

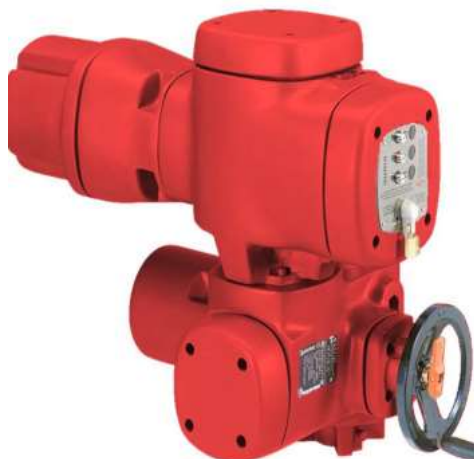
K-MASS[®] DB

K-MASS[®] DB is Thermal Designs' premium fire protection which is directly bonded and applied in one of our factories. K-MASS[®] epoxy intumescent is the result of 40 years know-how, research and development. It's the only product available on the market specifically designed for process equipment PFP. Currently, it is the only PFP designed to last the lifetime of the equipment. Our design also ensures that human error can be eliminated from the application and removal of PFP during the maintenance and operation of Critical Process Control Equipment (CPCE).

The result is a permanently bonded layer of fireproofing that is durable, weather and chemical resistant and there forever. The K-MASS[®] process allows complete access to equipment to operate and maintain without interference or concern for the fireproofing.

K-MASS[®] DB Advantages

- Designed and developed by Thermal Designs for CPCE fire protection which has lower critical failure temperatures compared to structural steel.
- Extensively tested on operational equipment from numerous manufacturers and complied with UL1709 fire test curve.
- No fitting required on site, so no additional transport or fitting cost.
- Approved for use by biggest actuator manufacturers in the market.
- Specified by asset owners and engineering companies.



- Compatible with SIL 3 actuators.
- Impossible to be left off during equipment maintenance.
- Because it is an epoxy product directly bonded to the equipment, it adds an extra layer of corrosion protection.
- Does not promote Corrosion Under Insulation (CUI).
- Full access to equipment with no special tools required.
- Being directly bonded, there is space to retain spills between equipment and fire protection.
- Chemicals have little or no effect on K-MASS[®]
- Does not affect the flame paths on explosion proof actuators and the equipment initial ATEX approval is maintained.
- Will last the life of the actuator if the paint is properly maintained.
- Typically applied to new equipment.
- Prior to a fire event, it does not act as an insulator and does not affect motor sizing (electrical rating).
- No need to open door to access controls in most applications.

K-MASS[®] DB

- Smallest footprint of any fire protection on the market.
- People-proof fireproofing because it cannot be removed or left off during equipment maintenance.
- Thermal Designs own proprietary formulation of intumescent epoxy.
- The preferred method of protection is molded on K-MASS[®] coating applied using Thermal Designs unique injection molding process.
- This is not hand applied or sprayed on fireproofing. We believe sprayed on or hand applied intumescent epoxy can lead to unacceptable variations in material thickness.
- The process precisely controls the thickness and shape of the coating bonded to the outer surface of each component part.



Why Molded Intumescent Epoxy is the Best Solution for the Protection of ESDS.

- People proof design always available for service.
- Low K value of K-MASS[®] in virgin state dissipates heat.
- Negligible space required.
- Low weight.
- High corrosion resistance.
- Easily accessible for operation or maintenance.
- Lowest total installed cost.
- Best expected working life.
- Proven and verifiable performance.