

INNOVATIVE Application Solutions

MOKON

Chemical

Chemical processing, mixing, R&D and analytical laboratories often require a precise and stable fluid temperature to achieve the company's objectives. Having a subpar temperature control system can result in lost batches, unmet deadlines and high costs for chemical waste removal and disposal.

Typical companies requiring high-quality performance chemicals can be found in a growing number of industries and applications including aerospace, agricultural, automotive, bio-medical, electronics, military and power/renewable energy.

Mokon's experienced application team has been developing specific-use process temperature control systems to meet the needs of original equipment manufacturers and users of complex materials for over 60 years. Accuracy, corrosion-resistant materials and durable components that can withstand frequent wash downs and/or exposure to hazardous atmospheres are all considered a necessity for these harsh applications.

Application Details

A multinational conglomerate contacted Mokon looking for a temperature control system to provide heat capacity to jacketed piping. After compounding, adhesives were to be transported through the jacketed piping at a constant temperature set point when traveling to the next process phase.

Considerations

The customer wanted the temperature control system to be controlled remotely and match the local code standard.



Solution

Mokon's application engineer proposed a 500°F/260°C temperature control system suitable for a Class 1 Division 2 Group C/D environment. The comprehensive solution satisfied the customer's heat capacity requirements, could be controlled remotely per the specified interface and met the local code standard. Mokon was able to provide the customer with the required engineered systems, all while meeting space-saving specifications and following a very tight delivery schedule.



Explosion proof system suitable for installation in Class 1, Division 2, Group C and D area. Two Z purge systems, one for electrical enclosure, the other for mechanical cabinet. All exposed electrical components are suitable for use in hazardous area.



Designed to Perform. Built to Last.

Typical Applications Include:

- Cleanroom
- Compounding
- Hazardous explosion-resistant areas
- Heat exchangers
- Heat tracing/Jacketed pipe
- Jacketed vessels
- Laboratory
- Mixers and blenders
- R&D/Testing
- OEM equipment & systems
- Ovens and furnaces
- Sanitary environments
- Vessels and reactors

Mokon's Expertise:

- Water and Heat Transfer Oil Systems
- Portable and Central Chillers
- Control Panels
- Custom Designed/Engineered Systems
- Closed and open loop circuitry
- Single and multi-zone circuits
- Stainless steel cabinets and wetted parts
- TEFC motors and magnetic drive seal-less pumps
- Sealed reservoirs and welded or silver brazed piping
- Tri-clamp and flanged connections
- NEMA rated panels and wash down designs
- SCR and solid state relays
- Remote set point and re-transmission controllers and communication ports
- Remote interface electrical enclosures
- UL, CE, CSA, NFPA, NEMA and ASME designs



Custom in-line heating/cooling system with ASME code stamped heater and heat exchanger with modulating cooling control.



Heating and cooling system with NEMA 4X electrical enclosure and components, stainless steel cabinetry for wash down and CE rated.



Combination heating and chilling system with all stainless steel cabinetry, NEMA 4X and wash down design.



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