

ENTRY

We know  
the drill.



blu™

ENGINEERED ENTRY MATERIAL

BLU,  
breathing  
life into  
old tools.

**Provides Excellent Accuracy** - allows you to maintain hole location from the entry side to the exit side of the stack

**Minimize Drill Deflection** - proprietary coating holds the drill immediately upon contact

**One Product For All Drill Sizes** - Bullseye blu can be used for all drill diameters from 0.10mm – 6.35mm

**Easy To Handle** - lays flat on the PCB stack and will not soften by heat

**Guarantee** - Behind every LCOA product stands the LCOA guarantee: Any LCOA product proven defective will be replaced or refunded

**L.C.O.A.**®  
LAMINATING COMPANY OF AMERICA

20322 WINDROW DRIVE • LAKE FOREST CA 92630 • LCOA.COM • 949.587.3200



## Engineered Entry Material

LCOA Bullseye® blu is a unique, innovative entry material that offers the user the best possible accuracy on a full range of diameters used in PCB manufacturing. Bullseye® blu is a combination of a non-contaminating carrier sheet and our proprietary coating, providing a unique surface for the drill to center and stabilize before entering the laminate. The proprietary coating is engineered to machine effortlessly without wrapping around the tool, turning to dust and evacuated by the vacuum system. Bullseye® blu resists scratching, denting, and damage from the pressure foot.

### SPECIAL FEATURES

**Provides Excellent Accuracy** – Bullseye® blu allows you to maintain hole location from the entry side to the exit side of the stack and is designed with a 7 mil aluminum base that will not oilcan on older equipment.

**Minimize Drill Deflection** – Bullseye® blu proprietary coating holds the drill immediately upon contact, creating a perfect bushing, eliminating deflection.

**One Product For All Drill Sizes** – Bullseye® blu can be used for all drill diameters from 0.10mm – 6.35mm.

**Easy To Handle** – Bullseye® blu lays flat on the PCB stack and will not soften by heat. The material does not require gloves or any special handling techniques.

**Guarantee** – Behind every LCOA product stands the LCOA guarantee: Any LCOA product proven defective will be replaced or refunded.

### TECHNICAL DATA

THICKNESS:	0.010" ±0.001"	(0.25mm ±0.025mm)
CUT TOLERANCE	±0.0625"	(±1.6mm)
SIZES	Most panel and sheet sizes available. Consult your local distributor or contact LCOA for additional information.	

### QUALITY CONTROL

The consistently high-quality of LCOA Bullseye® blu is guaranteed by the tightest production tolerances in conjunction with permanent product controls corresponding to ISO 9001.

### STORAGE

LCOA Bullseye® blu should remain sealed in its original packing until use. It should be stored under the same temperature and humidity conditions that surround the working area. Rapid change of these conditions will cause moisture fall out resulting in subsequent warp.

Best storage at: 65° - 75°F (18° - 24°C)  
<55% rH

ENTRY

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**EO+**  
EO PLUS COMPOSITE ENTRY MATERIAL



**Minimizes Burring** – provides a flat, hard surface for maximum support to minimize burring.

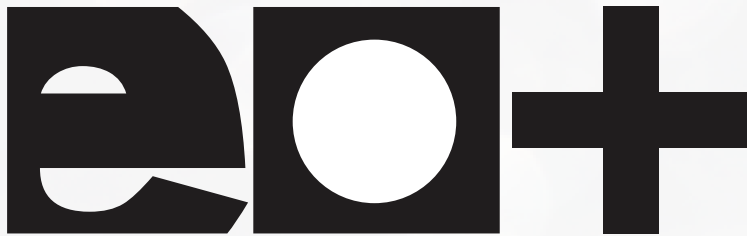
**Increases Hole Quality** – premium quality materials that will not contaminate the hole wall

**Reduces Drilling Temperatures** – offers excellent heat dissipation characteristics

**Increases Drilling Accuracy / Precision** – reduces drill breakage and improves positional accuracy

**Guarantee** – Behind every LCOA product stands the LCOA guarantee: Any LCOA product proven defective will be replaced or refunded.

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EO PLUS COMPOSITE ENTRY MATERIAL

## Superior Drill Entry Material

LCOA EO+ is a combination of special aluminum laminated to both sides of a pure cellulose core. While competitively priced, EO+ is engineered specifically for printed circuit board drilling. LCOA offers a wide range of special features that benefit the LCOA user.

### SPECIAL FEATURES

**Minimizes Burring** – EO+ provides a flat, hard surface for maximum support to minimize burring.

**Increases Hole Quality** – EO+ is constructed of premium quality materials that will not contaminate the hole wall.

**Reduces Drilling Temperatures** – EO+ offers excellent heat dissipation characteristics resulting in reduced drill wear and minimized heat related hole defects.

**Increases Drilling Accuracy / Precision** – EO+ reduces drill breakage and improves positional accuracy due to its unique compressible core.

**Return on Investment** – EO+ used in tandem with LCOA's backup materials provides the most effective combination to reduce the need for expensive deburring and hole cleaning procedures.

**Guarantee** – Behind every LCOA product stands the LCOA guarantee: Any LCOA product proven defective will be replaced or refunded.

### TECHNICAL DATA

THICKNESS:	0.012" $\pm$ 0.0015"	(0.305mm $\pm$ 0.038mm)
CUT TOLERANCE	$\pm$ 0.0625"	( $\pm$ 1.6mm)
SIZES	Most panel and sheet sizes available. Consult your local distributor or contact LCOA for additional information.	

### QUALITY CONTROL

The consistently high-quality of LCOA EO+ is guaranteed by the tightest production tolerances in conjunction with permanent product controls corresponding to ISO 9001.

### STORAGE

LCOA EO+ should remain sealed in its original packing until use. It should be stored under the same temperature and humidity conditions that surround the working area. Rapid change of these conditions will cause moisture fall out resulting in subsequent warp.

Best storage at:	65° - 75°F	(18° - 24°C)
	<55% rH	