

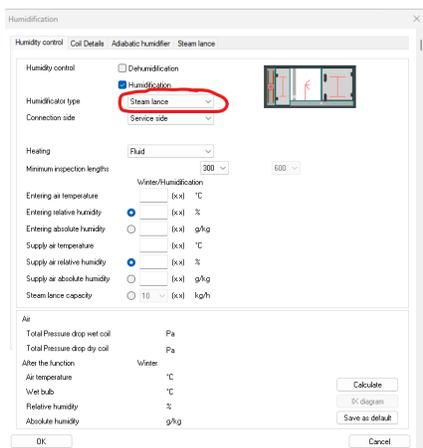
SystemairCAD Week 48 release

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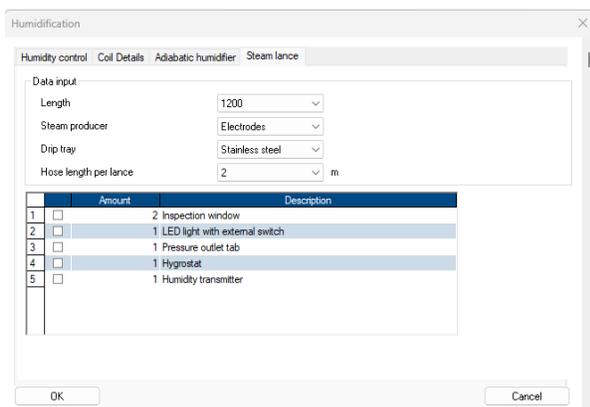
Humidification

The humidification function  is updated with a steam lance humidifier.

The steam lance humidifier is selected in the humidification dialog.



Details about the steam humidifiers can be seen under the steam lance in the dialog.



Here you can select the length of the humidification section, the heating element in the boiler (Steam producer), drip tray material and select hose length from the boiler to the steam lance.

Like the other humidification functions the system will calculate the steam humidifier based on the target values defined in the unit data dialog.

OUTDOOR AIR	Summer	Winter
Temperature	27.0 °C	-10.0 °C
Relative humidity	60 %	90 %
EXTRACT AIR	Summer	Winter
Temperature	23.0 °C	22.0 °C
Relative humidity	50 %	30 %
Supply air (Target)	Summer	Winter
Temperature	18.0 °C	22.0 °C
De-/humidification	75 %	50 %

20000 30000 50000 100000 m³/h

Unlike the adiabatic humidifier the steam lance does not cool down the air in the humidification process. The steam lance will heat up the air slightly between 0 – 0,7 deg Celsius. We will still need a heating coil to reach the required supply air temperature in most cases.

Adiabatic humidifier

We added accessories for the adiabatic humidifier. The accessories can be found in the Adiabatic tab / sub dialog of the humidification dialog.

Humidification

Humidity control | Coil Details | Adiabatic humidifier | Steam lance

Data input

Baffle Type / Frame Material: Hu-Cell / Stainless Steel

Voltage for valve control: 24 V DC

Thickness

75mm

100mm

125mm

150mm

	Amount	Description
1	<input type="checkbox"/>	1 LED light with external switch
2	<input type="checkbox"/>	2 Inspection window

OK Cancel

R454b refrigerant for DX cooling coils

R454b is release as a refrigerant for DX cooling coils. Here I must remind all that R454b is a flammable refrigerant that will require special security systems in the control system. The refrigerant comes with a disclaimer to inform about the flammability

Installer Warning – A2L Refrigerants The refrigerant used in the DX-system is classified as A2L. These refrigerants (e.g., R32, R454B) are flammable and therefore it should be prevented that, in case of leakage, refrigerant concentrations can build up to reach the flammability limits. The minimal indoor volume of connected spaces must be checked versus the total charge amount in the connected cooling or heat pump system, and pockets where refrigerant can accumulate need to be prevented. Making a risk assessment is highly recommended and can be legally required. Compliance with all applicable codes, standards, and regulations is the responsibility of the installing contractor, who is considered to be the manufacturer of the air handling equipment combined with the heat pump. Failure to follow these requirements may result in loss of certification, voided warranty, or legal liability. Systemair assumes no responsibility for improper installation or non-compliant field modifications.

NOTE: A2L Refrigerant Mitigation Kit Required