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Newsletter



Dragon-Concrete

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A Symbol of China and the Olympics

With China's entry into the World Trade Organisation and Beijing hosting the Olympics in August 2008, the volume of passengers passing through the Beijing capital city's airport is expected to rise from 27 million to 60 million per year by 2010.

The construction of Terminal 3, Beijing International Airport, started on March, 2004. It opened on February 29, 2008 and became fully operational on March 26, 2008. It was designed by a consortium of NACO, Netherlands Airport Consultants B.V., UK Architect Foster and Partners and ARUP. The budget of the expansion was US \$ 3.5 billion.

This is the largest airport expansion project the world has ever seen, as well as the fastest ever built. The two passenger terminal buildings have a roof area of over 80 acres, that is 170 soccer fields, and measure 800 m across at the widest point. These structures have a larger surface area than all of London Heathrow's five terminals put together. With 1.3 million square metres of floor space, it is the first building to break the one million square metre mark.

There are 243 elevators, escalators or moving walkways, more than 64 restaurants and 90 shops. The luggage system can handle 19,200 pieces of luggage per hour. After the luggage is checked in at any one of the 292 counters at Terminal 3, it can be transferred at the speed of ten metres per second.

In this impressive superstructure you find two places where RECKLI products are involved. Baogui Artificial Stone Art, Science and Technology Co. Ltd. in Beijing under the management of Mr. Zhang Baogui, creates four big vats used in the past Qing dynasty to store water for fighting fires in the Forbidden City. The diameter of these cupreous vats is 3,00 m and the height of 1,80 m. They are located in the reception area of the arriving passengers. In the departure area you find a 6,00 m height dragon sculpture, an armillary sphere replica of the Ming dynasty.

The four vats show a reproduction of nine dragons. Dragons are deeply rooted in Chinese culture. Nine is the most prestigious number and the dragon is the soul of all creation. The number of dragons is significant and symbolises the supremacy of the Emperor. The Chinese dragon, represented Yang, the principle of heaven, activity and maleness in the Yin-Yang of Chinese cosmology and from ancient times it was the emblem of the imperial family. The base of the carved design is the nine dragon screen wall in the Forbidden City, made of glazed decorative bricks and tiles in the Ming dynasty. The dragon sculpture is a full sized replica of the armillary sphere in the courtyard of the Ancient Observatory in Beijing produced in the Ming Dynasty.

The mould making department of Baogui Stone Art Company used the elastic RECKLI Polyurethane rubber with a shore hardness A55, to cast the moulds for these works of art. The master models for the sculpture and the vats are carved in gypsum. To manufacture the final product they cast GRC by spray application into the polyurethane rubber moulds. The elasticity of this material allowed an easy release and a demoulding without any breakage. They achieve a perfect concrete finish and give an exact reproduction of all fine model contours and details. Metal oxide colour pigments and natural stone powder in the GRC premix and an electroplating process after casting create this kind of metal bronze finish.

The close cooperation between the Baogui mould making department and the support of the local RECKLI representative in China ensure this successful work of art. This fingerprint welcomes all international visitors of the Olympic and the Paralympics Games passing through Beijing airport from next August.

This airport terminal building seems to be not big enough for Beijing; a second airport is already planned. China plans to build nearly 100 new airports by 2020, many in remote, economically backward areas.



