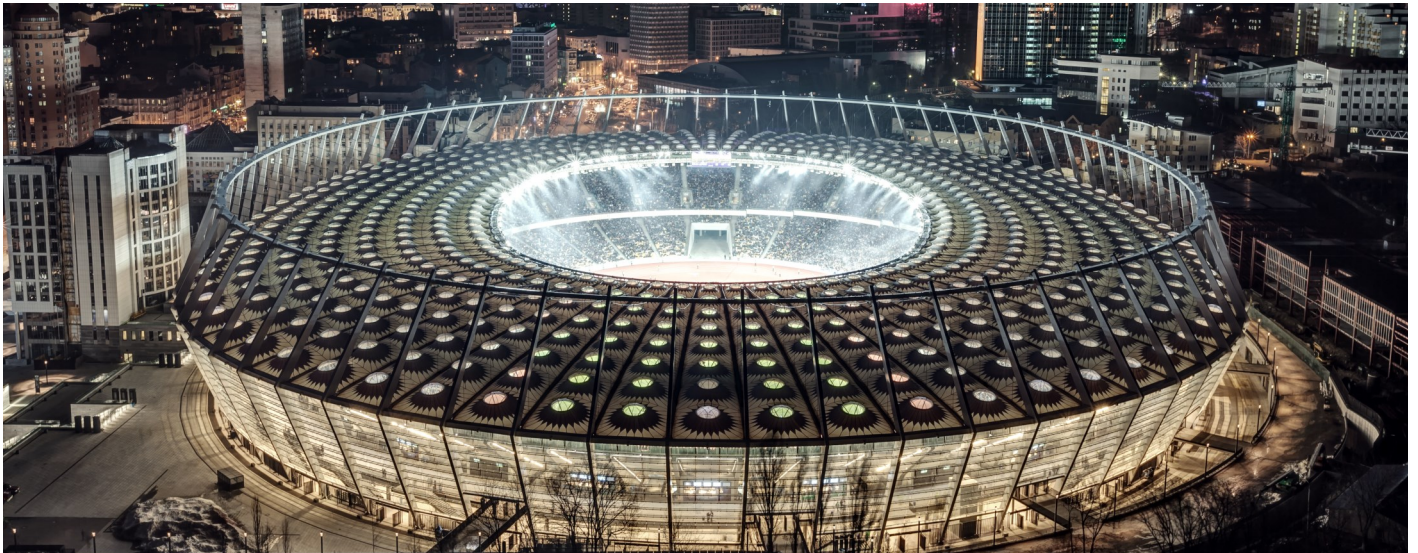




A brand of
Aqseptence Group

Olympic Stadium Kiev, Ukraine

Project report



Situation

On the occasion of the 2012 European Football Championships, the NSK Olympic Stadium in Kiev had to be completely refurbished to give space for 70,000 spectators. As per the plans of architectural group gmp from Germany, the stadium was equipped with the most modern technologies. But it soon became apparent that the ailing sanitation facilities presented a special problem.

Due to the existing building structure, a conventional gravity drainage system could only be realized with substantial technical and financial effort. In addition, the expected peak flow would have greatly overloaded the existing wastewater infrastructure. The requirement was for a sanitary system that enables a flexible pipe routing with small pipe diameters, and a significant reduction of wastewater.

Solution

The water-saving Roediger Vacuum Drainage system met all these requirements. Roediger and our Ukrainian partner VKS won the tender to install the largest vacuum system that has ever been realized in a building. Five individually-designed vacuum stations, 16,500

meters of pipe network, and over 1,050 Roediger vacuum toilets are the impressive figures of this project – water savings per event are up to 360 m³, so with a total of over 100 events per year, the reduction is really significant!

Technical Data

Sewage Water System, 5 Roediger® Vacuum Stations

Type of Stations	Individual Large Plant
Ton Filter	Each for 2.600 m ³ /h Air Volume
Components	<ul style="list-style-type: none">▪ 1065 x Vacuum Toilet SILENTIUM▪ 446 x Evacuation Unit Type PE 7▪ 88 x Evacuation Unit Type PE 5▪ 26 x Evacuation Unit Type AE 25▪ 76 x Evacuation Unit Type D+BW▪ 474 x Vacuum Floor Drain Stainless Steel▪ 26 x Air Blower Station 230 V▪ 368 x Pipe Monitoring System Mosy
Commissioning	October 2011

Impressions



Vacuum station



Ton filter



Sanitation facility — Toilets



Sanitation facility – Urinals

Aqseptence Group GmbH Vacuum Technology Systems

Kinzigheimer Weg 104
63450 Hanau
Phone +49 6181 309 - 285
Fax +49 6181 309 - 280
info.roediger@aqseptence.com

www.aqseptence.com

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