

# ALPHA<sup>®</sup> CUT HR2

**Laser Cut Stencil Materials** 

## DESCRIPTION

**ALPHA CUT HR2** Laser Cut Stencils have been developed as the new standard laser cut stencil, with improved printing performance. The stencil material retains the best-in-class shape, positional accuracy and wall quality associated with ALPHA<sup>®</sup> CUT, with added benefits of improved print definition and reduced variation in the solder paste deposit.

**ALPHA CUT HR2** Laser Cut Stencils are made from hardened stainless steel which enables improved resistance to stretching under high tension. The increased material strength and stiffness contributes to improved print definition when using high tension stencil printing.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

### **FEATURES & BENEFITS**

#### Features:

- Increased Hardness specification
- Stronger, stiffer, which can lead to produce crisper prints
- Smoother wall characteristics on laser cutting
- Drop in compatibility
- Available in common formats such as ALPHA Tetrabond and meshed frame stencils

**Benefits:** 

- Reduced variation in the solder paste deposit
- Improved volume repeatability
- Improved print definition
- Improved solder paste transfer efficiency
- Increased print yields
- Improved resistance to stretching under high tension to maintain precise registration with the PCB
- Excellent alternative to Nickel for high volume operations





## **APPLICATION GUIDELINES**

ALPHA CUT HR2 Laser Cut Stencils are available in the following formats:

- ALPHA TetraBond
- Meshed Frame Stencils

Compatible with Alpha's range of solder paste and adhesive products and suitable for a wide range of markets including; Automotive, Computer and Mobile devices, Military, IT/Telecom, LED, Power Semiconductor, Power Supply and Power Conversion.

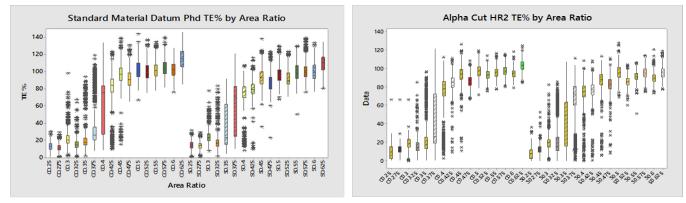
#### **TECHNICAL DATA**

#### **Printability Test Protocol**

ALPHA CUT HR2 paste deposits are more repeatable for all Area Ratios 0.5 and above

#### PHD Material SS

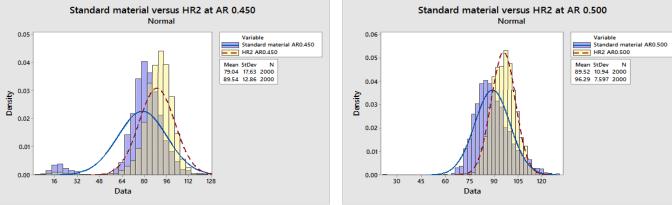
#### ALPHA CUT HR2 SS

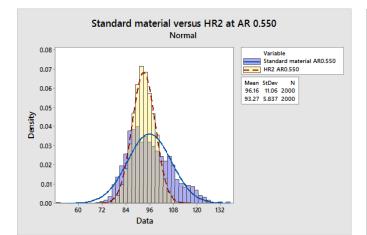


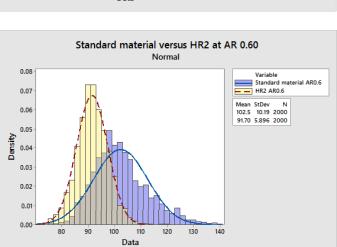


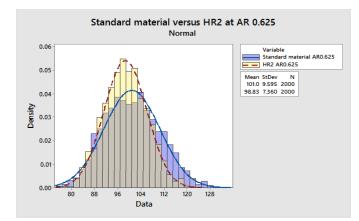
















# **TECHNICAL DATA**

Item Number		Description	Size
248414	ST2	ALPHA HR2 Stencil New Frame	29" x 29"
248968	ST2	ALPHA HR2 Stencil Tetrabond	23" x 23"
250723	ST2	ALPHA HR2 Stencil Tetrabond	23" x 23"_DR
248969	ST2	ALPHA HR2 Stencil Tetrabond	23" x 29"
248415	ST2	ALPHA HR2 Stencil Vector Guard	23" x 23"
249767	ST2	ALPHA HR2 Stencil Vector Guard	23" x 29"

# CLEANING

Always clean stencil down properly after usage. Avoid delays between using the stencil and the cleaning process. Ensure that the foil is dry and free from any cleaning residues before storing.

Recommended cleaning products:

- BIOACT SC-10E & SC-10E Plus Solvent Wipes or Cleaners
- HYDREX WS & SP Aqueous Cleaners
- ALPHA SM-110 Solvent Wipes or Cleaners





#### **SAFETY & WARNING**

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. Safety Data Sheets are available at MacdermidAlpha.com/assembly-solutions/knowledge-base

#### CONTACT INFORMATION

To order, or to find out more technical or application information please contact your local stencil site at any of the following:

#### **Robert Lang**

Stencil Account Manager East Kilbride, Scotland Robert.Lang@MacDermidAlpha.com

#### Soma, Szalay

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#### To confirm this document is the most recent version, please contact Assembly@MacDermidAlpha.com

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE. Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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