
Thank you for your purchase of this Biuged Film Applicator. Welcome to Biuged.

Biuged are world leaders in the design, manufacture and supply of inspection equipment for coatings and Ink. Our products cover all aspects of coating inspection, from development through application to post application inspection.

This Biuged Film Applicator is a world beating product. With the purchase of this instrument you now have access to the worldwide service and support network of Biuged. For more information visit our website at www.biuged.com

1. ABOUT THIS INSTRUMENT

This Biuged Film Applicator is a simple but effective instrument for applying a uniform and reproducible film of coating to a substrate. The Biuged 209 is suitable for manual application of thick layers of various products on solid and flat substrates.

The Biuged 209 is recommended only for application of relatively viscous fluids having a viscosity greater than 2000 cP. Your film applicator is suitable for manual application only; it is not recommended for use with a motorized film applicator. These instructions describe the operation of the Biuged 209 Casting Knife film applicators.

1.1 STANDARDS

Your Biuged Film Applicator can be used in accordance with the following National and International Standards: ASTM D 823-E.

1.2 WHAT THE BOX CONTAINS

- Biuged Film Applicator
- Storage case
- Operating instructions

Your Biuged Film Applicator is packed in a cardboard and foam package. Please ensure that this packaging is disposed of in an environmentally sensitive manner. Consult your local Environmental Authority for further guidance.

To maximize the benefits of your new Biuged Film Applicator please take some time to read these operating Instructions. Do not hesitate to contact Biuged or your Biuged supplier if you have any questions.

2 SETTING THE BLADE GAP

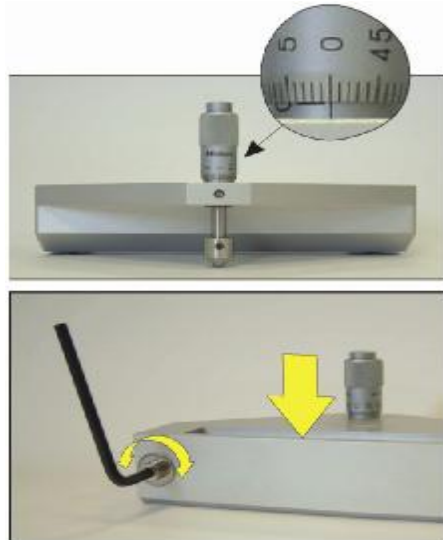
Take care while you are handling and using your Biuged Film Applicator. Damage to the working surfaces will affect the film thickness and the instrument may have to be replaced.

2.1 BIUGED 207

1. Place the applicator on a flat surface.
2. Adjust the micrometer to '0' (zero).
3. Loosen the two hexagon screws, press the blade firmly against the flat surface and then tighten the two screws.
4. Adjust the micrometer to the desired gap:

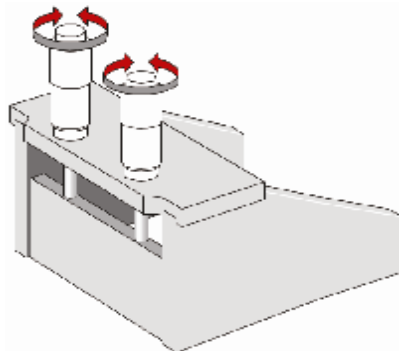
Due to the design of the film applicator, the gap must be multiplied by 10 and this value must then be set on the micrometer. For instance:

- To obtain a gap of 50 μm (2 mils), set the micrometer to 0.5 mm.
- To obtain a gap of 250 μm (10 mils), set the micrometer to 2.5 mm.



2.2 BIUGED 209

Adjust the micrometers to the desired blade gap. Both micrometers should be set to the same value.



3. APPLICATION PROCEDURE

1. Before each use, check the working surfaces for irregularities and damage.
2. Fix a clean substrate on a flat and horizontal base such as a vacuum table.
3. Place the applicator at one end of the substrate. The applicator should be positioned facing the direction of travel, as shown.
4. *Biuged 307*: Pour the product to be applied into the centre of the reservoir.
Biuged 309: Pour the product to be applied onto the substrate between the sides of the applicator.
5. Spread the film by moving the applicator towards the opposite end of the substrate at a constant speed.
6. Lift the applicator from the substrate taking care to catch any product dripping from the applicator before it lands on the newly prepared film.

4 AFTER APPLICATION

Clean your film applicator. After cleaning, ensure that all materials are removed and that the instrument is dry. Use the case provided to store the instrument when it is not being used.

5 WET FILM THICKNESS

The thickness of the film produced by your applicator depends on many factors including;

- *the speed of film application,*
- *applicator blade gap setting,*
- *surface tension,*
- *and the viscosity of the product.*

Do not use very aggressive solvents or wire brushes, metal scrapers, metal files or other metallic tools for cleaning. Clean the applicator using a suitable solvent.

6. MAINTENANCE

The Biuged Film Applicator is designed to give many years reliable service under normal operating and storage conditions. Regular calibration checks over the life of the micrometer gauges are a requirement of quality management procedures e.g. ISO 9000 and other standards. For checks and certification contact Biuged or your local supplier.

7. TECHNICAL SPECIFICATION

Material: Anodized aluminum

Range (BGD 209): 0 μm to 3500 μm (0 mils to 140 mils)

A stainless steel version of the Biuged 209 is also available - contact Biuged or your Biuged supplier for details.

8. RELATED BIUGED EQUIPMENT

Biuged produces a wide range of coatings inspection gauges and related equipment.

Users of this Biuged Film Applicator may also benefit from the following Biuged products:

- Biuged Fineness of Grind Gauges
- Biuged Motorized Film Applicators
- Biuged Test Charts
- Biuged Drying Time Recorders
- Biuged Washability, Brushability and Abrasion Testers
- Biuged Hardness Testers

For further information contact Biuged, your local supplier or visit www.biuged.com