Warsaw National Stadium

Warsaw National Stadium

The central spire is a key element of the roof structure, with a height of 70 meters and weighing over 100 tons. It was transported from Poznan to Warsaw in three parts. The largest one weighed 43 tons and was 33 meters long. 72 hydraulic cylinders were used to lift the spire to the height of 112 meters above the level of Vistula river. It hangs over the stadium supported by over 70 km of steel ropes with a diameter of 150 mm. Operation "Big Lift" was the first such project in Europe. Warsaw National Stadium has a retractable roof covering the area of the football field allowing games to be played in different weather conditions.

Gdansk PGE Arena Stadium

Gdansk PGE Arena Stadium

The main steel structure consists of 82 elements, each over 80 meters long and weighing about 66 tons. The final step in completion of the steel construction took almost 6 days. First stage was to release the bottom row of the outer ring bolts, then the top row, and the last stage was to disconnect the links holding them together. After lowering the cylinder towers supporting the inner ring, the roof dropped by 30 centimeters and the structure began to work on its own, becoming one of the most interesting types of self-supporting structures in Poland. The hull of the arena is made of polycarbonate panels in the color of amber.

Poznan City Stadium

Poznan City Stadium

The most spectacular part of the construction was lifting of roof elements. The north beam: 1 400 tones and 175 m long and the south beam: 1 300 tons and 160 meters long were lifted to the height of 30 m. Two smaller transverse girders, weighing 440 tons and 135 m long were mounted by hydraulic cylinders and steel ropes at the climb rate of 4 m/h. Three cranes moved the east and west trusses over the stands at the height of 32 meters. Nothing like that has ever been done in Europe. We did it first and we are proud of it!

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FOOTBALL ARENAS

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Warsaw National Stadium

The largest arena in Poland

Stadium capacity: over 58 000 seats

Weight of steel structure: 14 500 tons

The length of steel ropes: 70 km

Weight of the spire: more than 100 tons (key element of the roof structure)

Spire height: 70 m

Spire elevation: 32 m over the football field

4 LED screens: total area. 200 m²

Two-level underground parking for 1800 cars




Gdansk PGE Arena Stadium

Stadium Capacity: 44 000 seats

Cubic capacity of the stadium: 950 000 m³

Polycarbonate surface: 48 600 m²

Grandstand area: 22 700 m²

Number of roof beams: 82

Steel roof construction: 7 140 tons

The amount of concrete: 50 000 m³

The skating track: 1715 m long




Poznan City Stadium

Stadium Capacity: over 45 000 seats

Membrane surface: 40 000 m²

Weight of roof construction: 7 611 tons

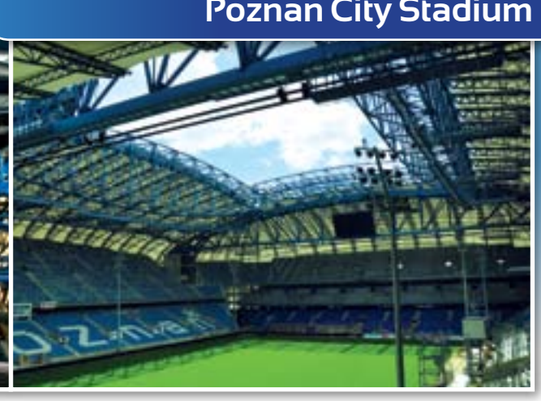
The center of the pitch: 157 m above sea-level

Dimensions of the pitch: 105 m x 68 m

2 LED screens: 115 m² each

Stands: 30 000 m³ of concrete reinforced with 7 000 tons of high quality construction steel



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Did you know that the stadiums for Euro 2012 were built by Polish private companies?

We built three stadiums for the Euro 2012 in Warsaw, Gdansk and Poznan, which together can hold 120 000 spectators. During construction, we used very unique and innovative solutions never before applied in Europe. Our constructions meet the highest standards of elite class facilities.

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