



Designed to Perform. Built to Last.

HTF NPS SERIES

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



Mokon's HTF NPS Series heat transfer fluid system maximizes performance with temperatures from 125°F to 400°F (52°C to 204°C). 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.

Model	Horsepower, Flow Rate & Pressure	# of Zones	Heating Capacity (kW)	Total Amps ¹ @ 460/3/60	Cooling Heat Exchanger	Connections		Reservoir Volume (Gallons)	Approximate Dimensions (L x W x H)	Shipping Weight (Approx. lbs.)
						Process (FNPT)	Water (FNPT)			
H4N	5 Hp, 10 GPM up to 60 PSI	1	12	21.1	7.0 sq. ft.	3/4"	1"	38	41" x 30" x 51"	620
		1	24	36.1	7.0 sq. ft.	3/4"	1"	38	41" x 30" x 51"	670
		1	36	51.2	7.0 sq. ft.	3/4"	1"	38	41" x 30" x 51"	730
		1	48	66.2	7.0 sq. ft.	3/4"	1"	38	41" x 30" x 62"	825
H5N	5 Hp, 20 GPM up to 50 PSI	1	12	21.1	7.0 sq. ft.	1"	1"	38	41" x 30" x 51"	620
		1	24	36.1	7.0 sq. ft.	1"	1"	38	41" x 30" x 51"	670
		1	36	51.2	7.0 sq. ft.	1"	1"	38	41" x 30" x 51"	730
		1	48	66.2	7.0 sq. ft.	1"	1"	38	41" x 30" x 62"	825

1. To calculate FLA for other voltages, multiply the above amperages by: 2.21 for 208 volt; 2.00 for 230 volt; and 0.80 for 575 volt

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.

"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

Standard Features

- Single zone configurations
- Three-way flow control valve to adjust system from positive pressure to negative pressure
- Heating and cooling design standard
- System reservoir – fluid supply source and air separation device
- Vertical stainless steel seal-less pump
- Venturi jet pump
- TEFC (IP54 Rating) motor that meets/exceeds NEMA Premium Efficiency levels
- Horizontal low watt density heaters
- Energy efficient insulated heater manifold with stainless steel heating elements
- Cool oil reservoir design, utilizing a continuous flow heat exchanger for increased cooling efficiency which eliminates thermal shock and provides trim cooling
- 1/16 DIN non-proprietary microprocessor-based controller in easily accessible panel
- By-pass cooling design with heat exchanger and expansion/fill tank
- Low fluid level shut off
- Discharge pressure gauge
- Low pressure shut-off switch
- Fluid high temperature shut-off switch
- Automatic air purge
- NEMA/Type 1 electrical enclosure
- Sight glass
- Main power safety door disconnect switch
- Redundant heater contactor
- Y type strainer (shipped loose)
- Heavy-duty ball bearing casters for portability
- Powder-coated carbon steel cabinet
- cULus 508A labeled electrical subpanel

Product Testing and 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 a 1 year warranty on system and 5 years on standard microprocessor controller.

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.

Common Options and Accessories

- Alarms - audible and visual
- Control options - remote setpoint and re-transmission, communication ports
- Cool down/automatic shut off via time delay relay
- Cooling only designs
- Emergency "crash" cooling control
- Emergency stop
- Heat exchanger flow control
- High/low heat switch for 12 kW units and higher
- Heating only designs
- High temperature rated hoses
- Increased cooling and heating capacities
- Inline heat exchangers
- Magnetic drive pumps
- NEMA/Type 4, 4X, 7, and 12
- Nitrogen purge
- Other voltages, phases, frequencies
- Overhead piping kits
- Phase monitor
- Process fluid purge via air connection
- Remote start/stop and control panels
- Solid state contactors/relays and SCR
- Stainless steel cabinets, fluid circuits and components
- Strainers (additional)
- Tank low level indication and system shutdown
- Thermocouple with selector switch
- Thermometers
- Timers
- UL, CSA, CE and EAC certifications
- Valved process bypass via metering globe

Controls

A non-proprietary microprocessor-based controller provides dual LCD indication of your process fluid setpoint and actual temperature to ensure process control accuracy. A variety of options and accessories to meet specific customer needs are available.



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