet the demands of today's die shop operators and die inspection personnel.

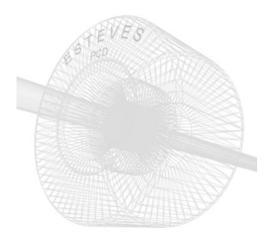
Microscopes are widely used and considered as an essential tool to inspect drawing dies. High-quality optics enable the trained operator or die inspector to evaluate drawing die geometries and observe surface features in drawing dies.

Esteves Group microscopes are used for evaluating drawing die wear and to determine if a die can be repolished or if recutting will be required. The microscope can also be used to visually evaluate the quality of the wire that is being manufactured.

Esteves Group EM-series binocular microscopes allow for superb drawing die evaluation with low eye fatigue for the operator. They are an essential tool within every die shop.

Virtually any type of die shop tooling is available from Esteves Group as well as in-house training for your recutting, repolishing, and resizing needs.

- Superb die evaluation
- Rotating die stage
- High quality optics
- Holds various casing sizes



## We Specialize in...

- Wire Drawing Dies
- **Bunching, Stranding & Compacting Dies**
- **Split Dies**
- **Tubing Dies**
- **Shaped Dies**
- **Extrusion Tooling**

### **Die Reconditioning Tools**

- **Engineering Services**
- **Customer Support**



View through an inspection microscope. Clearly visible is the drawing ring in the reduction cone. The drawing die needs to be recut.



# EM-series Inspection Microscopes

Die reconditioning



### **Key Features**

### **Benefits**

- Inclinable and movable die stage
- Superb die evaluation

• High quality optics

- Whole drawing die geometry can be seen
- Holds various casing sizes
- · Adjustable lighting

**Esteves Group EM-series Die** Inspection **Microscopes** 

Product name	EM-302	EM-303
Recommended for die size range <sup>1)</sup>	0.20 - 14.0 mm [.0078552"]	
Casing diameter	Max. 53 mm	
360° die rotation holder	✓	
Adjustable die inclination	✓	
Movable die stage	✓	
Camera adapter (USB camera optional)	×	✓
Stereo/depth view (binocular)	✓	
Magnification range <sup>2)</sup>	6.7x to 90x	
Available eyepieces	10x	
Illumination	Frosted lamp 3W	
Manual illumination intensity control	×	
Lighting position	Freely movable	
Input power	230V 50/60Hz	
Dimensions [w x d x h] (Approx.) inch [mm]	320 x 285 x 350/470 mm [12.6 x 11.2 x 13.8/18.5"]	
Weight (Approx.)	7 kg [15 lbs.]	

<sup>&</sup>lt;sup>1</sup> For any additional requirements and inquiries, please contact a sales representative at Esteves Group

More drawing die types, cabling tooling, and extrusion tools are available. Please contact **Esteves Group** for a quotation for your wire and cable tooling.

Drawing, and cabling tooling below: PCD dies, SSCD dies, ND dies, bunching and stranding dies, split dies, extrusion tools



<sup>&</sup>lt;sup>2</sup> Magnification range depends on objective and eyepiece combination