



## Water Treatment/Distillation Units/Reverse Osmosis/Pure Steam Generators STILMAS PSG 500 DTS - ER020 A

### Images





## Product details

<b>Category:</b>	Water Treatment/Distillation Units/Reverse Osmosis/Pure Steam Generators
<b>Machine:</b>	PSG 500 DTS - ER020 A
<b>Machine code:</b>	IT457
<b>Manufacturer:</b>	STILMAS
<b>Year of construction:</b>	1984

## Description

### MAIN FEATURES OF THE STILMAS PSG-DTS

Immediate start-up : Pure steam is immediately available thanks to the design of the "Accumulator boiler" technology. The unit can go from standby to full capacity in seconds.

High flexibility: production capacity can be automatically varied from 0 to 100 % according to demand

Unique purification system: Gravity purification principle for better steam purity assurance

High quality steam: the quality of steam produced is constant in terms of pyrogen content, heating value and drying fraction, irrespective of production pressure and flow rate

Simple and clean mechanical construction: the decontamination chamber without baffles or deflectors, providing the best inspection capability, minimises the risk of corrosion, for the longest expected equipment life.

Extremely low maintenance. Absence of moving parts, expansion joints or mechanical seals

Compact construction and low height. Little extra headroom required for disassembly and inspection.

### PRINCIPLE OF OPERATION

The design of the STILMAS PSG-DTS pure steam generators is based on thermosiphon technology. The system consists of two parallel bodies: the heat exchanger and the evaporator/decontamination column. The feed water is fed to the decontamination column (main body) while the industrial steam is fed to the support side of the heat exchanger. The industrial steam heats the feed water to evaporation temperature, creating a strong circulation within the two bodies.

The steam develops in the evaporator where its low speed and the height of the decontamination column eliminate any possible entrainment of impure water droplets. A pressure transducer, installed in the evaporator, controls the inlet of industrial steam to the heat exchanger, thus ensuring a constant pressure of the pure steam produced. Feed water flow

is controlled by a level transmitter installed in the evaporator.

### REDUCTION OF NON-CONDENSABLE GASES (NCG)

Stilmas has developed two alternative solutions to meet the NCG requirements of EN 285.

The first solution consists of an intermediate tank in which preheated feed water is sprayed separating the liquid from the gas which is then extracted externally.

This solution can adapt any clean steam generator to achieve the NCG content.

The second solution, Stilmas Gasbuster®, is integrated into the PSG. The degassing process occurs when preheated feed water enters the decontamination column and is sprayed separating the liquid from the gas which is then extracted by a small stream of clean steam.

With both solutions, Stilmas PSG can provide NCG contents much lower than those required by international standards.