SKG4 Natural gas steam generator 50 to 400 kg/h

Neptronic’s SKG4 gas humidifier uses the latest technology to produce steam. The latter generates sterile, odorless steam and ore using the power of natural gas or propane.

Benefits

Operation cost and carbon footprint are much lower than those of electric humidifiers with equivalent control accuracy (as low as +/- 1% RH)

- Steam capacity of 50-400kg / hr
- Modulation range of 10% of humidifier capacity
- Works with tap water, RO or DI
- Combustion efficiency: 83% to 91% (depending on the model)
- Modular design: 1 to 4 modules, easy to configure and install
- Easy maintenance: cleans and reinstalls in minutes
- The smallest footprint in the industry
- Patented AFEC Technology for safe and efficient operation
- Available with BACnet MS / TP communication interface
- Equipped with a drain pump
- Tempered drain water at 60°C
- Self-adjusting burner for altitude compensation

Typical Applications

When natural gas or propane or LPG is available on site, the humidifier SKG4 gas is ideal for 50-400kg / hr capacity. Typical applications for SKG4 humidifiers include:

- Hospitals / Institution
- Paint booths
- Clean rooms
- Laboratories
- Business Applications

Typical installation

The SKGE3 gas humidifier is designed to dispense steam into a duct or ATC. The inlet for water supply, the inlet for gas supply, the drain outlet and the outlet of the combustion gases may be located on the right or left side of SKGE3. The steam outlets are located at the top of each module. The air inlet may be effected by the front door through natural ventilation or by the top of each module if the combustion air option by inlet pipes (sealed combustion) is selected. If flue pipe installation or air supply is a problem, the optional ETL Certified Outdoor Installation is an ideal choice.

Modular Design

Flexible solution

Modular design offers flexibility and convenience; each module adds up to 100kg / hr of steam capacity. With the smallest footprint in the industry, the SKG4 module can be easily installed and assembled on site when access is limited. The assembly of the modules can be arranged in line, L-shaped or back-to-back to take into account specific spatial conditions. Water, gas, water drain and flue gas connections may be located on each side of the enclosure.

AFEC system (Anti-Foaming Energy Conservation)

The patented AFEC® technology was developed by the Neptronic® engineering team. It provides safety and effective control of the energy of boiling water and steam.

The AFEC system consists of:
- Measuring probe of the body of water
- Anti-foam detection probe
- Water temperature sensor
- Interactive LCD display and a microprocessor controller

The AFEC® system is one of a kind since the water level sensor can not be triggered falsely by the foam formed on the surface of boiling water.
This eliminates the possibility of damaging the elements heating.
Options

Steam diffusion system To diffuse into a ventilation duct, the SKG4 humidifier requires either a Multi-Steam or S.A.M.E2 water vapor diffusion system. Multi-Steam For an absorption distance of less than 900mm
S.A.M.E2 For an absorption distance of less than 1500mm

X-Stream™ Technology

• High Efficiency Insulated Steam Dispenser (Ramps and Manifold) with Steam Dispense Nozzles (Patent Pending)
• Double-walled 304 stainless steel with encapsulated Armacell UT / Solaflex™ foam insulation
• Silicone vapor diffusion nozzles specially designed to eliminate condensate ejection when starting or modulating steam production
• Significant reduction of wasted energy
• Reduces heat gain and condensate generated in the airflow

Box for outdoor installation

Features
• Hinged doors provide full access (for service) from the front, back and top of the unit
• Fully insulated and constructed of sturdy steel
• Stainless steel drip tray
• Zinc primer and polyurethane powder coating for scratch and corrosion resistance on exterior and interior surfaces
• Integrated protection against freezing and overheating
• Designed to be installed on a roof base, but can also be installed Box for outdoor installation

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• Designed to be installed on a roof base, but can also be installed on a bracket
• The connection can be made from the side or through the roof

Maintenance
Four easy steps!
1. Disconnect the drain water connection
2. Disengage the retention collar
3. Lower the evaporation chamber
4. Remove the room for cleaning to scale