SPECIALTY CHEMICALS AND ENGINEERED MATERIALS

# GLASSMATE<sup>®</sup> Graphite Materials

Catalog of machine repair parts















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#### MATERIALS

The GLASSMATE® family of materials have been specifically developed for use in hot glass contact applications. GLASSMATE materials have the heat resistance, strength, durability, and non-absorption characteristics to perform under the most rigorous conditions without damaging the glassware. Our hot glass handling materials offer excellent performance combined with reduced mechanical damage for increased pack rates.

#### MANUFACTURING

All our GLASSMATE materials and finished parts are produced at the North Texas manufacturing facility. Precision machining cells produce finished parts to customer specifications or standard industry finishes. Our experienced design specialists assist the customer to obtain the perfect fit for individual applications.

Our quality system is certified to ISO 9001 and AS9100.

# **GLASSMATE GRADES**

GLASSMATE graphites are high strength, isotropic materials with a uniform microstructure. We produce a full range of graphite grades designed for specific applications along the glass production line.

#### **GM GRAPHITE**

GLASSMATE-GM grade is a 5 micron material with superior strength and durability for applications with high wear. An exceptional material for precision thread pickup and long production runs.

#### **SR GRAPHITE**

GLASSMATE-SR grade is an economical, 10 micron material for short runs. It provides good strength, heat resistance, and durability.

#### **HT GRAPHITE**

GLASSMATE-HT grade is a high strength, 5 micon material with an oxidation inhibitor that raises the oxidation threshold. Service temperature can be raised to 600°C (1112°F).

#### LT GRAPHITE

GLASSMATE-LT grade is a 5 micron material with higher strength properties than the GM grade. It is ideal in very high-wear applications.

#### **CXTX GRAPHITE**

CXTX grade is a cost-effective material ideal for lehr stacker bar pads where exceptional hardness or high strength is not required.

# **SPECIALTY ITEMS**

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We create a variety of special items for specific IS machines and customer applications. Many parts are designed to eliminate water-cooling and increase machine speeds.

## **DEAD PLATE ASSEMBLIES**

Dead plate assemblies eliminate glass-to-metal contact in the dead plate area and help eliminate bottom checks. GLASSMATE dead plate assemblies combine the strength of a metal support plate with the container compatible surface of GLASSMATE graphite. Matching air holes allow even airflow, which provides uniform glass cooling and smoother container transfer. Assemblies are custom designed and engineered to fit your machines and are easy to install. Some assembly designs allow the dead plate to be reversed, prolonging life.

Due to the number of different configurations, GLASSMATE dead plates and companion support plates require special quotation. Two examples of dead plate assemblies are shown below.







## **MOLD TOP INSERTS**

Mold top inserts are made from GLASSMATE-HT graphite, a unique high-strength, 5 micron graphite impregnated with oxidation inhibitors. Impregnation raises the oxidation threshold to withstand the high temperatures of the glass bottle manufacturing process. GLASSMATE- HT graphite has low thermal conductivity minimizing thermal and mechanical checks during mold release, unlike metallic inserts whose higher thermal conductivity and thermal expansion frequently cause bottle damage. The ability to remove the insert prior to cleaning the mold allows the insert to be used and re-used in multiple production runs. These inserts have a metal protective plate for damage resistance.

We can design custom inserts to match customer equipment.



## **SWEEP-OUT ASSEMBLIES**

Our extended sweep-out assemblies are designed for use with taller glass containers. The reversible sweep-out blades are lined with long-lasting GLASSMATE-GM graphite and are available in a variety of sizes, in both angle and straight blade configurations, to meet your unique application needs.

### SWEEP-OUT ASSEMBLY DE-32604

This assembly fits 8  $\frac{1}{2}$  triple gob machines. Each pocket is shaped to accommodate 12 oz beer bottles (61.9 mm or 2.437" diameter), for example only.

#### Sweep-out replacement parts

Fits	Description	Part
Triple	Back plate	DE-27665
Triple	Pocket assembly	DE-36970A
Triple	Shoulder bolt – ¼" × 1" × 10-32	DE-97818542
Triple	Hex expansion locknut — 10-32 × ¼"	DE-97794230
Triple	Ring clip quick release pin — ¼4"	DE-17898131





#### SWEEP-OUT REPAIR KITS

Finger Repair Kit DE-38092



#### Kit includes

Description	Quantity
Inside finger pad	1 piece
Outside finger pad	1 piece
Alloy steel button head socket cap screw – 6-32 × ¾"	2 pieces

#### Back Pad Repair Kit DE-38093



#### Kit includes

Description	Quantity
Back pad	1 piece
Alloy steel button head socket cap screw – 6-32 × 5⁄16"	2 pieces

# **TRANSFER PADS**

Our transfer wheel pads and fingers are made from GLASSMATE-GM graphite for superior strength and durability. GM graphite is ideal for applications with high wear.

Transfer pads and fingers are available in 3" or 6" lengths and fit either dove tail or T-slot holders.

Description	Part
3" GM transfer wheel back pad	DE-29190
6" GM transfer wheel back pad	Special order
3" GM transfer wheel finger	DE-29191
6" GM transfer wheel finger	Special order
3" GM transfer wheel back pad	Special order
6" GM transfer wheel back pad	DE-26877
3" GM transfer wheel finger	Special order
6" GM transfer wheel finger	Special order
	3" GM transfer wheel   back pad   6" GM transfer wheel   back pad   3" GM transfer wheel finger   6" GM transfer wheel finger   3" GM transfer wheel finger   6" GM transfer wheel finger   3" GM transfer wheel finger   3" GM transfer wheel back pad   6" GM transfer wheel back pad   6" GM transfer wheel back pad   6" GM transfer wheel finger   6" GM transfer wheel back pad



#### **BOTTLE GUIDES**

The V-Spacer guide is designed to reliably align bottles as they enter the two belt lehr entrance system on a quad machine. The Split V guide is for use with single conveyer, multiple gob machines. Pads are adjustable and easy to install.

V-Spacer and Split V guides are special order items requiring additional production time. Both are available in 12" and 18" lengths. Please contact Entegris for more information.



Split V guide

## LEHR STACKER BAR ASSEMBLY

Our complete lehr stacker bars are available to meet all your container-handling needs in open, semi-closed, or closed lehr applications. The pocketed design of interlocking pads, coupled with steel mounting channels, create a bar that resists warping and is extremely durable.

Machined stacker pads are available to fit your current stacker bar configuration.



## LEHR STACKER BAR ASSEMBLY COMPONENTS





Push 2" to  $4\frac{1}{2}$ " diameter ware with a single bar and size 1 pad.







CXTX end pad assembly – size 1, DE-25093







CXTX end pad assembly – size 2, DE-25196

#### Lehr stacker bar hardware kits

ltem	Description	Part
L/S hardware kit	3 mount brackets and 1 end fixture	DE-12178
L/S nut pack	50 spring nuts	DE-12177
L/S fastener kit	50 washers and 50 self locking nylon patch screws	DE-12176
8' bar kit	8' bar, 3 mounting blocks, 50 each screws, washers, nuts	DE-12119
10' bar kit	10' bar, 3 mounting blocks, 50 each screws, washers, nuts	DE-12120
12' bar kit	12' bar, 3 mounting blocks, 50 each screws, washers, nuts	DE-12121
14' bar kit	14' bar, 3 mounting blocks, 50 each screws, washers, nuts	DE-12122
16' bar kit	16' bar, 3 mounting blocks, 50 each screws, washers, nuts	DE-12123
20' bar kit	20' bar, 3 mounting blocks, 50 each screws, washers, nuts	DE-12124

## **SPECIALTY ITEMS**

ltem	Description	Part
SR gob funnel	Gob funnel – external forced air or water cooling is not required. Specify bore diameter when ordering, max 2" or 52 mm ID.	N/A

#### LIMITED WARRANTY

Entegris' products are subject to the Entegris, Inc. General Limited Warranty. To view and print this information, visit <u>entegris.com</u> and select the Legal  $\vartheta$  Trademark Notices link in the footer. Entegris does not warrant any failure in the case of customers using unapproved foreign components.

#### FOR MORE INFORMATION

Please call your Regional Customer Service Representative or Distributor today to learn what our GLASSMATE® products can do for you. Visit <u>poco.entegris.com/contact-us</u> for the location nearest you.

#### TERMS AND CONDITIONS OF SALE

All purchases are subject to Poco Graphite's Terms and Conditions of Sale. To view and print this information, visit <u>poco.entegris.com/terms-and-conditions</u>.



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