

# Food safety status of Airtec® High pressure air humidification systems

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## Introduction:

At the request of Airtec® A/S, Hvedemarken 21, DK-7620 Lemvig, FORCE Technology has evaluated the food safety status of Airtec® High pressure air humidification systems. Airtec® A/S has given detailed information on components and materials, and FORCE Technology has analyzed water samples from High pressure air humidification systems in normal operation.

The basis for the evaluation is the requirement set out in 852/2004-EC, Annex II, Chapter 1, Section 2:

2. *The layout, design, construction, siting and size of food premises are to:*
- (a) permit adequate maintenance, cleaning and/or disinfection, avoid or minimise air-borne contamination, and provide adequate working space to allow for the hygienic performance of all operations;*

It has been discussed whether this type of equipment falls under the Regulation on materials and articles intended for contact with food, 1935/2004-EC, but there is no legal basis for using this regulation as the humidified air is neither a food nor a food ingredient. However, we have used Article 3 of Regulation 1935/2004-EC as a guideline for the requirements that need to be met in order to comply with Regulation 852/2004-EC.

## Evaluation:

The evaluation has been conducted by:

- Direct and risk analysis of metals in water samples collected from Humidifiers in normal operation
- Risk analysis for all polymeric materials in contact with sprayed water (NBR, PA12, FKM)

The risk analysis has been based on:

- Requirements regarding metal content in drinking water (DK, DE)
- Requirements concerning metallic and polymeric food contact materials (EU, DE-BfR, US-FDA, FR, I)
- Normal and foreseeable conditions of use

## Conclusion:

Based on careful evaluation of all components and materials, risk analysis, and testing of equipment in normal operation, it is our opinion that the evaluated Airtec® High pressure air humidification systems comply with the requirements set out in Regulation 852/2004-EC on the hygiene of food production and storage facilities.

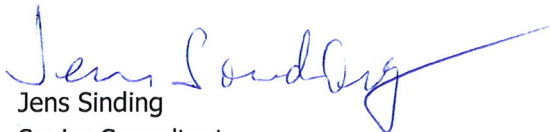
We conclude that under normal or foreseeable conditions of use, the evaluated types of Airtec® High pressure air humidification systems will not transfer their constituents to food in quantities which can:

- (a) endanger human health; or*
- (b) bring about an unacceptable change in the composition of the food; or*
- (c) bring about a deterioration in the organoleptic characteristics thereof.*

Even though the equipment is not covered by 1935/2004-EC we conclude that the use of Airtec® High pressure air humidification systems complies with the requirements set out in Article 3 of this Regulation, and that they are suitable for use in food production and storage facilities.

Skejby on the 2<sup>nd</sup> of March 2012

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A handwritten signature in blue ink, appearing to read "Jens Sinding", with a long horizontal stroke extending to the right.

Jens Sinding  
Senior Consultant  
FORCE Technology