case study



Filter solutions for best indoor air quality in hotels

Berlin Marriott is the first hotel in Germany to be equipped with CityFlo XL

Company profile:

With more than 2,900 hotels, Marriott International Inc. is one of the world's leading hotel chains.

The Berlin Marriott is a 5-star hotel. It is located in the inner city area of Berlin, directly on Potsdamer Platz.

The Situation:

Compared with the status 50 years ago, considerable changes are discernible in the industrialised world of today. A quantifiable difference relates to the air we breathe which is contaminated more by a larger number of different pollutants.

The European standard EN 13779 concentrates on the realisation of a comfortable and healthy indoor climate with acceptable installation and operating costs. Here, the required filter performance to achieve a good indoor air quality is specified, taking into account the quality of the outdoor air.

This is classified in three categories, from ODA1, i.e. clean air with temporary pollution such as pollen, to ODA3 with high concentrations of gas and particles. Indoor air, however, is classified from IDA1 (high air quality) to IDA 4 (low air quality).

Außenluftqualität	Raumluftqualität			
	IDA 1 (hoch)	IDA 2 (mittel)	IDA 3 (mäßig)	IDA 4 (niedrig)
ODA 1 (saubere Luft)	F9	F8	F7	F5
ODA 2 (hohe Konz. Staub/Gase)	F7 + F 9	F5 + F8	F5+F7	F5 + F6
ODA 3 (sehr hohe Konz. Staub/Gase)	F7 + GF+F9	F7+ GF+F9	F5+F7	F5 + F6

With a city centre location with a high volume of traffic, like the location of the Berlin Marriott Hotel directly on Potsdamer Platz, primarily the outdoor air quality ODA3 is measured. Specifically, this means frequent exceeding of EU threshold values and guideline values of environmental protection in the concentrations of particulate matter (PM10), ozone, nitrogen dioxide etc. This conflicts with the high standards of the Berlin Marriott Hotel which aims to guarantee its guests the best indoor air quality IDA 1).

The Action:

In addition to a good particulate matter filtration, the DIN EN 13779 recommends using gas filtration in cities to improve the IAQ.



Camfil Farr has developed a special product for this:

The City Flo XL

This is a filter made of a unique combination media of fibreglass and activated carbon (with rapid adsorption dynamics) that combines particle and gas filtration. The CityFlo XL has a low pressure drop, superb filter efficiency and also efficiently eliminates particulate matter, ozone and any fumes caused by traffic.

In addition, the CityFlo XL can be used without major effort in existing or new filter installations in place of conventional pocket and compact filters.

"Our goal: Feel-good ambience and pleasant indoor air quality!"



The result:

The Berlin Marriott Hotel is the first hotel in Germany in which the recommendation pursuant to DIN EN 13779 has been consistently implemented for all areas.

The conversion to an additional gas filtration level did not entail any major conversion work and the pocket filters used up to now could be replaced without any problems in the second filter stage by the CityFlo XL.

Best indoor air quality in the entire area of the Berlin Marriott Hotel is the result which Camfil Farr confirms with the handing over of a certificate.

Marriott

from left to right: Claudio Trübenbach (Technical director / Berlin Marriott Hotel), Thomas Guss (General Manager / Berlin Marriott Hotel), Robert Kretschmann (Camfil Farr office Berlin).

The Proof:

The indoor air improved in this way is perceived as a qualitative added value of the hotel for guests and also portrayed as such.

In collaboration with the Berlin Marriott Hotel therefore, a joint flyer with a supplier - Camfil Farr - was created for the first time, and this is displayed in all guest rooms and informs guests about this added value.

As the Berlin Marriott has often had a pioneering role in the Marriott Group, an expansion in use of the CityFlo XL to other Marriott hotels is the desired goal. A dissemination of information within the Marriott Group is done via its Intranet.

The use of the Berlin Marriott Hotel as a reference by displaying the common flyer at the Camfil Farr trade fair booth and in advertisements in special magazines is explicitly requested by the hotel.



Advertisement in the special magazine for hotel technology, equipment and fittings "HotelObjekte" in October 2010:



The Marriott Group hereby additionally confirms the satisfaction of the customer with the Camfil Farr product: CityFlo XL.

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