

SK 300 humidifier





Benefits:

Exceptional
reliability

Energy
conservation

Very high
return on
investment

Simplicity
of operation
and service

Attractive
packaging

General Description:

The **SK300** are power humidifiers designed to provide dry sterile steam for humidification.

They combine the latest **microprocessor based electronic design** with carefully matched metallurgical and mechanical technology perfected over two decades by *National Environmental Products Ltd.*

The humidifiers are available in capacities from 2.7 to 82 kg/hr (6 - 180 lb/hr) in ON - OFF and fully MODULATING versions.

The design is based on **permanent** rather than replaceable containers.



Alphanumeric Display and Control Buttons



Simplicity of Operation and Service:

The **SK300** humidifier consists of an automatically water fed stainless steel container with an easily removable cover containing heating elements and water level sensors.

Periodic servicing of the unit can be easily done in minutes. All mechanical, power and control connections are **readily accessible for quick servicing.**

The mechanical and electrical compartments are secured by wide hinged doors allowing **comfortable inspection and access to all components.**

Exceptional Reliability:

Reliability of the **SK300** humidifier is one of the features that sets it apart from competing humidifiers. Using the proprietary AFEC® technology, the **SK300** is much more forgiving to variable water conditions. Great care has been taken to select materials which have proven themselves for their exceptional performance in very harsh conditions. Such materials are **elements made of super alloy, incoloy 825, teflon sleeved stainless steel level control probe, silicon tubing and baked enamel painted aluminum cabinet.**

Selection of electro-mechanical and electronic components has been based on many years of experience and exhaustive testing. All **SK300** units pass through rigorous Q.C. inspection and full power check.



Indicators and Switches:

ALPHANUMERIC DISPLAY
information & control center

MENU & BUTTON CONTROLS

POWER
unit is connected to power source

CHECK
unit indicates an abnormal condition of operation (ie: blocked water supply)

FILL
water supply valve is open

STEAM
humidifier is ON and there is a humidity demand

MANUAL SWITCH (3 position)

AUTO - automatic operation

OFF - unit is off

DRAIN - unit is in manual drain mode

DRAIN
unit is in drain cycle

Anti-Foaming Energy Conservation System:

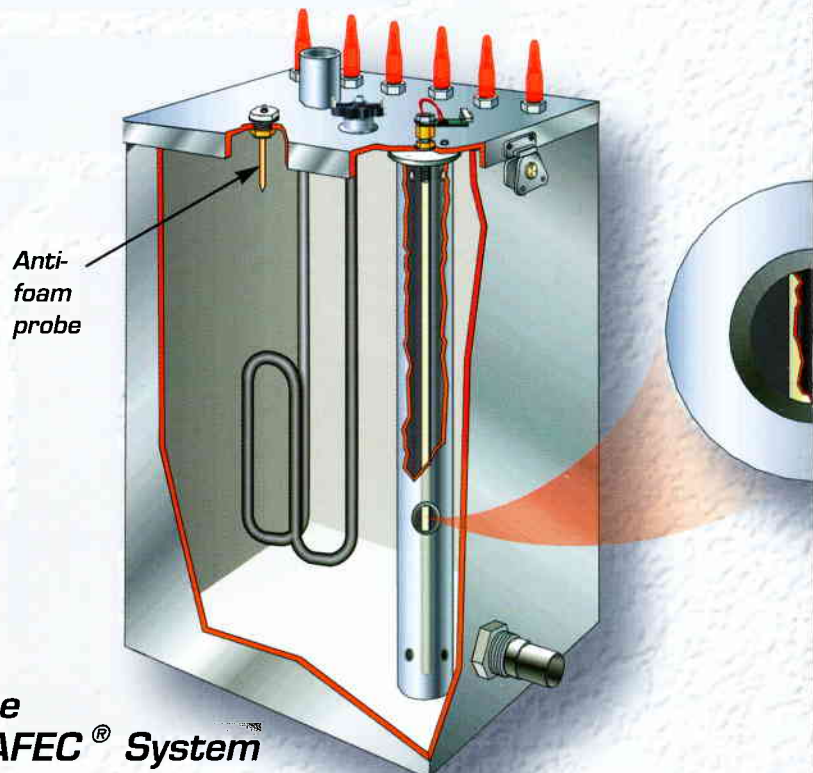
The AFEC® technology developed by the N.E.P. engineering team offers a unique safety and energy conservation management of expensive boiling water and steam. The AFEC® system is made of mass measuring water sensor, anti-foam sensor, electronic high temperature sensor, interactive LCD display and microprocessor controller.

The AFEC® system is unique because:

The water sensor cannot be falsely triggered by foam formation on the top of the boiling water. This eliminates the problem of heating elements burning out in free air.

The additional foam-sensing probe, which is unique to our design, would automatically initiate a drain cycle upon foam formation. Unlike other humidifiers, the drain can be initiated only when necessary without having continuous skimming to drain of expensive boiling water. This is an excellent energy conservation measure.

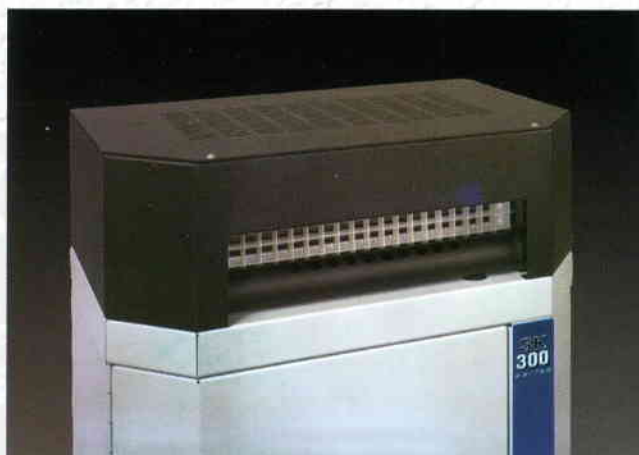
The **SK300** is unique in having fast acting electronic safety temperature sensors inside the steam container in very close proximity to the heating elements. Other humidifiers use only a bimetallic external electro-mechanical temperature switch (which is also standard on all **SK300**). Therefore the AFEC® system provides an additional layer of protection.





Multi-steam:

For the most efficient steam absorption, N.E.P. developed 3 different steam dispersion methods using the MULTI-STEAM, SAM or REGULAR distributors.



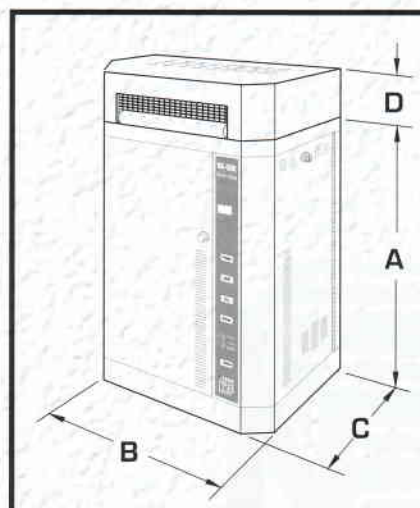
S.D.U. (Space Distribution Unit):

Our low profile **Steam Distribution Unit** is to be used where ducted air distribution system is not available. The steam is discharged directly into the required area. S.D.U. is available in 2 sizes. **A tangential fan delivers a quiet and efficient steam distribution.**

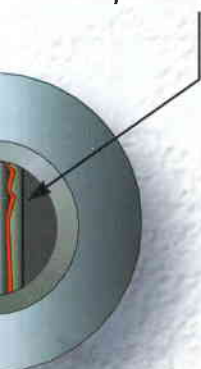
Dimensions:

model	A	B	C	D+A	SDU
SK302	597mm 23-1/2"	470mm 18-1/2"	292mm 11-1/2"	737mm 29"	SDU-1
SK304	597mm 23-1/2"	470mm 18-1/2"	292mm 11-1/2"	737mm 29"	SDU-1
SK306	597mm 23-1/2"	470mm 18-1/2"	292mm 11-1/2"	737mm 29"	SDU-1
SK310	724mm 28-1/2"	533mm 21"	318mm 12-1/2"	890mm 35"	SDU-2
SK314	724mm 28-1/2"	533mm 21"	318mm 12-1/2"	890mm 35"	SDU-2
SK320	724mm 28-1/2"	533mm 21"	318mm 12-1/2"	1048mm 41-1/4"	SDU-3
SK330	724mm 28-1/2"	533mm 21"	318mm 12-1/2"	1048mm 41-1/4"	SDU-3
SK340	794mm 31-1/4"	813mm 32"	318mm 12-1/2"	-	-
SK360	794mm 31-1/4"	813mm 32"	318mm 12-1/2"	-	-

SK300 SDU (SPACE DISTRIBUTION UNIT)
available on models SK302 to SK330



Water mass and temperature probe



Output and power consumption:

model	power	capacity	amperage							# of outlets	dia. of outlets
			240/1	208/1	208/3	480/1	480/3	600/1	600/3		
SK302	2 Kw	6 lb/hr 2.73 kg/hr	8.5	10	-	4.5	-	3.5	-	1	1-3/8"
SK304	4 Kw	12 lb/hr 5.5 kg/hr	17	19	11.5	8.5	5	7	4	1	1-3/8"
SK306	6 Kw	18 lb/hr 8 kg/hr	26	30	16.5	13	7.2	10.5	6	1	1-3/8"
SK310	10 Kw	30 lb/hr 14 kg/hr	-	-	28	-	12	-	10	1	1-3/8"
SK314	13.5 Kw	40 lb/hr 19 kg/hr	-	-	38	-	16.5	-	13.5	1	1-3/8"
SK320	20 Kw	60 lb/hr 28 kg/hr	-	-	57	-	25	-	20	2	1-3/8"
SK330	30 Kw	90 lb/hr 41 kg/hr	-	-	-	-	36	-	30	2	1-3/8"
SK340	40 Kw	120 lb/hr 56 kg/hr	-	-	120	-	50	-	40	2	2-1/8"
SK360	60 Kw	180 lb/hr 82 kg/hr	-	-	-	-	72	-	60	3	2-1/8"

Note: designate the letter **M** for modulating units. (ie: SK320M)
designate the letter **D** for units operating with deionized water.

SK
300
series

NEP
SK314

M



POWER

CHECK

FILL

STEAM

AUTO



OFF

DRAIN

DRAIN



Features:

- Permanent easily serviceable stainless steel container
- ON - OFF or MODULATING control functions
- Interactive LCD display and microprocessor controlled self-diagnostics
- AFEC® technology provides greatest energy conservation and safest operation
- Functions exceptionally well in severe, normal or D.I. water conditions
- Self-cleaning heating elements
- Unit is built from the most advanced materials such as stainless steel and teflon components and silicone hoses
- Aluminum housing and the best electronic and electro-mechanical parts