KARL MAYER

Building on textiles
Technical warp knitted fabrics from KARL MAYER machines open up new market opportunities, particularly in the civil engineering sector

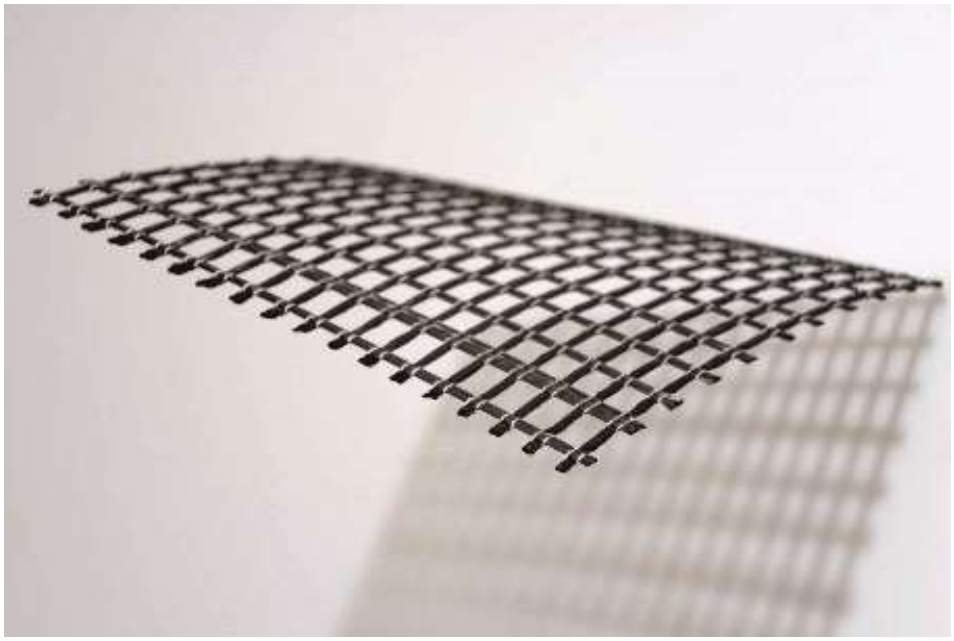


Fig.: Textile for concrete reinforcements

KARL MAYER has the right technology and expertise to cater for a wide range of applications in the technical textiles sector. The company's weft-insertion, biaxial and multiaxial warp knitting machines can be found in the plants of manufacturers of inlays, tarpaulins and advertising substrates, as well as in those of producers of geogrids, composites and automotive fabrics. The focus of the exhibition at ITMA ASIA + CITME 2018 will be on textiles for the civil engineering sector. The Chinese civil engineering sector is one of the growth areas in the country but, unlike the construction industries in Europe and America, for example, the Chinese building industry focuses on conventional materials. Textiles can offer the civil engineering sector many advantages, especially when used in concrete components. By replacing conventional steel reinforcements with carbon- or glass-fibre textiles, the amount of concrete used can be reduced by up to 70%. CO_2 emissions, energy consumption and component weights can also be reduced. In Germany, textile-reinforced concrete components with the appropriate licences are already available on the market. Other promising applications for warp-knitted structures are in tear-resistant plaster grids for increasing the tear resistance within the plaster, self-adhesive tape for repairing holes and cracks in walls, cost-effective, flexible roof canopies and bitumen roofing materials with excellent mechanical properties.