



Seit 1877

**Kiefer**

Luft- und Klimatechnik

Neue Wege mit Luft

# Concrete core cooling with air CONCRETCOOL

## AXA Konzern AG, Cologne



Photo © AXA Konzern AG

This extension to the German headquarters building of the international insurance group AXA in Cologne-Holweide comprises five new administration buildings and a new media and congress centre. The architects, BM + P Beucker Maschlanka and Partner, Düsseldorf, have achieved an elegant combination of brick facades and external glazed stairways, with a floor plan that follows a large-area concept. The generous window fronts provide clear views of a tranquil lake and gardens while brightening the rooms with daylight. In the building complex, about 4,500 employees serve the insurance enterprise.

### 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

- Optimum thermal comfort
- Additional ceiling cooling with water is not required
- Free cooling provides energy savings of up to 50%
- Full flexibility due to modular positioning of cooling tubes
- Cooling with outdoor air – no air circulation required
- Construction costs reduced due to low floor height

<b>Building:</b>	<b>AXA Konzern AG, Cologne-Holweide</b>
<b>Architects:</b>	<b>BM + P Beucker Maschlanka and Partner GbR, Düsseldorf</b>
<b>Proprietor:</b>	<b>AXA Konzern AG, Cologne</b>
<b>Project management:</b>	<b>Assmann Beraten + Planen GmbH, Dortmund</b>
<b>New building:</b>	<b>Five office buildings, media and congress centre, multi-storey car park</b>
<b>Scope:</b>	<b>28,000 m<sup>2</sup> conditioned area</b>
<b>Cooling System:</b>	<b>Concrete core cooling with air CONCRETCOOL</b> <b>Per fitout module, one linear diffuser. Air flow path invisibly integrated into the ceilings.</b>
<b>Air flow rate:</b>	<b>3 m<sup>3</sup>/hm<sup>2</sup></b>

