



ventec

INTERNATIONAL GROUP

騰輝電子

PCB CONSUMABLES



MV-CENTRUM

**LUBRICATED
Al ENTRY SHEET**

MATERIAL DATASHEET

INTRODUCTION

MV-Centrum is a specially engineered innovative and patented entry material for high quality drilling applications. MVC offers comprehensive PCB drilling benefits on a full range of diameters and a premium option for micro-holes, better accuracy, perfect holes quality, more PCB stacks and less risk of drill breakage.

MV-Centrum is suitable for Rigid, Flex & R-FPCBs and widely

used as drilling entry board for Package, HDI, Automotive, High-Layers, COMM Board etc. and offer advantages as enhance accuracy, increase more PCB stack-ups, better hole-wall quality, more drilling hits and less breakage.

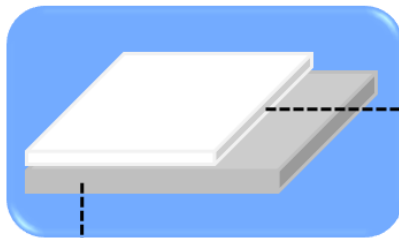
MV-Centrum is a water soluble resin coating entry and sensitive to moisture and please avoid any direct contact of water or high-moisture storage conditions.

GENERAL INFORMATION

- The proprietary coating provides a unique surface for the drill to center and stabilize before entering the laminate surface
- Greater hole positional accuracy and increased cpk at the drilling process
- Lubricating and heat dissipating design decreases hole roughness
- Improves drill positional accuracy, reducing drill deviation through the stack and reduced incidence of burring
- Reduction in heat and wear of drill bit, thus increasing drill bit life and drill breakage rate
- Hydrophilic lubricant allowing easy removal of drilling debris
- Allows for increased stack height, thus increasing drill capacity and machine utilization / efficiency
- Significantly improves quality of drilled holes, particularly micro hole drilling required to manufacture today's BGA and micro-BGA, HDI PCB's.

Version: 11/06/20

CONSTRUCTION AND AVAILABILITY

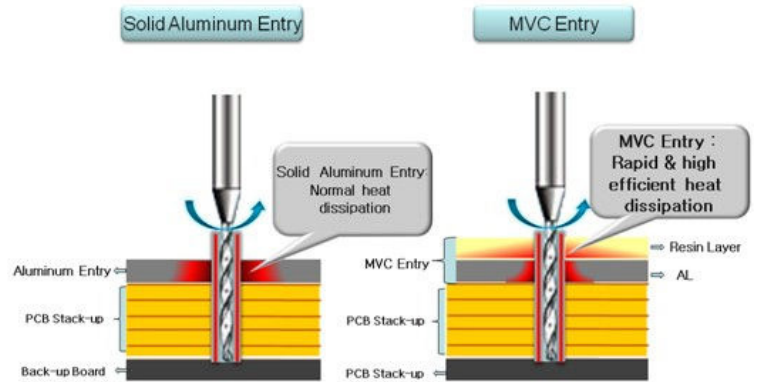


**Resin Coating:
20-100um**

Aluminium Foil:70-250um

Resin Coating Layer: water soluble resin, low-melting point

Al Foil: Selected high purity Al foil



Note: Red part is drawing of drilling Heat's formation and dissipation

LINE UP

Item/Code	MVC0830	MVC1040	MVC1350 MVC1440	MVC1550	MVC2540
All Foil Thickness	80µm	100µm	130µm/140µm	150µm	250µm
Coating Layer Thickness	30µm	40µm	50µm/40µm	50µm	40µm
MVC Thickness	0.11mm	0.14mm	0.18mm	0.20mm	0.29mm
Suitable Hole Sizes (mm)	≤ 0.15	0.15~0.25	0.2~0.40	0.2~0.40	0.25~0.40
Typical PCB Application	Package BGA	HDI BGA MODULE FPCB	HDI Backplane HF & RF PCBs MODULE	HDI Automotive MLB HF PCBs	Backplane Automotive HF & HR PCBs
Why to use:	High Accuracy Less Breakage	High Accuracy Less Breakage More Stack-up	High Accuracy Less Breakage More Stack-up	High Accuracy Less Breakage More Stack-up Better Hole Quality More Hits	High Accuracy Less Breakage More Stack-up Better Hole Quality More Hits

Remark: All MV-Centrum model and cutting panels are available upon request.

SPECIFICATIONS

Item	Specifications	Tolerance	Measure Tools
Thickness	0.11~0.29	± 10%	Micrometer
Dimension	N/A	± 2	Tapeline
Diagonal	N/A	≤ 3	Tapeline
Warp/Twist	N/A	≤ diagonal 1%	Plug Gauge, Steel Ruler
Appearance	1 - Surface clean and keep same direction stack-ups 2 - Severe Wrinkle & Scratches are not allowed 3 - Cutting edges are clean and no functional defects 4 - Pints & Dents: 3 points (<1.0mm)/1 sheet are allowed		Visual Check

Disclaimer: The information and data contained in this technical literature is based on data and knowledge correct at the time of publishing/printing and is believed to be accurate and is offered in good faith for the benefit of the user. The user should make his own tests to verify the suitability of this product for any application before its use. All data are typical values only and subject to change without notice.

PRECAUTION MEASUREMENTS

- Please keep coating layer be upward and then tape tightly with PCB.
- Please wear protective face masks and gloves before materials cutting.
- It is normal to find slight war-page from this non-symmetrical structure based material. Please place and fix the board on the top layer of the substrate so that it can be used for the drilling process.
- Heavy scratches and wrinkle ones are not allowed to use.
- Any water and solvent subjects contamination will destroy the quality of coating layers.
- Please ensure the material surface is clean before goes into drilling process
- In order to have the best drilling performance, a short-time storage and finish the use in one month time is recommended.

SHIPPING & STORAGE CONDITIONS

- Please place the sealed MV-Centrum horizontally and keep away from fire resources
- Keep MVE be waterproof,moisture-proof and fireproof
- Storage Temperature 5~25°C and Humidity ≤60%
- Shelf life guaranteed:
 1. One Year time from the delivery date (bill of loading date) if kept at original unbroken sealed packing.
 2. No guarantee if unpacked ones remain unpacked status and not sealed and original packing not recovered.

Reminder: MV-Centrum is very sensitive to the humidity and temperature. No matter storage, unpacking, package recovery, cutting, using, please keep temperature & humidity in controlled conditions.

Packing Method and Labels

P1 - Label for small Pack

Name	MV-Centrum Lubricated Al Entry Sheet
Code	MVC-1550
Size	0.20mm*510mm*610mm
QTY	100 ppls
PO NO.	xx

100pcs / film sealed packing



2 - Label for Pallet

P/L NO:	xx - x	MVC
Consignee	xx	
Production Description	MV-Centrum Lubricated Al Entry Sheet MVC-1550 Size: 0.20mm*510mm*610mm	
QTY	2000 ppls	
QC. Check		

Pallet protected by cover board + strong bending belts



Environmental Protection and Regulations

Materials are fully meet the requirements of China environment protection rules and regulations. Please make the waste treatment or do the waste recycle according to your local laws or regulations.

Version: 11/06/20