



MACH HEATER®

Direct steam injection Heaters

Direct steam Injection Heater

Now available on a monthly lease, no upfront capital investment -only pay a portion of your savings every month.

“

It costs you 12-30% more energy by heating indirectly with steam through heat exchangers. Replace it with the direct steam injector today to start saving.

”

Save Money



Available
On Monthly Lease



12-30% Less Energy
Consumption



Durable Design



High accuracy

Features

1. Outlet temperature can be set as per requirement on our PLC HMI screen.
2. The system can handle variable liquid flow rate while maintaining constant outlet temperature.
3. Safety shut-down of steam injection in low steam pressure condition.
4. Temperature rise up to 80 C in a single pass.
5. Standard models available for liquid flows from 4 to 1000 m³/h
6. Can be installed at any angle without impact on performance.
7. Available in all major flange configurations with 150# or 300# pressure rating.

Benefits

1. Precise temperature control within +/- 2 C.
2. Non clogging design, the system can handle fibrous and particulate slurries.
3. Steam injection at sonic velocity eliminates steam hammer and noise.
4. No hot-spots in heating preventing burning or scorching of sensitive food products.
5. Attractive monthly lease business model which reduces upfront cost, so that you can start saving energy from the first month.

Major Applications



White liquor heating – Pulp & paper



Green liquor heating – Pulp & paper



Slurry heating – various industries



CIP Fluid heating – Food & Pharma



Boiler feed water heating



Starch Cooking – Food & Beverage



Instant water heating – various industries



*Jacketed vessel heating
– Chemicals and process*



Waste steam recovery – various industries



*Lime slaker hot water addition
– Flue gas Desulphurization*

STEAM POWER

Direct steam injection Heaters

“ The direct steam injection heater is the most efficient way of heating liquids which can permit the addition of a small amount of condensate into the process. The DSI heater works by the principle of direct steam injection at Mach 1 velocity into the process liquid **”**

MACH HEATER®

Steaminjectionheater.in

02

Variants

Model	Steam line IN	Liquid line IN/OUT	Process Flow rate (m3/hr)
PT-DSI-3201	A	25NB	4
	B	25NB	11
	C	50NB	17
PT-DSI-3201.5	A	40NB	11
	B	50NB	17
PT-DSI-3202	A	50NB	17
	B	80NB	40
PT-DSI-3203	A	80NB	40
	B	100NB	70
PT-DSI-3204	A	100NB	70
	B	150NB	155
PT-DSI-3206	A	150NB	155
	B	200NB	270
PT-DSI-3208	A	200NB	270
	B	250NB	425
	C	300NB	610
PT-DSI-3210	A	250NB	425
	B	300NB	610
	C	350NB	830
PT-DSI-3212	A	300NB	610
	B	350NB	830
	C	400NB	1085



MACH HEATER®
PT-DSI-3201



MACH HEATER®
PT-DSI-3201.5



MACH HEATER®



PRIMETECH

MACH HEATER®



MACH HEATER®
PT-DSI-3202



MACH HEATER®
PT-DSI-3203



MACH HEATER®
PT-DSI-3210



MACH HEATER®
PT-DSI-3212

Leading

TECHNOLOGY

MACH HEATER®

Steaminjectionheater.in

04

Customers Speak

VIJAY ANAND KRAFT PAPERS PVT. LTD.

Date: 18.11.2020
PERFORMANCE LETTER

Primetech had supplied a direct steam injection heater of flow capacity 65 m3/hour to raise the temperature from 35 Degree Celsius to 55 Degree Celsius using steam. The unit was installed and is performing satisfactorily till date.

The issuance of this letter does not relieve Primetech of their warranty obligations as per the purchase order.

Thanking you,

Yours faithfully,

For Vijay Anand Kraft Papers Pvt. Ltd.

DIRECTOR

Office: 13-721A, Old Kumar Road, Kattankulai, Hyderabad - 500 077, TEL: INDIA: Tel: 040-2400-6011, 2400-1207, Fax: 040-2400-6076
Factory: A-25/26, Elkatta Village, Faheem Nagar Mandal, Dab Muhadivnagar - 500 410 (T.S.) INDIA
CIN: U21005TS2004PTC244098 [www.vijayanand.in](mailto:sales@vijayanand.in) sales@vijayanand.in

Kuantum Papers Ltd
In Paper Products

Date: 11.05.2021

To whom it may concern

Primetech had supplied 2 nos. Direct steam injection heaters of flow capacity 100 M3/hr. for online heating of hot water for in-house usage with low pressure steam (0.6-0.8kg/cm²). The equipment's were installed and commissioned and operating successfully.

The issuance of this letter is solely for the purpose of marketing and to add Kuantum papers in Primetech reference list and does not relieve Primetech from their Guarantee and commitments towards Kuantum Papers.


Manoj K Agarwal
(Sr. V.P Process)

KOTHARI FERMENTATION & BIOCHEM LTD.

Date: 26.11.2020

TO WHOMSOEVER IT MAY CONCERN

Primetech had supplied a direct steam injection heater of capacity 35 m3/hour for heating of molasses slurry from 25-degree Celsius to 90-degree Celsius by injection of steam. The system was installed and is operating satisfactorily.

The issuance of this certificate does not absolve Primetech of their warranty commitments.


P.R. Jain
General Manager (Operated)

Regd Office : 16 Community Centre, 3rd Floor, Saket New Delhi - 110017
Tel: 40590944, 26830004, 26983147 Fax: +91-11-41664840, Email: info@kotharifbm.com



MACH HEATER®

Direct steam injection Heaters



PRIMETECH
THE EJECTORS SPECIALISTS



Primetech, #861-A,13th - mainroad,
15th street, AnnaNagarWest, Chennai-600040



Sales@primetechejectors.com



Steaminjectionheater.in