

The Perfect Temperature. Every Time.

hydro
THERMAL

NOH Non-Obstructing Heater™

For thick, abrasive slurries



The most challenging applications deserve a heavy-duty solution – and the NOH Non-Obstructing Heater™ is up for the job.



Featuring an extremely flexible heating capacity, the NOH Non-Obstructing Heater™ can precisely heat any fluid. Utilizing a robust design and unrestricted flow path, the NOH Non-Obstructing Heater™ is suited to solve any processing issues.

BENEFITS



Reduce energy costs through enhanced process conditions



Precise temperature control helps you reach – and hold – your desired set point



Reduced Downtime/Maintenance eliminates clogging of solids, saving you maintenance and downtime



Small footprint and compact design saves space and eliminates costly retrofit work



Patented Technology provides unmatched process performance

PERFORMANCE GUARANTEE



Confidence
100% performance guarantee give you peace of mind that our products will perform as specified by YOUR application.

NOH Non-Obstructing Heater™ Skid



**STEAM HEAT IN A
POWERFUL PACKAGE**

Powerful, rugged, and versatile – the NOH Non-Obstructing Heater™ can handle any abrasive fluid or slurry. Across **Food & Beverage, Industrial, and Wastewater** applications, the NOH Non-Obstructing Heater™ can improve even the most corrosive process.

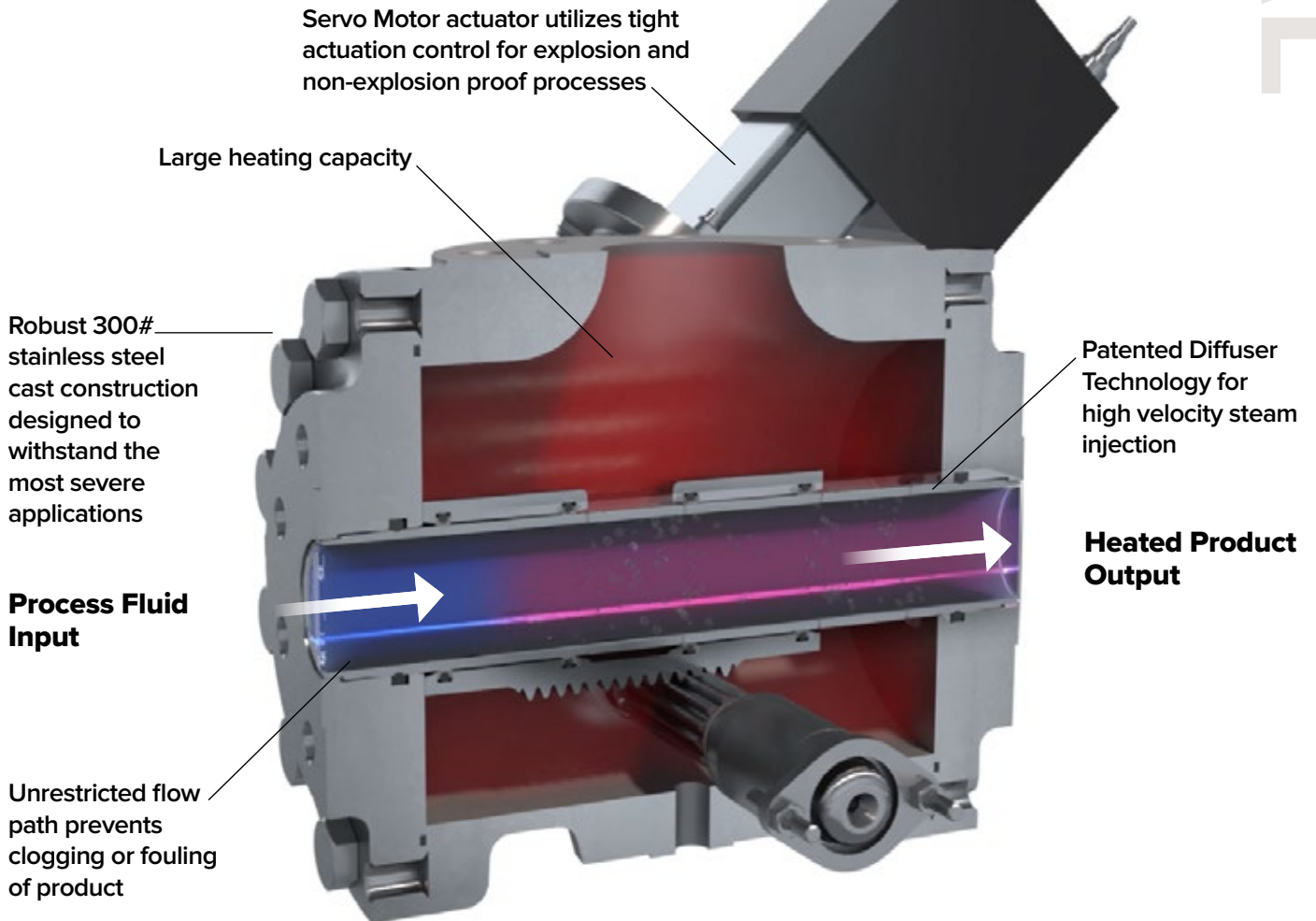
Both cavitation and erosion are no longer issues, as the patented internals of the NOH Non-Obstructing Heater™ ensure perfect processing conditions.

Stable across a range of process conditions, the NOH Non-Obstructing Heater™ utilizes precise temperature control, a large heating capacity, and flexibility to cover a wide range of viscous slurries, including large solids and particulates.

FEATURES

- **Operating stability** across a full range of process conditions
- **Precise temperature control** within +/- 1 degree
- **Self-cleaning design** eliminates scale build-up and product fouling
- **Durable materials** of construction designed to last
- **Multiple heater sizes** to meet your process needs
- **Flow-through design** creates minimal pressure drop

INDUSTRIAL



NOH

SPECIFICATIONS



Applications

Sludge Heating
 Black/Green/White Liquor
 Rendering Plants & Facilities
 Paper Stock Heating
 Aseptic Applications (Tomato Paste)
 General Water Heating

Industries Served

Paper & Pulp
 Wastewater (Municipal, Industrial, Agricultural [RNG])
 Food & Beverage Processing
 Meat & Poultry Processing

Controls

NOH can be locally controlled from the panel or from DCS. For Distributed Control System (DCS), either Ethernet IP, Modbus TCP, or limited analog and digital must be utilized.

Digital Inputs

Flow enable (flow switch)

Digital Outputs

Alarms to DCS

Flow Turndown

15:1 turndown ratio

Analog Inputs

Temperature discharge
 (TC / RTD)
 Spare (4-20mA)

Analog Outputs

Two spare (4-20mA)

I/O Options

Larger panel size & additional analog inputs/outputs available as needed

Technical Information

Pressure & Temperature

Max pressure - 300 PSIG / 20.7 Barg
 Max temperature - 450°F / 232°C

Product Inlet / Outlet & Steam Flange

300# raised face flanges designed (per ANSI B16.5) with lugged connections

Sizing & Process Parameters 2"-12" / DN50-DN300

	NOH02		NOH04		NOH08		NOH12	
Steam Inlet (in. / mm)	3.0	76.2	6.0	152.4	8.0	203.2	12.0	304.8
Steam Drain (in. / mm)	0.5	12.7	1.0	25.4	1.0	25.4	1.0	25.4
Estimated OAL Length (in. / mm)	12.0	304.8	19.0	482.6	24.0	609.6	33.5	850.9
Estimated CL to Steam Flange (in. / mm)	5.0	127.0	6.5	165.1	8.0	203.2	11.66	296.2
Min. Flow (GPM / m ³ /hr)	30.0	6.8	110.0	25.0	455.0	103.4	1,035.0	235.1
Max. Flow (GPM / m ³ /hr)	175.0	39.7	735.0	167.0	3,053.0	693.4	6,900.0	1,567.2
Estimated Weight (lbs. / kg)	220	100	450	204	950	431	1,900	862

THE GLOBAL REACH OF HYDRO THERMAL

From the original Hydroheater® developed in 1934 to our latest designed and engineered solutions today, we harness the power of steam. We design, engineer, and deliver ultra-precise and dependable heating solutions that optimize temperature control, increase energy efficiency, and minimize maintenance requirements.

With more than **20,000 installations in 90+ countries** – all backed by our 100% performance guarantee – we help you achieve **The Perfect Temperature. Every Time.**

Need more information about Hydro-Thermal products?

✉ info@hydro-thermal.com

🌐 www.hydro-thermal.com

☎ 800.952.0121

hydro
THERMAL®

The Perfect Temperature.
 Every time.

400 Pilot Court | Waukesha, WI 53188

Follow us [in](https://www.linkedin.com/company/hydro-thermal) @Hydro-Thermal

NOH-634 Rev. A / 2023

©2023 Hydro-Thermal Corp. All Rights Reserved.

Hydro-Thermal is protected under U.S. and foreign patents and trademarks.

