



# Neptronic SKG

## Gas-Fired Steam Humidifier

85% cheaper  
to run than  
electric steam

The Neptronic SKG gas-fired steam humidifier has the smallest footprint of any gas-fired humidifier on the market and has been designed with maintenance in mind. A quick-release boiling chamber means that the unit can be emptied of scale in less than five minutes.

The SKG also has the widest modulation available with between 8.7-400kg of steam from a single unit and a patented self-cleaning spiralled heat exchanger.

### The most advanced gas-fired humidifier

- Easiest to maintain
- Smallest footprint
- Largest output from a single unit (400kg)
- Widest range of modulation from a single unit (8.7-400kg/h)



# Neptronic SKG – the new generation of

**G**as-fired humidification is ideal for any application that requires over 50kg/h of steam and has an available gas source. The running costs when compared to electrical units are so much lower that the initial payback period, when replacing electric with gas units, can be just one year.

When gas-fired humidification is suitable there is no better choice than the Neptronic SKG. It leads the way in humidifier technology with superior output and performance, an extremely compact and functional design, and features that make maintenance simple and straightforward.

## No other gas-fired humidifier comes close!

### Easy maintenance

Scale removal as easy as 1, 2, 3...



**1** Release band clamp



**2** Depress handle



**3** Remove tank

Every steam humidifier will build-up scale in its boiling tank as the minerals present in the water are left behind during evaporation. How a humidifier deals with this problem determines how easy it is to maintain.

The SKG is the easiest gas-fired humidifier to maintain due to two innovative features:

**1** **Patented spiralled heat exchanger** that fluctuates in size during heating and cooling. This increase and decrease in size literally cracks the scale from the surface, keeping the exchanger clean and fully efficient. The scale that falls off is either flushed away to drain or is collected in the bottom of the boiling tank.

**2** **Quick-release tank mechanism** allowing limescale build-up to be emptied in less than five minutes from start to finish. The same maintenance on other gas-fired humidifiers can take up to four hours. For a demonstration of how easy this is, visit our website at [www.jshumidifiers.com](http://www.jshumidifiers.com).



Quick-release tank mechanism

### Features

- Smallest footprint available
- Designed for easy maintenance
- Wide modulation: 8.7-400kg/hour of steam
- Scale-resistant, spiralled heat exchanger
- Single point connections for services – water, gas, etc
- Easy to install
- Very accurate water level sensor
- Very high combustion efficiency: 93%
- Programmable automatic drain and maintenance cycles
- Can be controlled via BMS or stand-alone
- Operates with any type of water
- Weatherproof enclosure available
- Highest quality construction & materials
- Drain water tempered for discharge
- Backlit LCD display
- BACnet compatible



Small footprint & wide modulation

100kg/h Neptronic SKG

100kg/h Vapor GF

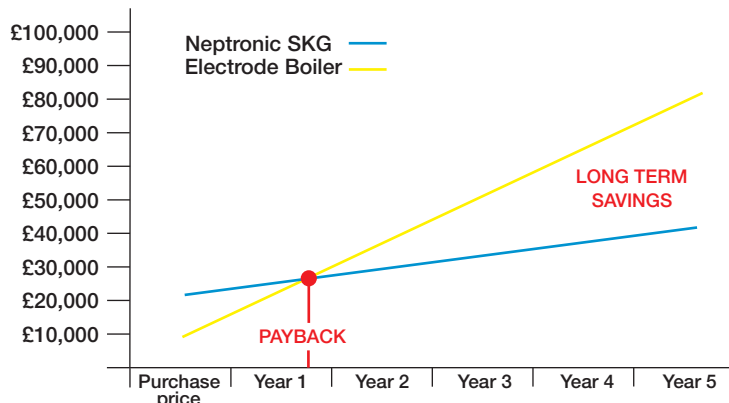
# gas-fired humidifier



## 12-month payback when retrofitting

Due to the lower price of gas compared to electricity, when replacing a 180kg/h electrode boiler humidifier with the Neptronic SKG, the resulting savings will pay for the initial expense of the SKG in just 12 months.

Even though the initial capital cost is around three times as much as an electrode boiler humidifier, the gas option soon becomes the economic alternative. In fact, over the first five years of operation, up to £50,000 can be realised in savings once the energy, spares and maintenance costs are taken into account.



12-month payback period & around £50,000 in energy and maintenance savings in first five years

## Accurate water level control

A patented solid-state water level sensor maintains the correct level of water in the boiling chamber, even if there is severe foaming. Other humidifiers that use float level sensors can be inaccurate when foam fills the tank as the float rests upon the foam. This can lead to the heat exchanger burning out.

The SKG's solid-state water level sensor can recognise the difference between foam and water, ensuring that the correct water level is always maintained, helping to provide utmost control over output, even during refilling.



Solid-state sensor

The sensor is located outside of the main boiling tank allowing users a clear visual indication of water level and allowing easy access for cleaning.

## Quality construction

The Neptronic SKG is constructed to the highest quality with a 316 stainless steel combustion chamber, evaporation chamber and heat exchanger with powder coated cold roll steel cabinet. The humidifier is CE and WRAS approved for direct connection to a mains water supply.

The humidifier can be used with any type of water, even deionised or reverse osmosis,

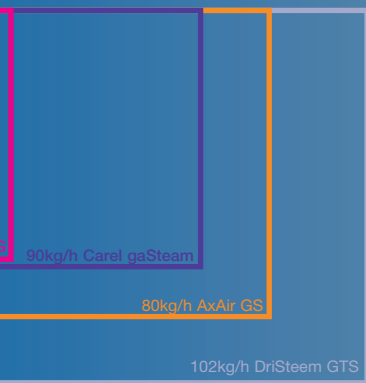
and is available in a weatherproof enclosure for use outside.

Manufacturer & Model	Footprint (m <sup>2</sup> )	Depth (cm)	Width (cm)	Height (cm)
100kg/h Neptronic SKG	0.34	56	61	147
85kg/h Vapac GF	0.43	96.5	45	116.5
90kg/h Carel gaSteam	0.58	57	102	120
80kg/h AxAir GS	0.79	67.3	118	81.5
102kg/h DriSteam GTS	1.13	82.2	138	104

The Neptronic SKG has the smallest footprint of all gas-fired humidifiers. A unit with a 100kg output has a footprint of just 610mm by 560mm. This makes it ideal for plant rooms where space is at a premium.

It also has the widest modulation range of any gas-fired steam humidifier. A single SKG with a

maximum output of 400kg/h can modulate down to just 8.7kg/h so even when the smallest output of steam is required the Neptronic delivers the utmost control. This model still only requires single connections to gas, water, drain, flue, power and controls making it much easier to install than other units that need multiple connections for larger outputs.



102kg/h DriSteam GTS

# Neptronic SKG - gas-fired steam humidifier

## Specifications

Models	Steam Capacity	Consumption			Weight		Dimensions		
		Gas input	Gas Consumption	Elec.	Empty	Full	Height	Width	Depth
		kg / hr	kW	M <sup>3</sup> /hr	W	kg	kg	cm	cm
SKGE3-0501N/P	50	43	3.9	410	125	180	147	61	56
SKGE3-0701N/P	70	60	5.4	410	125	180	147	61	56
SKGE3-0801N/P	80	68	6.1	410	125	180	147	61	56
SKGE3-1001N/P	100	84	7.6	410	125	180	147	61	56
SKGE3-1202N/P	120	103	9.3	795	245	355	147	122	56
SKGE3-1502N/P	150	119	10.8	795	245	355	147	122	56
SKGE3-1702N/P	170	144	13.0	795	245	355	147	122	56
SKGE3-2002N/P	200	169	15.3	795	245	355	147	122	56
SKGE3-2503N/P	250	212	19.2	1200	245	550	147	183	56
SKGE3-2703N/P	270	228	20.7	1200	245	550	147	183	56
SKGE3-3003N/P	300	253	22.9	1200	245	550	147	183	56
SKGE3-3504N/P	350	296	26.8	1610	485	705	147	244	56
SKGE3-3704N/P	370	313	28.3	1610	485	705	147	244	56
SKGE3-4004N/P	400	338	30.5	1610	485	705	147	244	56

## Accessories



JS Pureflo reverse osmosis unit



JS Pureflo water pressurising pump



MultiSteam short evaporation pipework



Water softeners

### World class service

With agents across the globe and cutting edge technology, JS will deliver the right humidification solution for you.



### Service & maintenance

JS will support you in your humidification requirements from system design, evaluation, installation, commissioning, maintenance, spare parts, training and technical advice.



**JS Humidifiers plc**  
You can depend on us!

- Planned Maintenance
- Breakdown response
- Commissioning
- Spares
- Technical
- Training

Service Hotline: +44 (0)1903 858649  
Spares Hotline: +44 (0)1903 858610  
Service Fax: +44 (0)1903 850685

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JS has a policy of continually improving products and performance. Actual specifications might vary from those shown.

