

FINN-AQUA® TF - SERIES
Pure Steam Generators &
Multiple-Effect Water Stills



The success of pharmaceutical plants often depends on having an efficient, reliable water purification system. You can trust STERIS Finn-Aqua, the pioneer of Multiple-Effect distillation, to deliver that system.

Finn-Aqua® invented Multiple-Effect water distillation technology 40 years ago and continues to be a leading producer of the Multiple-Effect Water Stills and Pure Steam Generators with thousands units in operation in pharmaceutical manufacturing facilities throughout the world. For the production of Pure Steam and Water for Injection, the Finn-Aqua brand represents the gold standard in quality and reliability.

Introducing the TF-Series

Based on decades of sales history in the pharmaceutical industry, STERIS Finn-Aqua has packaged the most popular features to create a standard, pre-configured line of Multiple-Effect Water Stills and Pure Steam Generators we're calling the TF-Series. This standardized approach creates the best value for customers who demand the legendary quality and reliability of Finn-Aqua equipment. The TF-Series is manufactured in Finland and offers a range of sizes and options.

Finn-Aqua's Patented Three-Stage Separation Technology

Finn-Aqua Multiple Effect Water Stills using multiple-column distillation, produce the highest quality Water for Injection free of endotoxins, pyrogen and other impurities. Our pure steam generator using falling film evaporation and continuous hot feed water circulation, features extremely fast response time to steam demand and employs a highly effective continuous gas separation. The TF-Series incorporates the key elements of Finn-Aqua's original and widely emulated technology including:

- Falling film evaporation
- 180 degree flow turn and continuous blow down removal from each column
- Centrifugal separation
- Continuous hot feed water circulation
- Continuous gas separation





Configured To Meet Your Needs

Finn-Aqua TF-Series Pure Steam Generator				
Model #	450-TF	850-TF	1600-TF	2900-TF
Capacity* (Optimal to high level)	280 kg/h @ 6 bar to 440 kg/h @ 8 bar	535 kg/h @ 6 bar to 800 kg/h @ 8 bar	1020 kg/h @ 6 bar to 1600 kg/h @ 8 bar	1675 kg/h @ 6 bar to 2600 kg/h @ 8 bar
Finn-Aqua TF-Series Water Stills				
Model #	450-TF-4 & 450-TF-5	850-TF-5	1600-TF-5	2900-TF-6
Capacity (minimum to maximum)	445 l/h @ 3 bar to 890 l/h @ 8 bar	786 l/h @ 3 bar to 1670 l/h @ 8 bar	1820 l/h @ 3 bar to 3450 l/h @ 8 bar	3140 l/h @ 3 bar to 6000 l/h @ 8 bar
Standard Options				
<ul style="list-style-type: none"> • Ethernet Connection • Feed water Conductivity Sensor • Chart Recorder • Ground Fault Indicator • Seismic Restraints and Calculations • Pure steam quality monitoring • Closed loop cooling system 				<ul style="list-style-type: none"> • Plant Steam heat reducing valve • Distillation against back pressure • Simultaneous Pure Steam and WFI production • Proportional capacity control • Condenser size increase • Stainless steel frame • Various manufacturing and testing documentation

* Output pressure 3 bar, optimum operating level

Efficient Design Minimizes Energy and Water Consumption

Finn-Aqua's T and TF-Series uses less utility compared to earlier generations of equipment. This significant savings is achieved through a variety of enhancements.

- Improved system tuning reduces blow-down levels and optimizes feed water consumption
- Continuous hot water circulation lowers energy consumption compared to repeating startups and stops of equipment
- Proportional controls improve overall efficiency

Certifications & Specifications

The Finn-Aqua product lines meet U.S. Pharmacopeia, European Pharmacopeia and Japanese Pharmacopeia for Water-for-Injection guidelines. The product lines are designed, manufactured and perform in accordance with many global standards and requirements including: ISO 9001:2008, ISO 14001:2004, OHSAS 18001:2007, EN-ISO 3834-2, HTM 2010, EN 285, GAMP 5, 21 CFR Part 11, EU Annex 11, cGMP, ASME BPE and FDA.

About STERIS Corporation

STERIS Corporation is a leading provider of infection prevention and surgical products and services, focused primarily on critical healthcare, pharmaceutical and research markets around the world. The Company supplies a broad array of equipment, consumable and service solutions that help assure productivity and quality. STERIS is listed on the New York Stock Exchange under the symbol STE. For more information, visit www.steris.com.



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