ADAC Headoffice Munich

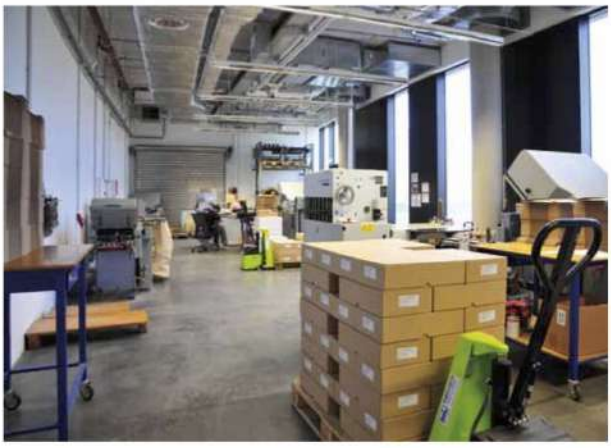
ADAC celebrated its 100th anniversary in 2003 and took this opportunity to plan a new head office in the state capital, thus combining the employees - who had hitherto been working at seven different addresses in Munich - under one roof. Construction work on the new ADAC building began with the laying of the foundation stone in April 2007, using a design provided by the Berlin architectural office Sauerbruch Hutton.

A five-storey base construction with an 18-storey high-rise building offers space for about 2,400 work stations, a training and conference centre, an events centre, a casino, a cafeteria, a computer centre, a print shop and other logistics divisions, as well as a parking garage with 1,000 parking spaces.

This office block with a height of over 90 metres is visible at a distance, instantly recognisable by a total of 22 different shades of yellow and orange used for the 1,100 facade elements, which are divided over the 30,000 square metre glass facade like a mosaic. The new ADAC head office in Munich not only provides interesting architecture, but also an unusual energy concept. The building is heated by district heating, but also has a 1,500 m^2 solar energy plant installed on the flat roof of the base structure. In addition, the 349 energy piles driven up to 37 metres deep into the ground water produce about 20 percent of the energy required. The double-glazed facade with interior shutters also protects the building against high levels of solar radiation and prevents heat from building up.

All these measures have contributed to a reduction in the emission of CO2. The company's in-house print shop also took special steps to reduce the acoustic emissions responsible for noise pollution. The print shop has been set up on the ground floor and produces maps, all kinds of flyers and other printed business matter. Printing and cutting machines of various sizes are available to produce the printed documents.

The special requirements for airborne and structure-borne noise therefore had to be taken into account when planning the print shop. It is not only the operation of the print shop machinery that could have resulted in structure-borne noise being conducted through the building, thus adversely affecting the offices above the print shop. The use of elevating platform trucks to transport paper rolls weighing several tonnes, as is standard practice during the production process, required a special floor construction. It was thus not sufficient simply to separate the foundations of the printing machines to reduce vibration.



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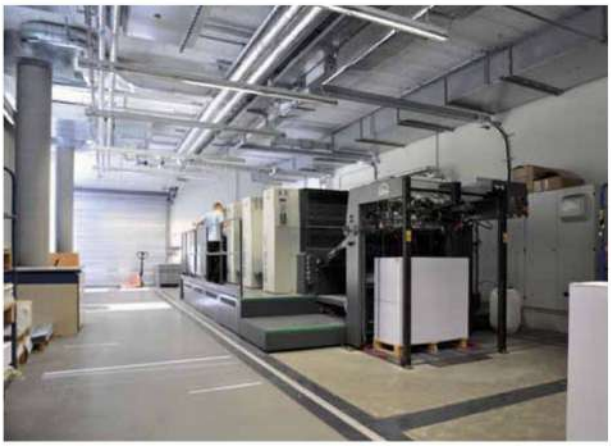
Reference

The measures introduced to reduce structure-borne noise also made provision for laying **Regupol®** BA screed insulation on the reinforced concrete screed, which is subjected to the heavy weight of the hoisting vehicles. The screed insulation layer is a mere 17 mm thick and is made from PU-bound rubber fibres; it reduces footfall noise by 26 dB and can take a maximum traffic load of 5,000 kg/m², making it ideal for use in the ADAC print shop. Other positive characteristics of **Regupol®** BA mats are their minimal compressibility and good recovery.

Once the **Regupol®** screed insulation strips had been laid, there were taped together with adhesive tape and then covered with a 0.2 mm thick layer of PE film. The PE film prevents the screed material from penetrating the porous structure of the **Regupol®**. Apart from the extensive sound insulation of screed surfaces, the active vibration insulation of printing machine foundations is a frequent application for **Regupol®** products.



A BSW product
Regupol® BA screed insulation

- PU-bound rubber fibre rollers
- Dimensions 10,000 x 1,250 x 17 mm
- Temperature resistant from -20°C to +80°C
- Noise reduction of 26 dB
- Compressibility 2.0 mm
- Max. traffic load up to 5,000 kg/m²
- Fire class B 2 / Class E

More references can be found on our website.

www.bsw-vibration-technology.com

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