

KM-EL 软式电热加热布包系将电热线, 温控开关, 及测温热电偶等排绕安装于耐高温布上, 再与软质之耐高温布及毯等材料车缝成一体, 由外层出线与控制器连接而成。

KM-EL 特点:

- 依被加热物之形体将电热及保温制作一体, 以粘扣带或束带固定, 以接头直接与控制器连接即可, 安装简易,
- 保温隔热效果明显, 低表面温度, 高电热效率, 低电能耗损, 依呎吋需求订制, 加热面紧贴被加热组件, 温度分布平均,
- 加热温度可设计至 1000°C,
- **内外层高温布及车缝线, 黏扣带均可用于无尘室环境,**
- 高温布, 保温材及车缝线均为不可燃材, 或耐燃材质。
- **可依需求提供具防潮防湿功能之电热层, 且厚度可薄至约 1.2mm,**
- 备有多种不同材质之电热线, 高温布, 保温毯, 车缝线等, 可依使用条件灵活选用最適切之组合,

KM-EL Flexible Heating Jackets are composed of Heating element, thermostat, thermocouple, high temperature fabrics, and Insulation blanket (as an integral part by sewing) and power cable/connector for connecting to electric controller.

BENEFITS AND FEATURES OF KM-EL:

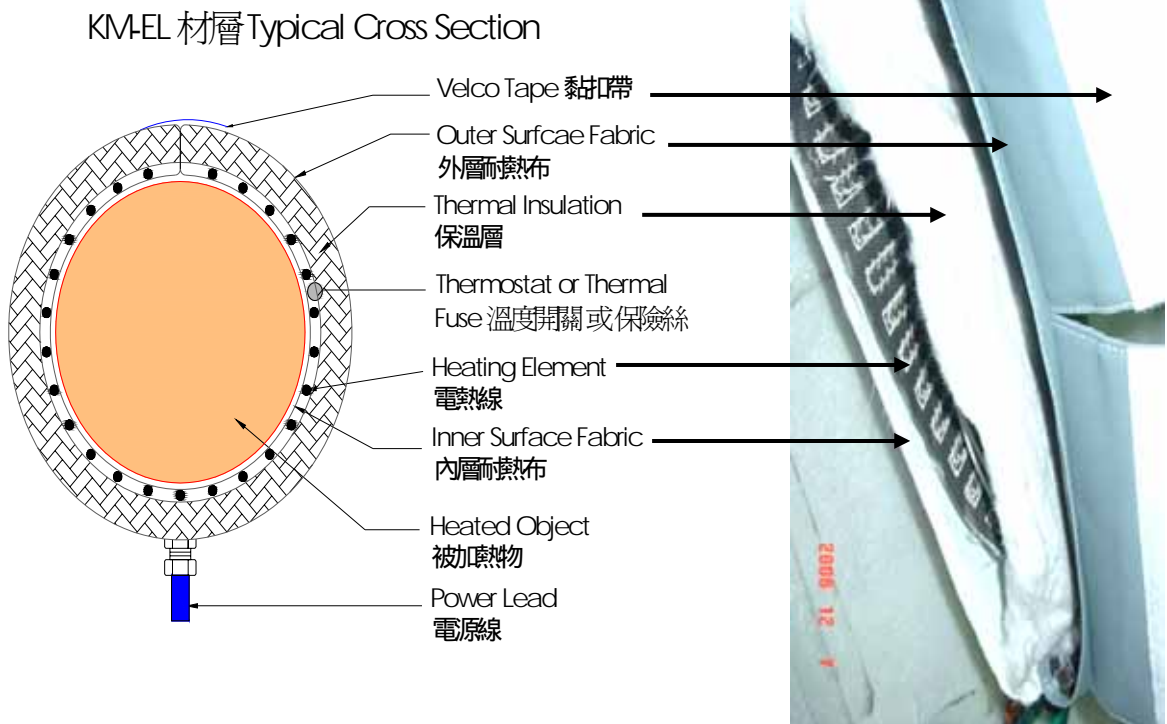
- By integrating heating and thermal insulation into one part, KM-EL are fabricated to fit contour of heated objects with Velco or fastening belts/D-rings for easy installation.
- Good thermal insulation and electric energy efficiency, low surface temperature, and uniform heat distribution,
- All materials used are either non-combustible or, at least, flame-resistant,
- High temperature capability to 1000°C,
- Selection from Comprehensive materials of heating element, fabrics, Insulation blanket, sewing thread for most appropriate Combination of KM-EL
- **Clean room compatible**
- **Heating pad can be supplied with moisture/splash proof with 1.2mm thick only.**



安全保护及电源 Built-in security devices and Power

电源	100 to 240Vac	功能
温度开关	80 to 160 °C (每 5 °C 一级), 200 °C , 550 °C, 710 °C	当测温热电偶或控制器异常时, 确保加热温度不过热
温度保险丝	220 °C或 270 °C 依需求选用	当测温热电偶或控制器异常时, 自动断线, 防止持续加热及意外
LED 断电指示灯	绿色或橘色	闪烁表正常加热, 如持续不亮, 表加热布包损坏
Power	100 to 240Vac	Function
Thermostat	80 to 160 °C (5 °C per increment), 200 °C, 550 °C, 710 °C	Open (disconnect) the power circuit at preset temperature, to eliminate over heating. Close (reconnect) the circuit when temperature drop.
Thermal Fuse	220 °C, 270 °C,	Will disconnect the power circuit permanently At pre-set temperature.
LED Power Indicator	Green or Orange colored	Blinking for normal. Off for failure

KM-EL 材层 Typical Cross Section



使用材质 Materials Used

依使用条件(操作温度及环境要求---例:无尘) 选用适合者.

名称	材质	耐温 °C	特性
电热线	Ni-Cr Alloy	--	选用世界知名品牌及合适等级, 以加工成所需之阻值(0.8Ω/m to 4000Ω/m) 并确保其耐用性, 依选用电热线阻值及排绕电热线密度, 单位面积功率可在 0.1W/cm ² 至 0.8W/cm ²
电热线 绝缘批 覆	特级玻纤	650	不含高温易劣化之成份(如硅胶), 并经多次验证其耐温及适用性
	KM1000 fiber	900	
	KM1200 fiber	1200	

使用材质 Materials Used

依使用条件(温度及环境要求--例:无尘)选用适合者.

名称及材质	耐温 °C	特性	适用位置		
			内层	外层	保温层
100% 铁氟龙布	290	难燃, 符合 Class 10 无尘等级, 不发烟/味及其它异物, 仅 0.08mm 厚, 适形性佳, 耐候, 耐 UV, 不沾黏粉尘外物, 防油水, 可轻易保养擦拭恢复外观, 耐强酸碱			X
铁氟龙玻纤布	290	难燃, 符合 Class 1 或 Class 10 无尘等级, 不发烟/味及其它异物, 柔软, 适形性佳, 耐候, 耐 UV, 不沾黏粉尘外物, 防油水, 可轻易保养擦拭恢复外观, 耐一般酸碱			X
镀铝玻纤布	200	难燃, 符合 Class 1 无尘等级, 表面镀铝质量及贴合性远优于其它同类产品(皱折少, 不易剥落), 不沾黏粉尘外物, 防油水, 可轻易保养擦拭恢复外观	X		X
KM1200 布	1200	不燃, 在 1200°C 仍保有所需之强度, 韧性及绝缘			X
KM700 布	650	不燃, 在 650°C 仍保有所需之强度, 韧性及绝缘			X
KM600 毯	500	不燃, 低热传, 保温隔热性佳, 特殊处理使其高温下之烟及异味量远低于其它品牌,	X	X	
KM1000 毯	900		X	X	

: 非常合适 : 尚可 X: 不适

Materials selected based on the operation temperature and other requirements (ie: clean room)

Part Name	Material	Temp. Resistance	Features			
Heating Element	Ni-Cr alloy	--	Select the appropriate material from world leading manufacturer for required durability and Resistance (from 0.8Ω/m to 4000Ω/m), By selection the element Resistance and winding pitch, the wattage of KM-EL can be from 0.1W/cm ² 至 0.8W/cm ²			
Outer Braided Insulation for Heating element	Special formulated Glass fiber	650°C	Contain no material (ie. Silicone) that will de-grade at high temperature,			
	KM1000 fiber	900°C				
	KM1200 fiber	1200°C				
Material	Temp. °C	Features		Applications		
				Inner Layer	Outer Layer	Insul-at ion
100% PTFE Film	290	Flame Resistance, Class 10 Cleanroom Standard, No smoke/odor at high temperature, 0.08mm thick, soft, weathering and UV resistance, non-stick surface, water Oil resistance, easy for cleaning, excellent chemical resistance				X
PTFE coated glassfiber cloth	290	Flame Resistance, Class 1 or Class 10 Cleanroom Standard, No smoke/odor at high temperature,, soft, weathering and UV resistance, non-stick surface, water & Oil resistance, easy for cleaning, chemical resistance				X
Aluminized glassfiber cloth	200	Flame Resistance, Class 1 Cleanroom Standard, superior surface aluminization (no de-lamination, smooth surface) non-stick surface, water & Oil resistance, easy for cleaning,		X		X
KM1200 Cloth	1200	Non-combustible, Retain required strength, flexibility, insulation at 1200°C				X
KM700 布	650	Non-combustible, Retain required strength, flexibility, insulation at 650°C				X
KM600 毯	500	Non-combustible, good thermal insulation, much less off smoke and smell than other brands.		X	X	
KM1000 毯	900			X	X	

© : Excellent : Fair X: Not Suitable

