



Process Heat Solutions



RevoMax Nxt

The Futuristic and Versatile Steam Generator



**India's
Largest
Selling
Steam
Generator**

Capacity: 0.2 to 1 TPH
Standard Design Pressure: 10.54/17.5 kg/cm²(g)

Conserving Resources, Preserving the Future.

Thermax is a leading conglomerate in the energy and environment space and a trusted partner in energy transition. Thermax's extensive portfolio includes clean air, clean energy, clean water and chemical solutions. Backed by its longstanding industry partnerships across multiple sectors, Thermax has cultivated strong expertise in audit, consulting, execution, and maintenance coupled with digital solutions, ensuring a unified energy-management experience. Leveraging its distinctive engineering capabilities, Thermax converts costs to profits while protecting the environment – a win-win for the industry and society at large.

RevoMax *Nxt* - Engineered for Consistent Performance

RevoMax *Nxt* is a 3-pass, reverse-flue, once-through, forced-circulation design, compact, non-IBR, plug-and-play unit with multi-fuel flexibility. It is the most efficient instant steam generator preferred by the process industries and the hospitality segment for decades.



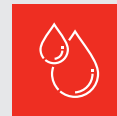
Fuel Firing Options



Furnace Oil



Light
Diesel Oil



High Speed
Diesel



Natural Gas



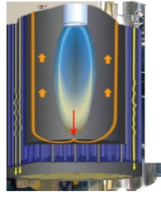
Liquefied
Petroleum Gas

Unique Design Features



Lower OpEx Cost - Enhanced System Efficiency

RevoMax *Nxt* employs reverse flame technology. This ensures complete combustion and consistently high production efficiency. RevoMax *Nxt* is condensate-ready. Condensate utilisation and flash steam recovery from DryMax™ can reduce the fuel bill up to 10%.



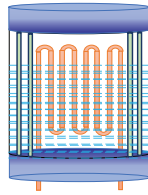
Improved Steam Quality - with Drymax™

RevoMax *Nxt* helps to overcome the limitation of conventional coil type boilers. DryMax™ is a next-generation steam separator that employs a novel twin separation mechanism to enhance the steam dryness fraction up to 0.97. Reduction in process cycle time and improvement in product quality is a customer delight.



Multi-fuel Flexibility - with Innovative Economiser

With RevoMax *Nxt*, Thermax has introduced an innovative economiser design. It enables customers to utilise process condensate, thereby increasing system efficiency. It also employs a unique metal temperature control system with indirect heat exchange, which ensures that fuels with varying sulphur content can be fired. RevoMax *Nxt* also ensures multi-fuel flexibility that protects customers against fluctuations in fuel availability and cost.



Improved Aesthetics & Ergonomics - Pride of Ownership

The product design of RevoMax *Nxt* beautifully integrates the best of functionality and world-class aesthetics. Reflective mirror for flame monitoring, step ladder for access, panelling to ensure safety, and the flush control panel at the right height, ensure ergonomic and safe operation.



Reliability & Uptime - with Premium Design

RevoMax *Nxt* pressure part design incorporates a unique membrane coil design with a gas-tight furnace, ensuring zero leakage & a high heat absorption rate. Uniform heat transfer across the furnace ensures the long life of the coil, avoiding overheating/high-temperature spots, resulting in a reliable operation with maximum uptime. Metal temperature control system for economiser & reduced oxygen level in hot feed water protects the pressure part against dew point corrosion & O₂ pitting.



Inherent Safety - Hassle-free Regulation

Once-through, coil type configuration has lower water hold-up compared to shell boilers having a large water hold-up. This, in turn, ensures a safe boiler design. Other safety measures around combustion are built to the highest standards. With substantially lower failure impact, RevoMax *Nxt* falls outside the purview of boiler regulations, thus making the operation safe and hassle-free.



Quick Start - Once-through Design

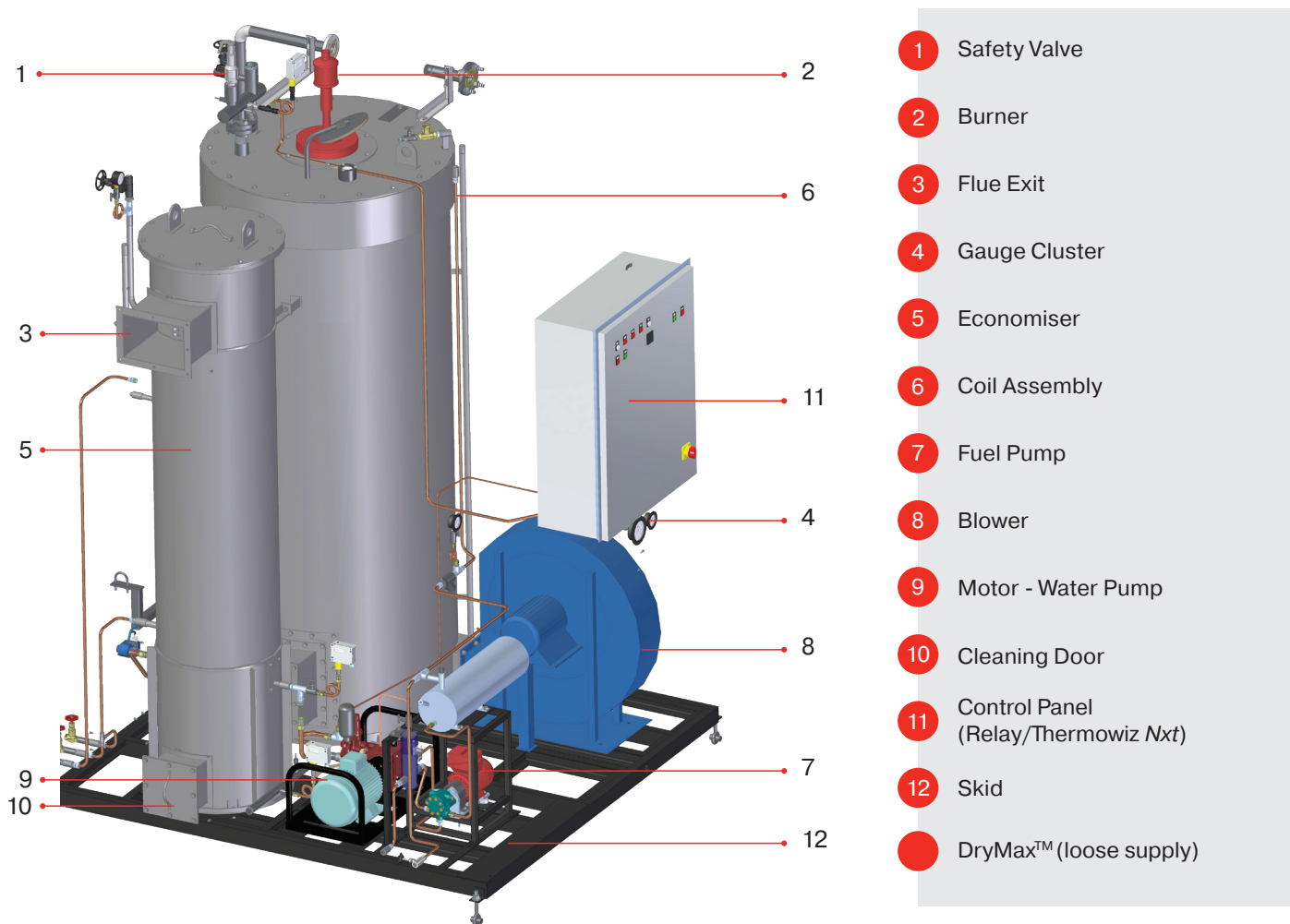
RevoMax *Nxt* can generate instant steam within a few minutes from a cold start-up. This feature eliminates standby losses & ensures instant steam availability. Any unplanned steam requirements can be addressed on an immediate basis.



Plug & Play, Packaged Steam Generator - Compact Footprint with Easy Installation

RevoMax *Nxt* employs coil type design with vertical orientation in place of a conventional shell-type horizontal configuration, reducing the footprint of the product. In addition, the product is fully packaged – 100% skid mounted, pre-piped & pre-wired, that ensure hassle-free installation.

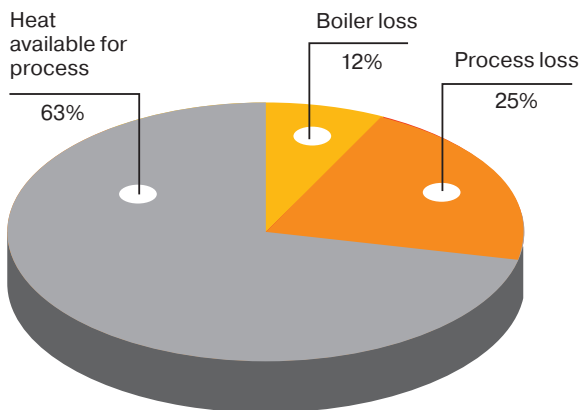
RevoMax Nxt and its components



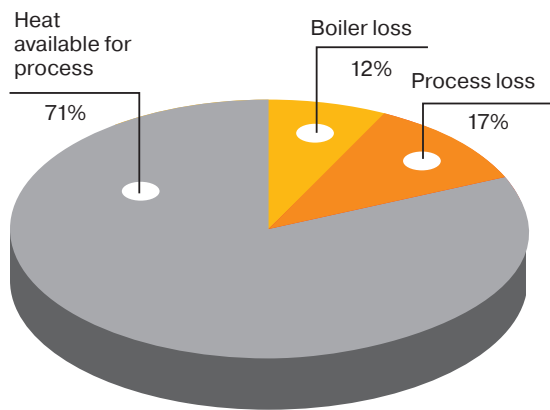
Energy Conservation through RevoMax Nxt

The energy provided through the boiler is a summation of energy consumed in the process & energy lost through the boiler and process. It is a well-established fact that the loss of energy in the process is significantly high. This includes losses on account of distribution, flash steam, and loss of condensate.

Heat Utilisation with Conventional Boiler



Heat Utilisation with RevoMax Nxt



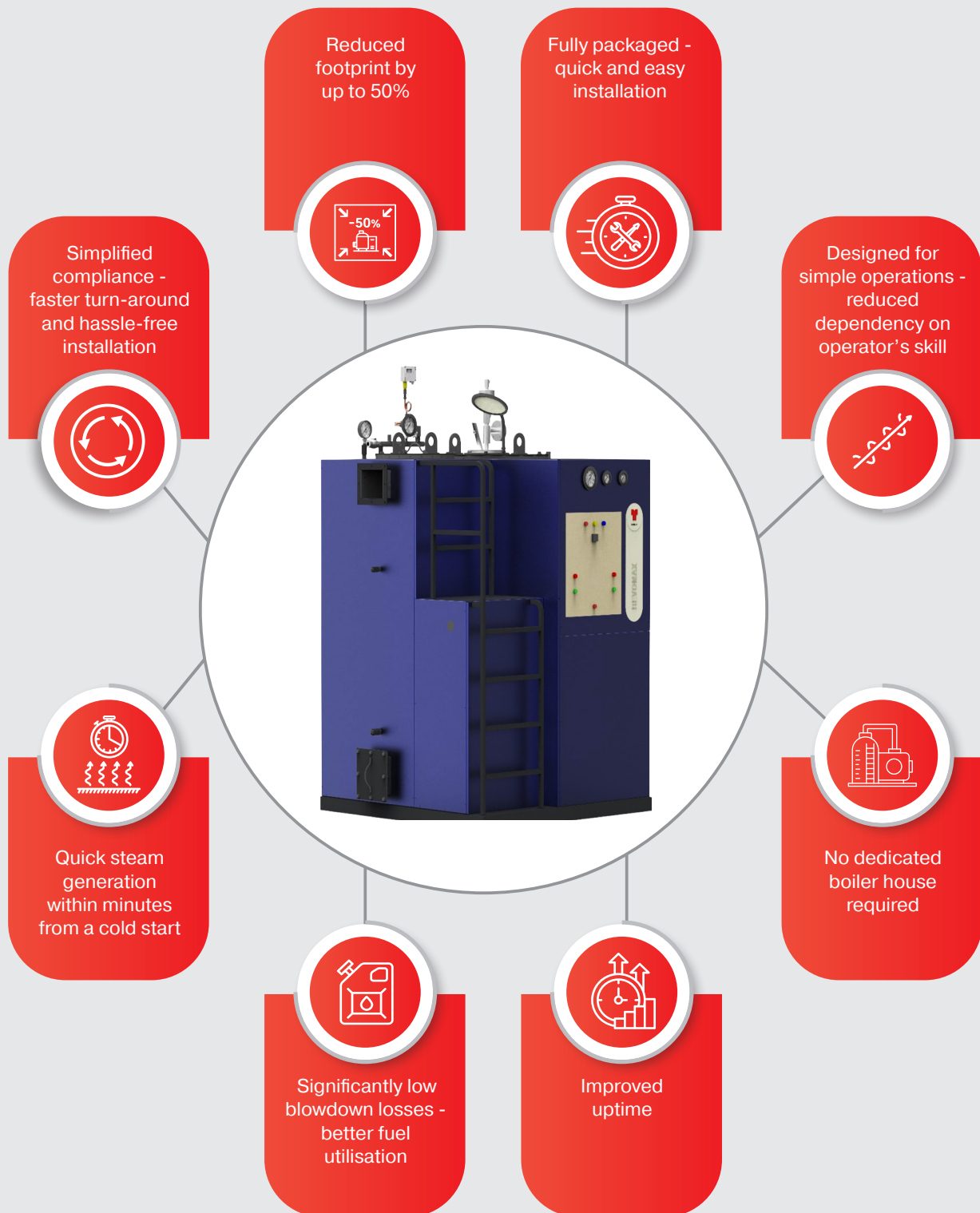
Utilisation of the condensate can improve the system efficiency significantly. The contemporary coil type steam generators have design limitations and do not support condensate recovery. Lower dryness fraction leads to poor system efficiency.

Every customer endeavours to conserve energy, and to support their endeavour, Thermax has introduced the NEXT generation RevoMax Nxt. This revolutionary product is designed to accommodate up to 100% condensate return. This coupled with flash steam recovery from DryMax™ enhances the system efficiency by over 10%, thereby reducing the fuel bill.

The Same Trusted Performance. Now at 1 TPH.

Building on its proven engineering excellence, RevoMax *Nxt*, now with a capacity offering of 1 TPH is designed to meet the evolving demands of process industries and delivering the same hallmark efficiency, reliability, and multi-fuel flexibility.

Why RevoMax *Nxt* over conventional shell type boiler?



Multi-Unit Configuration - A Better Option!



Each unit within the battery of steam generators can be operated at the highest efficiency during the part-load condition, as against operating a single large boiler at low efficiency.



Quick startup eliminates standby losses and ensure instant steam availability, as against the long time that is taken by the conventional boiler due to a large hold-up.



Coil-type steam generators with low water hold-up are inherently safer to operate, and hence fall outside the purview of regulations.



Decentralised operation is possible with compact coil-type steam generators located near the process, which will minimise piping costs & distribution losses.

Thermowiz™ Nxt

Experience the power of technology with Thermowiz Nxt in 1 TPH RevoMax Nxt, a digitally powered device for monitoring, control and protection of equipment.

- **User comfort** – Touch screen HMI with graphical operator interface
- **Real-time trends** – On HMI for selected parameter
- **Data logging** – Downloadable through USB port on storage device
- **Networking** – Embedded Ethernet Port & Serial Port
- **Download PLC logic program** through a USB drive



Technical Specifications

Parameters	Unit	RXa-Nxt					RXd-Nxt			
Capacity (F&A 100°C)	kg/hr	200	300	400	500	600	400	600	850	1000
Design Pressure	kg/cm ² (g)	10.54/17.5					10.54/17.5			
Steam Dryness (At Boiler Outlet)	%	80					80			
Steam Dryness after DryMax™		97					97			
Efficiency as per BS 845 Part 1 Indirect on NCV Basis										
HSD/LDO/FO	%	88					88			
NG/LPG		87.5					87.5			
Total Connected Electrical Load										
LO/HSD	kW	1.8	2.17	2.17	2.75	2.75	NA	NA	3.87	3.87
FO		NA	NA	NA	NA	NA	5.17	6.12	6.87	6.87
NG/LPG		1.8	1.8	1.8	2.75	2.75	NA	NA	3.5	3.5
LO/HSD/NG/LPG		2.17	2.17	2.17	3.12	3.12	NA	NA	3.87	3.87
FO-NG/LPG		NA	NA	NA	NA	NA	5.17	6.12	6.87	6.87
Dimensions without DryMax™										
Height	m	2.24	2.24	2.24	2.43	2.43	2.60	2.60	3.10	3.10
Length		1.67	1.67	1.67	1.68	1.68	1.90	2.00	2.20	2.20
Width		1.60	1.60	1.60	1.65	1.65	1.70	1.80	2.10	2.10

Note: Dimensions mentioned are approximate and excludes the dimensions of DryMax™ (loose supply)

Major Applications



Drugs & Pharma



Chemical



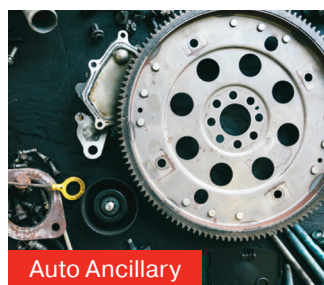
Garment



Laundry



Food & Beverage



Auto Ancillary



Hotels and Hospitality



Effluent Treatment

Conserving Resources,
Preserving the Future.



Air Pollution
Control



Boiler and
Heater



Build-Own
-Operate



Chemical



Cooling



Projects and
Energy
Solutions



Process
Heating



Renewable
Energy



Water and Waste
Solutions

Registered Office

D-13, MIDC Industrial Area, R D Ag Road,

Chinchwad, Pune 411019, India

Email: enquiry@thermaxglobal.com

Customer Care: 1800-209-0115

www.thermaxglobal.com

thermaxlimited

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