

SMOKE FACTORY

FOG AND HAZE GENERATORS

To whom it may concern

17.01.19

Cubic meter specification for Smoke Factory fog machines

Dear honored Reader,

in the following text, it will be explained why you will not receive any information about the generated fog quantity in cubic meters from the Smoke Factory, as well as from other serious manufacturers and distributors of fog machines. The most important point, especially for German manufacturers, is that there is no uniform procedure and guidelines how this information is determined. This means that anyone can require their own frame operations when determining these values, which would lead to incomparable results. These include, for example: Room temperature, air humidity, measuring method, density, which fluid is used, pump characteristics of the machine, how much m³ are fogged during the test, general thermal conditions in the room (draught, heating, tightness of the windows etc.) it should be a hermetically sealed room. Another important point is whether only the pure output of the machine is measured or whether it is additionally distributed in the room by means of a fan. If this is not the case, what about devices that have already installed a fan? As you can see, it is extremely difficult to find a uniform regulation here that corresponds to a DIN standard, so that customers have comparable values.

Here is an example:

We have a room with a volume of 800 m³ and a fog machine with 2600 watts of heating power. This is started and maintained until there is an even fog distribution throughout the room. Based on the time and the volume, we can calculate how much m³ the machine has theoretically achieved per minute. Our customer is now a fire brigade who wants to fog a room, which also has 800 m³, for a zero-visibility exercise, which should have happened in x minutes according to the information. Unfortunately, the exercise room is much warmer than the room during the test and a fluid with a different glycol content is used in the machine. Unfortunately, the measurement was only based on an even fog distribution and not on a complete saturation in the room. Thus, it comes that although only three of the eight factors mentioned above have changed, a result is already obtained, which in no way corresponds with the data of the data sheet.

Kind regards

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executive director