



Seit 1877

**Kiefer**

Luft- und Klimatechnik

Neue Wege mit Luft

# Concrete core cooling with air CONCRETCOOL

## Kyocera Mita Headquarters for Germany, Meerbusch

Kyocera Mita's new German headquarters building on its site in Meerbusch consists of three elements, each with three storeys and a flat roof. A transverse hall connects the individual building elements; this not only provides space for an attractively designed courtyard, but also ensures short lines of communication. The entire building is designed so that it is environmentally-friendly and energy efficient. Solar panels and collectors conserve resources, and the use of concrete core cooling ensures constant room temperatures and saves energy at the same time while supplying only outdoor air.



Photo © Kyocera Mita Deutschland GmbH

Kyocera Mita's new German headquarters building on its site in Meerbusch, near Düsseldorf

### Function CONCRETCOOL

In contrast to conventional systems, in which supply air is fed directly into the working areas, the air first flows through aluminium cooling tubes cast into the ceilings. Thereby the supply air cools the ceiling. At the same time the gain of heat is used to warm up the supply air.

### System advantages

- Free cooling provides energy savings of up to 50%
- Optimum thermal comfort
- Additional ceiling cooling with water is not required
- Concrete core cooling with supply air is an efficient, ecological and economical system.
- Full flexibility and conversion costs avoided due to modular cooling tubes
- Cooling only with outdoor air – no air circulation required

<b>Building:</b>	<b>New building for Kyocera Mita Meerbusch</b>
<b>Architects:</b>	<b>Altena Architekten, Düsseldorf</b>
<b>Proprietor:</b>	<b>Kyocera Mita Germany, Meerbusch</b>
<b>General contractor:</b>	<b>Köster AG, Osnabrück</b>
<b>Consultant, building services:</b>	<b>IJW Ing.-Ges.mbH J. Weindt Haustechnik, Mühlheim</b>
<b>Gross floor area:</b>	<b>11,300 m<sup>2</sup></b>
<b>Enclosed space:</b>	<b>65,000 m<sup>3</sup></b>
<b>System:</b>	<b>Concrete core cooling with air CONCRETCOOL</b> <b>Per fitout module, one linear diffuser GLS Z/A 360 combined with air supply and extract air. Air flow path invisibly integrated into the ceilings.</b>
<b>Cooling capacity:</b>	<b>60 W/m<sup>2</sup></b>
<b>Air flow rate:</b>	<b>7.5 m<sup>3</sup>/hm<sup>2</sup></b>

