# Architectus



2010 Nr 1(27)

# Presentations

### National Polish Student Competition for the elaboration of the concept of a sports hall organised by the company ACTIV SPORT from Poznań

#### Bend your mind and do a project

Author: Marta Praszczyk, Artur Borkowicz, Łukasz GłogowskiPrize: II place in the National Polish Student Competition for the elaboration of the concept of a sports hall

The theme of the National Polish Student Competition was the elaboration of the concept of a sports hall in two versions: without seats for the audience and with 200 seats for the audience. The competition was organized by the company ACTIV SPORT from Poznań, whose business is designing, constructing and equipping sports halls. Unfortunately, no winner was chosen and the second (highest) place in the National Polish Student Competition was taken by the students of the Faculty of Architecture of Wrocław University of Technology:

## Marta Praszczyk IV year student of Monument Protection,

Artur Borkowicz V year student of Architecture and Urban Planning and

### Łukasz Głogowski IV year student of Architecture and Urban Planning.

Our motivation to participate in this project was the interest in sport which we share as well as the fact that in the Polish climate it is not always possible to practice active forms of relaxation in favourable weather conditions. As future architects and today's students of the Faculty of Architecture, similarly to the majority of contemporary groups of professionals, we are also exposed to the risk of 'sedentary working style'. Therefore, we eagerly engage in various forms of active relaxation such as riding a bicycle or practicing team sports games. Thus, we intended to create a sports hall that could be used not only by players and professional sportspeople but also by ordinary persons like us. Thanks to our own experiences gained during training sessions of handball, basketball, volleyball and through participating in sporting events and venues, we tried to create our own response to the needs of such a sport facility and its users.

As 'architects – sportspeople', we wanted to dynamize the form of the hall by giving it the shape of 'a curved ice skate'. Next, we had the idea of modularity of the rooms inside the building which, consequently, gave the possibility of creating a hall with or without seats for the audience. There were many concepts of the module project – it was the process of seeking the best solution that took us so much time. However, our patience was rewarded because, as we see it now, modularity is one of the strongest elements of our project. Unfortunately, we did not have enough time to complete our work. Although we finished the projection views, we did not manage to complete the entrance area in a satisfactory way.



Fig. 1 Front view of the sports hall II. 1. Widok hali sportowej od frontu



Fig. 2. View of entrance area II. 2. Widok strefy wejściowej

We had to adjust our observations to the competition requirements, according to which the designed hall was supposed to serve as a place to play handball and to meet the standards of utilizing a sport facility. Apart from that, an additional requirement was introduced with regard to dimensions of the designed building: the hall with audience for 200 persons –  $50 \times 40$  m; without audience –  $50 \times 30$  m. Thanks to this competition, many original sports halls were created, which constitute alternatives for the already existing schemes. With the permission of



Fig. 3. Bird's eye view of the form of the sports hall Il. 3. Bryła hali sportowej z lotu ptaka

the company ACTIV SPORT, we would like to present: chosen visualizations, projection and section of our competition project and technical and program description.

Finally, we would like to express our special thanks to Ms Dr inż. arch. Grażyna Hryncewicz-Lamber for her invaluable help in solving project problems and for being a source of creative inspiration for us.

Final results as well as the works of other awarded participants are accessible on the website: <u>http://www.activsport.pl./konkurs.php</u>

#### **Project idea**

The project assumed the designing of a sports hall that would be a brand-name product of the company ACTIV SPORT. For this purpose, we suggest the hall with rooms servicing the playing field which are within the modules  $635 \times 580 \text{ cm}$  – this allows for creating a universal object whose particular elements-modules of rooms can be located in various combinations near the playing field depending on the investor's needs. The concept of a sports hall is based on modules in two versions: basic version (without audience) and extended version (with audience). Universality of the object is emphasized by a characteristic silhouette of the hall form which results from its construction and is used in both versions. The playing field is covered with a form that is accompanied by a basic module or basic with extended and in this way the halls are created, with or without the audience.

#### **Basic version: hall without audience**

playing field + a) technical rooms, b) administrative and social rooms, c) rooms for coach and doctor, d) cloakrooms and lavatories for players, e) sports warehouse

#### Extended version: hall with audience

playing field + a) technical rooms, b) administrative and social rooms, c) rooms for coach and doctor, d) cloakrooms and lavatories for players, e) sports warehouse, f) audience, g) reception, visitors' cloakroom, café, h) administrative and social rooms.





Fig. 6. Projection of the ground floor of the sports hall with audience for 200 persons

#### Il. 6. Rzut parteru hali sportowej z widownią dla 200 osób

The concept of a hall with an audience assumed the creation of a playing field for handball with the possibility of making the facility more attractive by adding more areas for playing the most popular team games. We assume that the hall shall be used not only for sporting events, but also for training and recreation sessions; in this way it will be utilized more effectively. Enlarging the area beyond the lines of the handball playing field

The object of the hall was divided into two parts: for players and for visitors. They can function together or separately, depending on the needs. Each part is equipped with its own hallway. In the part for 60 players there are two cloakrooms with lavatories for sportsmen. One of them is accommodated for disabled persons. In the block there is also a WC for the players who are training on the field. There is a room for the coach – during contests this room functions as a place for referees. It is equipped with WC and a shower. Next to it, there is a doctor's room which also functions as the first aid/massage place. In the vicinity of this block there is a sports warehouse accessible from the playing field. In the representative part there are the following rooms: reception, cloakroom, security and monitoring room, administration, common room for employees and director's room. Additionally, there is a café planned in the hallway - such a place is usually absent from objects which serve as sports facilities and they are created in a makeshift way in places which are not really appropriate for that purpose. There is also a version without the café - then the hallway will be bigger or version with café and main entrance for visitors from the gable wall, depending on the investor's needs and the conditions of the plot of land where the hall is planned.



Fig. 7. Section of the sports hall with audience II. 7. Przekrój hali sportowej z widownia

 $(24 \times 44 \text{ m})$  by 2 metres gave the possibility of inserting 3 additional training areas for basketball. The choice of basketball was made because this is the most popular team sports game that is practiced by people after work. Within the area of the handball playing field, additional full playing fields were inserted for the games such as volleyball, indoor football and basketball. When marking lines we used the required widths and the following code of colours for team games: handball, football orange, volleyball - blue, basketball - black. When designing the facilities for 60 sportspersons and 200 visitors we took into account the relevant guidelines for designing spectacular sports facilities. The audience is planned in such a way so as to enable the spectators to observe well the whole playing field. We assumed the distance between the head tops and the line of vision = 12 cm, assuming eve position = 1.25 m and observation point F under above 0.5 m above the playing field level. The width of stairs at 82 cm and width of seats 45 cm. We suggested the glass wall oriented to the south because the western eastern light is too strong, therefore there are blind windows in side construction of the gable walls of the hall.

#### **Function**



Fig. 8. Interior of the hall from the perspective of an audience spectator II. 8. Wnętrze hali z perspektywy widza na widowni



Fig. 9. View of the playing field Il. 9. Widok boiska

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#### **Construction**

The main construction of the hall is based on frames made of glued wood – their length allows for covering the playing field and the audience. Therefore, the bearing columns of the frame do not limit the visibility from the audience. The construction from the glued wood is a characteristic element of the building of the hall which is visible from the inside and from the outside as well. The modules of the servicing rooms are contained in the simple brick construction. The roof above the servicing part is similar

#### "Gimnastykuj się nad projektem" – Ogólnopolski konkurs studencki na opracowanie koncepcji hali sportowej, organizowany przez firmę ACTIV SPORT z Poznania

Hasło "GIMNASTYKUJ SIĘ NAD PROJEKTEM" było mottem konkursu studenckiego na koncepcję hali sportowej. Ten projekt miał zachęcić studentów wydziałów architektury z całej Polski do refleksji i nowego spojrzenia na tego typu obiekty rekreacyjne.

Tematem było opracowanie koncepcji hali sportowej w dwóch wersjach; bez widowni i z widownią dla 200 osób. Konkurs organizowany był przez firmę ACTIV SPORT z Poznania, zajmującą się projektowaniem, budową i wyposażeniem hal sportowych. Niestety zwycięzcy nie wyłoniono, a drugie (najwyższe) miejsce w ogólnopolskim konkursie zajęli studenci Wydziału Architektury Politechniki Wrocławskiej;

Marta Praszczyk studentka III roku ochrony zabytków,

Artur Borkowicz student IV roku architektury i urbanistki oraz Łukasz Głogowski student III roku architektury i urbanistyki.

Key words:

# in character to the covering above the sports hall.

Założeniem projektu studentów Wydziału Architektury Politechniki Wrocławskiej było zaprojektowanie hali sportowej, która stałaby się produktem markowym firmy ACTIV SPORT. W tym celu zaproponowali halę z pomieszczeniami obsługującymi boisko sportowe mieszczącymi się w modułach 635 × 580 cm. Pozwala to na stworzenie uniwersalnego obiektu, którego poszczególne elementy moduły pomieszczeń można lokalizować w różnych kombinacjach przy boisku sportowym w zależności od potrzeb inwestora. Koncepcja hali sportowej opiera sie na modułach w dwóch wersjach: podstawowej (bez widowni) i rozszerzonej (z widownią). Uniwersalność projektu podkreśla charakterystyczna sylweta obiektu hali wynikająca z jego konstrukcji, stosowana w obydwu wersjach. Przekrycie boiska jest brył, do której dostawia się moduł podstawowy lub podstawowy z rozszerzonym, uzyskując w te sposób hale bez widowni lub z widownią.

Słowa kluczowe:

Translated by T. Setkowicz