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Experts in Thermostatics

Bearbeiter: **R&D department**
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Report No.: **ME 1811 - 1085**

Cleanroom compatibility

The Fraunhofer IPA Institutoe certifies the Memmer heating oven model UF 1060 and the constant climate chamber model HPP 1060 as TESTED DEVICE, Report No. ME 1811 – 1085, nach ISO 14644-1.

This results in the following classification:

Universal oven UF1060	**Air cleanliness class DIN EN 14644-1**
Working temperature 300°C Outside: Temperature = 300°C Ventilator on (100%)	6
Working temperature 300°C Inside: Temperature = 300°C Ventilator on (100%)	6
Working Temperature 300°C Inside: Temperature = 300°C Ventilator off (100%)	6
Total result	**6**

Constant Climate Chamber HPP1060	**Air cleanliness class DIN EN 14644-1**
Working temperature 50°C Outside: Temperature = 50°C Humidity = 10%	5
Working Temperature 50°C Inside: Temperature = 50°C Humidity = 10%	5
Total result	**5**

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Explanation:

The tested heating oven **UF1060** is currently the largest model of the Memmert product range.

Due to the nearly identical design of all appliances of the series UF (heating ovens), IF (incubators) and SF (sterilizers) as well as the use of identical components (e.g. insulation material), which may have negative influence on cleanroom compatibility, it can be assumed that the mentioned models will achieve at least the same, in general, even better results in particle emission measurement.

The tested use case of a UF1060 model with the fan switched off (0%) corresponds to the use of a UN1060 model with natural convection (without motorized air circulation in the chamber). It can also be assumed that all other smaller models of the series UN (heating ovens), IN (incubators) and SN (sterilizers) achieve at least the same or even better results in terms of cleanroom compatibility.

The tested **constant climate chamber model HPP1060** is currently the largest model of the Memmert product range.

Due to the nearly identical design of all appliances of the series HPP (Constant Climate Chamber) and IPP (Peltier-Cooled Incubator) as well as the use of identical components (e.g. insulation material), which may have negative influence on cleanroom compatibility, it can be assumed that all the mentioned models achieve at least the same or, in general, even better results in terms of cleanroom measurement.

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Leiter Entwicklung