

On the turn

The installation of a revolving circular stage at the new congress centre in Tashkent, Uzbekistan

The revolving stage at the International Forums Palace Uzbekistan

Taashkent, the capital of Uzbekistan, gained independence from the Soviet Union in 1991, triggering cultural, economical and architectural changes. Soviet-era buildings have been replaced with new, modern buildings, particularly in the downtown region, which includes the 22-storey NBU Bank building, an Intercontinental hotel, International

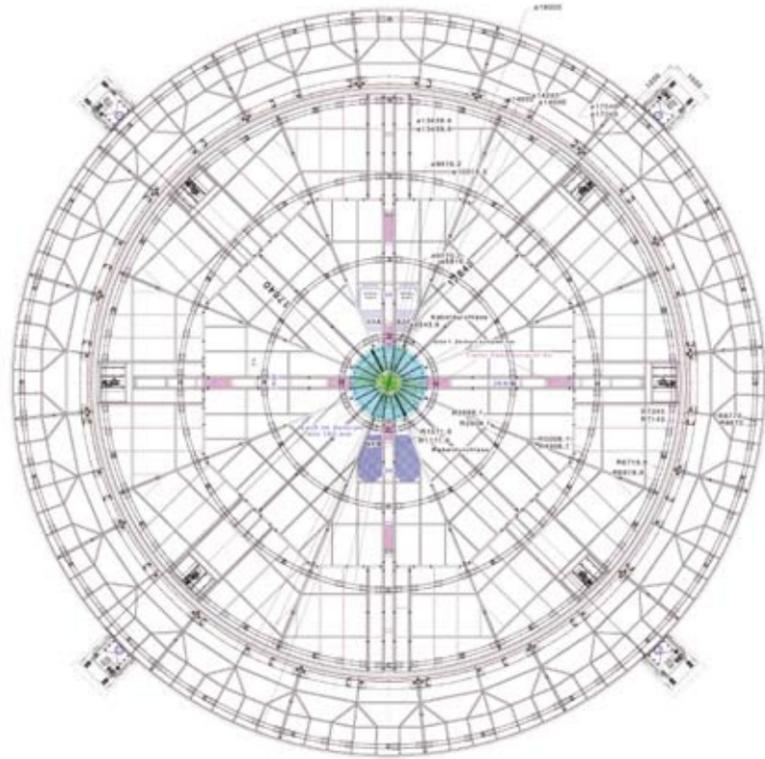
Business Center, the Plaza Building and now a new multipurpose congress centre – the International Forums Palace Uzbekistan.

The centre is designed to hold large international forums, and cultural and other events. The 48m-high building, built by Neftgazmontaj, features a 53m-diameter dome and marble columns on the exterior. Inside it contains a 300-seat conference hall, a 300-seat banquet hall, and a 1,800-seat congress hall.

The congress hall features a huge main stage (50m wide and 15m deep), a forestage, and a proscenium that can be adjusted in height from 8-13m and in width from 15-27m. For added flexibility the stage contains an integrated revolving stage with an extra outer ring. Extended fully, the revolving stage reaches into the forestage, with a total diameter of 18m (a 4m-deep outer ring and 14m diameter inner turntable). The outer ring runs independently (from left to right) from the inner turntable.

Time flies

Construction started on the building in 2008, with opening planned for 1 September 2009. In June 2009 the contractor for the stage technology contractor, SBS Dresden, assigned Hoac, well known as a planner and supplier of mobile aluminium staging constructions, to supply the turntable. “The most challenging part of this project was to match the extremely short time schedule,” says Gabriele Högg, commercial director of Hoac. “That of course also affected the planning, construction and installation of the stage technology.”





Above: Both parts of the revolving stage are integrated into the main stage

Below: Construction work on the International Forums Palace Uzbekistan

The revolving stage was designed in accordance with the technical demands of the stage planner, Teapro. The turntable and revolving outer ring had to share basic structural features so as to form one unit. The overall height of the unit, including a 45mm wooden top layer and casters, is 250mm, however it is embedded into the concrete ground so that it is flush with the rest of the stage. The static load capacity of both turning elements is 500kg/m² and the dynamic load capacity is 250kg/m². For the welded aluminium frames Hoac-Zarge 16 2/3, which has a profile height of 140mm, was chosen.

To enable the turning elements to do their job – and do it quietly – Hoac placed steel rings on the ground to take the level for the casters. The steel rings were fixed by injecting a high-resistance mortar underneath, which took approximately 48 hours to dry.

The ring cycle

The inner turntable is driven by four 1.5kW decelerated-friction wheeled motors, powered through a central slip ring that ‘floats’ in the concrete stage floor. The turntable also features two DMX circuits and two power circuits, free for other configurations. The outer ring is also driven by four 1.5kW friction drives in the stage floor. Two encoders ensure accurate path measurement. The revolving construction is wired to an external computerised control system, supplied by SBS Dresden.

Hoac realised the installation of this special construction in a very short time period – approximately 40 days. The final inspection of the work was on 3 August 2009, in time for the opening, as planned, on 1 September. “The revolving stage was installed in time because of the cooperative collaboration between all the building enterprises on site, an engaged client and contractor, and the installation knowledge of Hoac,” says Högg. ■

www.hoac.de

