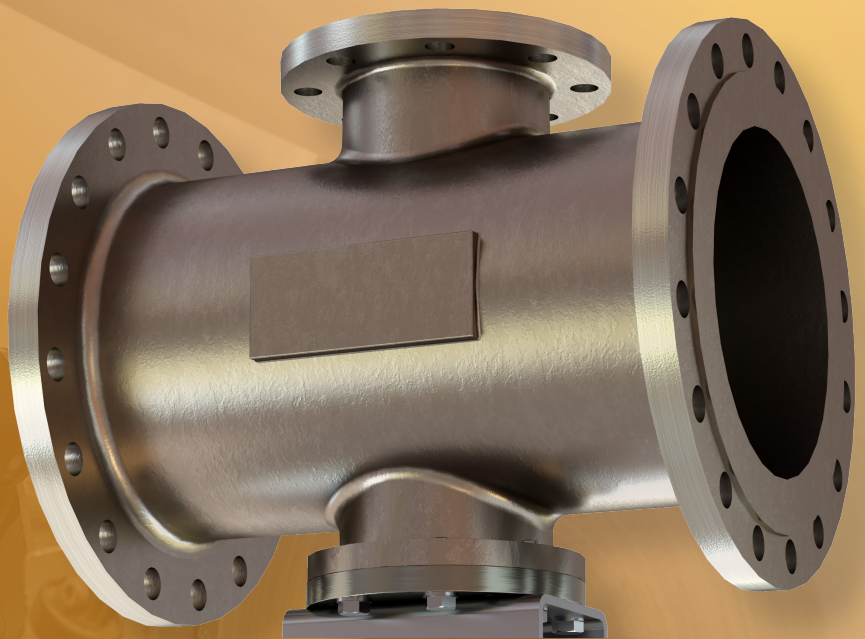


The Perfect Temperature. Every Time.

**hydro**  
**THERMAL**

# SOLARIS

Straight-Through Design  
for Thick Liquids & Slurries



Thick, viscous slurries require a powerful heating solution - making the Solaris® the right choice.

# SOLARIS

By utilizing a straight-through design and a cross-flow diffuser, the Solaris® is your go-to solution for thorough heating and mixing of different liquids and slurries, while reducing plugging, fouling, and pressure upsets in your process.



## BENEFITS



**Precise** temperature control (+/- 1 degree) helps you reach & hold your desired set point



**Optimized Process Conditions** through low pressure drop and low shear utilization



**Uniform Heating & Mixing** without the need for mechanical mixers or motors



**CRN CE**

## IMPACT STATEMENT

Speciality paper mills turn to the Solaris® for in-line heating of freshwater and tank recirculation



**Save Money**  
No More  
Lost Production



**Save Time**  
Reach  
Temperature Faster



**Less Maintenance / Downtime**  
Optimize run-time



**Easy Installation**  
Integrate with  
existing equipment

### A TRUSTED SLURRY HEATING SOLUTION, SUITED FOR YOU

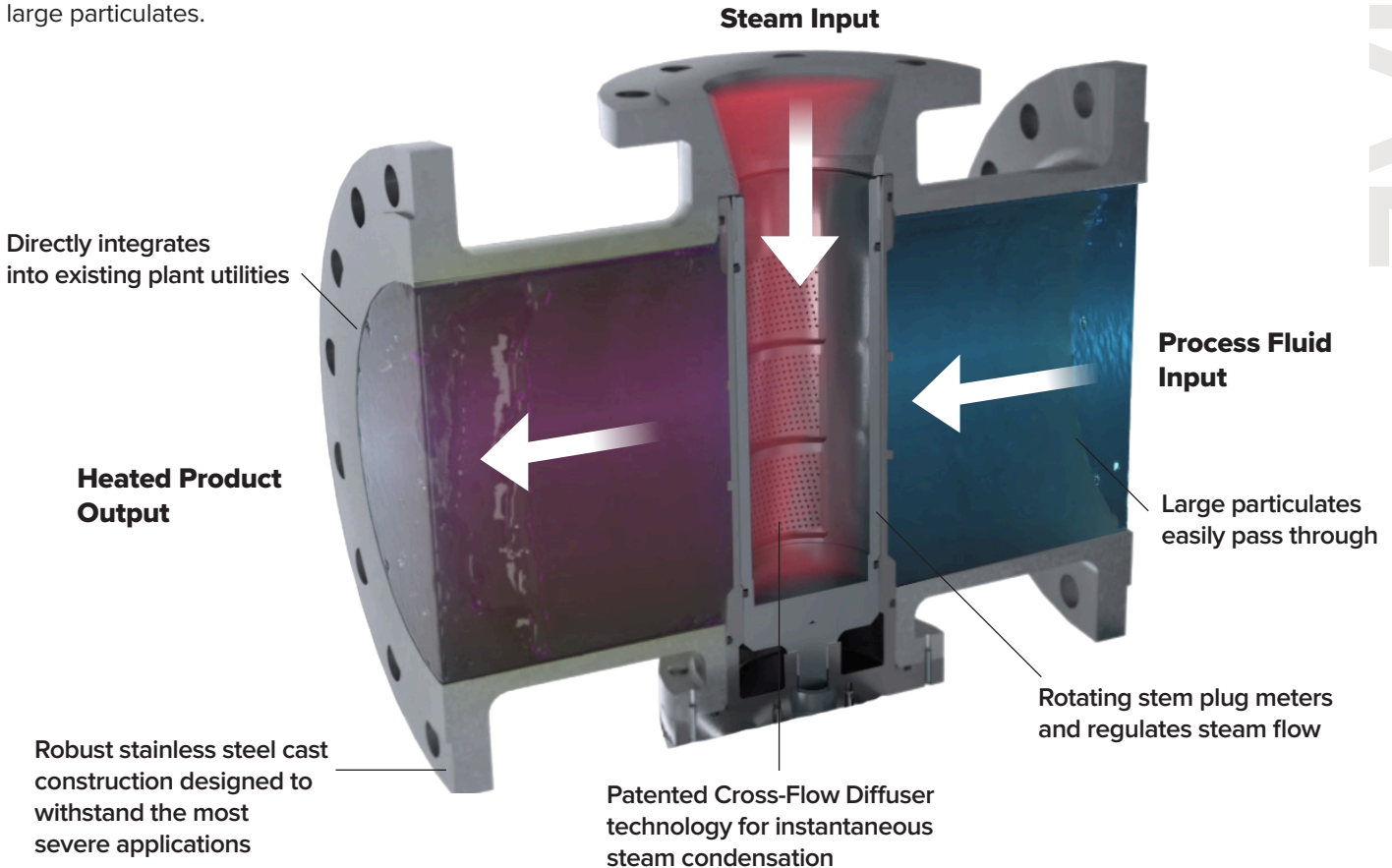
The Solaris® is heating efficiency at its best, featuring an industrial design and a powerful heating range.

The rotation of the stem plug controls steam flow. To achieve precise temperature control, steam is metered via our patented diffuser technology and at high velocities, then dispersed across the entire cross-section to ensure thorough mixing and a uniform temperature profile.

As parameters change, the Solaris® doesn't flinch - its stability is second to none, able to handle a wide range of difficult applications, making it ideal for thick slurries and large particulates.


### FEATURES

- **Straight-Through Design** delivers uniform heating and mixing without plugging
- **Patented Cross-Flow Diffuser** uniformly distributes the heat into the liquid
- **Rotating Stem Plug** meters and regulates steam flow
- **Instantaneous Condensation** of steam eliminates hammer and vibration
- **Multiple heater sizes** to meet your process needs



INDUSTRIAL

**PERFORMANCE GUARANTEE**



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

FOR MORE PRODUCT INFORMATION



SCAN HERE



# SOLARIS

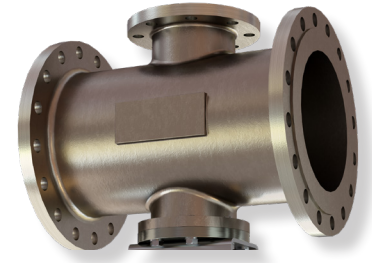
## SPECIFICATIONS

### Applications

Sludge Heating  
 Pulp Stock Heating  
 Back Set Heating  
 Bleaching  
 Viscous/High Solid/Fibrous Slurries  
 Aseptic Applications (Tomato Paste)  
 Corn Oil  
 General Water Heating

### Industries Served

Paper & Pulp  
 Wastewater (Municipal, Industrial, Agricultural [RNG])  
 Food & Beverage Processing  
 Ethanol, Starches & Sweeteners



### Viscosities

Up to 40,000 cP

### Flow Turndown

Up to 10:1 liquid turndown

### Connection Types

ANSI Class 150 & Class 300  
 DIN PN16, PN25, PN40  
 Other custom connections available

### Pressure & Temperature

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

### Materials of Construction

316/316L Stainless Steel  
 Other custom materials available

### Sizing & Process Parameters

3" - 32" / DN80-DN800

	S203		S204		S206		S208		S210		S212	
Steam Inlet (in. / mm.)	2.5	64.0	2.5	64.0	4.0	102.0	4.0	102.2	6.0	152.4	6.0	152.4
Process Inlet (in. / mm.)	3.0	76.2	4.0	102.0	6.0	152.4	8.0	203.2	10.0	254.0	12.0	304.8
Process Outlet (in. / mm.)	3.0	76.2	4.0	102.0	6.0	152.4	8.0	203.2	10.0	254.0	12.0	304.8
Weight (lbs. / kg)	105	47	134	61	235	106	287	130	346	157	519	235
Max. Flow (GPM / m <sup>3</sup> /hr)	180	41	600	136	1,300	295	2,200	500	3,700	840	5,000	1,136

Larger sizes are available upon request - contact your Sales Representative for more information

## 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](mailto:info@hydro-thermal.com)  
[www.hydro-thermal.com](http://www.hydro-thermal.com)  
 800.952.0121



The Perfect Temperature.  
 Every time.

400 Pilot Court | Waukesha, WI 53188  
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