

# NOH

## Non-Obstructing Heater

**The Non-Obstructing Heater (NOH) is a rugged DSI heater suited to handle even the toughest abrasive materials, all while producing low pressure drop and unrestricted flow.**



### HIGHLIGHTS:

#### Durable & Expansive

Viscous slurries, particulate-filled products, abrasive/corrosive substances, stringy products, & inline water heating abilities – all are possibilities with the NOH.

#### Efficient & Capable

Utilizing a steam connection larger than the process connection, the max diffuser is sized to accommodate the full flow available from the steam piping.

#### Compact & Powerful

Ranging from 2" to 12" [DN50-DN300] sizes, volume capabilities reach all the way to 6,900 GPM [up to 1,567.2 m<sup>3</sup>/hr].

#### Quiet

Designed with noise output in mind, hearing the heating process will be a thing of the past. A quiet, noise-minimizing design was incorporated into the NOH.

#### Benefits

- Virtually zero pressure drop
- Unrestricted flow
- Balanced, noise-cancelling design
- Wide-ranging heating capacity
- Uniform fluid heating
- Effective seal construction for near-zero steam shutoff (CL. IV)
- Adaptable, tight controlling servo-motor driven control



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## Controls

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

| Digital Inputs               |
|------------------------------|
| Flow enable<br>(flow switch) |

| Analog Inputs                                      |
|--|
| Temperature discharge (TC / RTD)<br>Spare (4-20mA) |

| Digital Outputs |
|-----------------|
| Alarms to DCS   |

| Analog Outputs     |
|--------------------|
| Two spare (4-20mA) |

| I/O Options  |
|--|
| Larger panel size and additional analog inputs/outputs are available as needed |

## Technical Information

| Pressure & Temperature   |
|--|
| Max Pressure - 300 PSIG / 20.7 Barg<br>Max Temperature - 450°F / 232°C |

| Product Inlet / Outlet & Steam Flange   |
|---|
| 300# raised face flanges designed (per ANSI B16.5)<br>with lugged connections |

## Sizing & Processing Parameters

2" - 12" / [DN50-DN300]

|   | NOH2  |       | NOH4  |       | NOH8    |       | 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 <sup>3</sup> /hr)    | 30.0  | 6.8   | 110.0 | 25.0  | 455.0   | 103.4 | 1,035.0 | 235.1   |
| Max. Flow (GPM / m <sup>3</sup> /hr)    | 175.0 | 39.7  | 735.0 | 167.0 | 3,053.0 | 693.4 | 6,900.0 | 1,567.2 |

*Metric measurements listed in grey columns*

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**Need more information about Hydro-Thermal products?**

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