

# **ALPHA® TENSORED®**

**Stencil Tensioning Frames** 

#### **DESCRIPTION**

**ALPHA tensoRED** Master Tensioning Frame was developed with the aim of reducing the total cost of ownership of stencils compared to other systems on the market. The innovative technique for creating tension in the stencil is achieved without the need of air pressure being applied to the frame, resulting in less maintenance cost and downtime. It allows all the advantages of using stencils in foil formats to be achieved, at lower overall cost of ownership than older technologies.

A higher and more even tension, compared to ALPHA Tetra Frame, is delivered by this novel design of master tensioning frame. The system requires a minimum one of loading station per customer, which allows stencil foils of any given size, to be loaded and unloaded from the master tensioning frame itself. Frames are available in common printer sizes and there are additional adaptors, designed to sit permanently in the printer, that configure the smaller frames sizes to fit into full 29" printer openings.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

# **FEATURES & BENEFITS**

#### Features:

- No air pressure or silicon tubes required to operate the system
- Backward compatible with most popular legacy stencil foil types
- Patented Design with less moving parts and reduced weight
- Available in all common foil sizes
- Adaptors for full 29" configuration customers designed to sit permanently in printer
- Mechanical loading station to assist in attaching/detaching foils



## TECHNICAL BULLETIN



#### **Benefits:**

- Reduced maintenance costs:
  - No silicon air tube that might burst and need repair kit or service
  - No downtime sending frames back for repair/maintenance
- Improved Reliability
- Improved manual handling for operators
- No need to replace your Alpha Tetrabond or DEK Vectorguard foils
- Printing Process Benefits:
  - More even tension resulting in less smearing of paste over the full squeegee length\*
  - Reduced variation in volume deposits\*
  - Improved positional alignment on volume deposits\*
- Can store up to 5 stencil foils in the space of a single meshed framed stencil
- Reduced transport costs of a stencil foil, compared to meshed framed stencil
- \* Compared to foil mounted in ALPHA Tetra Master Frame during print trial testing carried out internally and with Alpha customers.

#### APPLICATION GUIDELINES

ALPHA tensoRED frames can be used with the following stencil products:

- ALPHA Precision Milled Stencils
- ALPHA CUT Laser Cut Stencils
- ALPHA Nickel-Cut
- ALPHA Form

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**

JDE item	Description	weight
175721	23*23 tensoRED master frame	3 kg
175722	23*23 tensoRED master frame, side bars 29*29	4 kg
175723	23*29 tensoRED master frame, side bars 29*29	5 kg
175724	29*29 tensoRED master frame	4.5 kg
175725	23*23 tensoRED master frame, with teeth	3 kg
175726	23*23 tensoRED master frame, side bars, with teeth	4 kg
175727	23*29 tensoRED master frame, side bars, with teeth	5 kg
175728	23*29 tensoRED master frame	4 kg
175729	23*29 tensoRED master frame, with teeth	4 kg
175733	29*29 tensoRED master frame, with teeth	4.5 kg
175734	650mm * 550mm tensoRED master frame	4 kg
175735	23*23 tensorRED loading station (mechanical)	20 kg
240536	tensoRED Adaptor - 23*23 frame to full 29"	5 kg
240537	tensoRED Adaptor - 23*29 frame into full 29"	5 kg
240538	Universal loading station	20 kg
240539	23*29 tensoRED loading station (mechanical)	20 kg
240540	29*29 tensoRED loading station (mechanical)	20 kg
240541	650*550 tensoRED mm loading station (mechanical)	20 kg





#### **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 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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