Application Solutions

Sanitary

The food, beverage, semiconductor and pharmaceutical industries require an experienced design and application team to deliver precise temperature control of process fluids.

Mokon's practical approach to sanitary applications while meeting health and safety standards provides optimized process heating and cooling solutions.

Many years ago, a global leader in the chocolate manufacturing industry asked Mokon to provide a solution for a heating and cooling application located in a sanitary environment. With the right team of engineers and design experts in place, Mokon partnered with the customer to provide a tailored solution that offered both efficiency and durability. Today, that same Mokon unit is still up and running, and the customer has come to rely on us for all their temperature control needs.

While the designs back then were not as aesthetically appealing as they are today, numerous vintage Mokons continue to perform flawlessly decades after they were manufactured. Our dedication to quality and our superior knowledge of design for a wide variety of applications make

Mokon more than just a product manufacturer. We are dependable partners willing to work with you to answer questions and build custom solutions.

Outdoor air-cooled chiller freeing up valuable indoor space with stainless steel construction and remote indoor panel.





Mokon can provide assistance with:

- 1. Heating and cooling load calculations
- 2. Recommending system design and features
- 3. Sizing and selection of heat exchangers
- 4. Customizing a control solution for your specific application



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



Designed to Perform. Built to Last.

Sanitary

Building a MOKON

When designing systems for sanitary applications, Mokon uses a range of different metals and materials to assure quality performance and safe use. 300-series stainless steel is the most widely used metal for food and other sanitary applications due to its durability. Nickel content in the steel provides structural strength for the unit while chromium offers greater corrosion resistance. 3-A Sanitary Standards require 316 (or 18/10) stainless steel for most surfaces and allow the use of 304 stainless steel for utility usage (i.e. pipes). The use of 303 stainless steel is restricted under these standards.

MOKON

The material composition of stainless steel can be altered as the use of abrasive cleaners and chlorine can reduce the chromium oxide layer. To protect the surface, some applications require different surface finishes or the stainless steel to be passivated. Passivation is achieved by exposing the surfaces to nitric acid or other strong oxidizing agents thereby creating a passive (non-reactive) oxide film on the surface of the metal.

Mokon products can be installed either inside the sanitary facility, partially using remote interface electrical panels, or outside the area or building. Typical applications include:

- Food and beverage processing
- Mixers and blenders
- Reactors and sterilizers
- Pet food processing and packaging
- Electronic circuit boards and components
- Biotechnology and pharmaceutical
- Medicine and vitamin packaging
- Surgical equipment and devices



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

MOKON Products and Features:

- Water and Heat Transfer Oil Systems
- Portable and Central Chillers
- UL 508A Control Panels
- Custom Designed/Engineered Systems
- Closed and open loop circuitry
- Single and multi-zone circuits
- Stainless steel cabinets and components
- TEFC motors and magnetic drive seal-less pumps
- Sealed reservoirs and welded or silver brazed piping
- Tri-clamp and flanged connections
- 3-A heat exchangers and heat remover designs
- Non-marring casters and leveling legs
- NEMA 4X rated panels and wash down designs
- Audible and visual alarms
- SCR and solid state relays
- Remote set point and re-transmission controllers and communication capabilities
- Remote interface electrical enclosures



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