



Designed to Perform. Built to Last.

**HTFSystem**  
NPS Series

Heat Transfer Fluid System  
Up to 400°F (204°C)

## Negative Pressure Positive Results

**Keeps Production Up and Running** Even a minor circuit leak from stress cracks or bad O-rings can stop operations, but with the Mokon HTF NPS Series positive & negative pressure temperature control system, you can finish the production run without the nuisance of a leak or the costly interruption of a repair. The HTF NPS Series gives you accurate temperature control while creating a negative pressure condition to pull the fluid through the mold.

**Versatile** Whether your process requires positive pressure (no leaks present) or negative pressure (to stop a leak), HTF NPS Series provides the most efficient means of temperature control. By incorporating a venturi jet pump and a uniquely designed reservoir, you are provided with a self-supporting means of accurate temperature control up to 400°F (204°C) in a positive or negative pressure condition.

**Efficient and Accurate** The incorporation of a redesigned Mokon heating vessel assures a continuous fluid flow over the heating and cooling assemblies, resulting in an energy efficient means of controlling the process fluid temperature. Cutting-edge microprocessor controls, with PID auto tuning, provide accurate and precise temperature control to meet your process temperature control needs.

- ▶ **Delays repairs allowing production to continue through end of run**
- ▶ **Simplifies changeover with standard hose and pipe connections**
- ▶ **Microprocessor-based controller**
- ▶ **Meets NFPA 79 electrical safety standards**
- ▶ **cULus 508A labeled electrical sub-panel**

# Mokon converts a problem into a positive opportunity

## Standard Features

- System reservoir – fluid supply source and air separation device
- Microprocessor-based PID controller mounted in operator-friendly orientation
- Standard safety features include level switch and high temperature switch
- Horizontal low watt density heaters
- Glycerin filled pressure gauge
- Powder-coated steel cabinet for protection and durability
- Three-way flow control valve to adjust system from positive pressure to negative pressure
- Venturi jet pump
- Vertical stainless steel seal-less pump
- NFPA 79 Electrical Safety Standard and cULus 508A labeled electrical sub-panel

## “Negative” Benefits

Being negative isn't always a bad thing.

With Mokon's HTF NPS Series, negative pressure creates a vacuum, essentially pulling air and oil out of the mold instead of pushing it through the system. There are many benefits with this method, including:

- Repairs can be deferred until a more convenient time.
- The risk of hot fluid spray is reduced, improving worker safety.
- Less downtime means manpower and equipment are maximized, increasing productivity.

## Specifications – HTF System NPS Series (Up to 400° F/204° C)

Hp	Flow Rate & Pressure	Connections	# of Zones	Heating Capacity (kW)	Reservoir Tank Volume (gallons)	Cabinet Dimensions L x W x H (inches)
5	10 GPM and up to 60 psi	3/4" Process Oil 1" Cooling Water	1	12, 24, 36	38	41 x 30 x 51
5	10 GPM and up to 60 psi	3/4" Process Oil 1" Cooling Water	1	48	38	41 x 30 x 62
5	20 GPM and up to 50 psi	1" Process Oil 1" Cooling Water	1	12, 24, 36	38	41 x 30 x 51
5	20 GPM and up to 50 psi	1" Process Oil 1" Cooling Water	1	48	38	41 x 30 x 62

Higher kW capacities and a variety of voltages are available. Please contact Mokon for more information.

**Easy to Use** Designed to be used in the same manner as our Duratherm NPS water circulating system, the system requires no special piping, hoses or utilities. By simply moving a three-way flow control valve on the back of the cabinet, the system is changed from a positive pressure to a negative pressure system in an instant. The system's reservoir acts as a fluid supply source and air separation device, making the venting of the system automatic.

Easily removable cabinet panels provide access to internal components, making routine maintenance and adjustments simple and fast.

**Heat Transfer Fluid** All Negative pressure systems will accelerate the oxidation, raise the fluid temperature and severely shorten the life of heat transfer fluids. It is highly recommended to repair the leak as soon as possible, test and replace the fluids as necessary, and clean the system to maintain peak performance. Mokon's DELF series of heat transfer fluids offers a variety of long-lasting and clean-running fluids for high temperature heating and cooling applications. Depending on the fluid temperature, severity of the leak, duration in NPS mode and other operating conditions, select our DELF LT, DELF 450, DELF 600 fluids or one of our other heat transfer fluids.

## Product Testing & Warranty

All Mokon temperature control systems are qualified for service by rigid, simulated field tests, and are 100% factory calibrated and run tested. Mokon offers these extended warranties as standard on the HTF NPS Series system:

**1 year on system • 5 years on micro-processor controller and safeties**

Technical data shown is subject to change without notice. The company will endeavor to supply the equipment as illustrated but reserves the right to make dimensional and other design changes as required.



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