Projet Erasmus+ Namur - Marsala

" Patrimonia "

A la découverte du patrimoine historique, architectural et culturel

Atomium

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ABSTRACT

General presentation

Origin

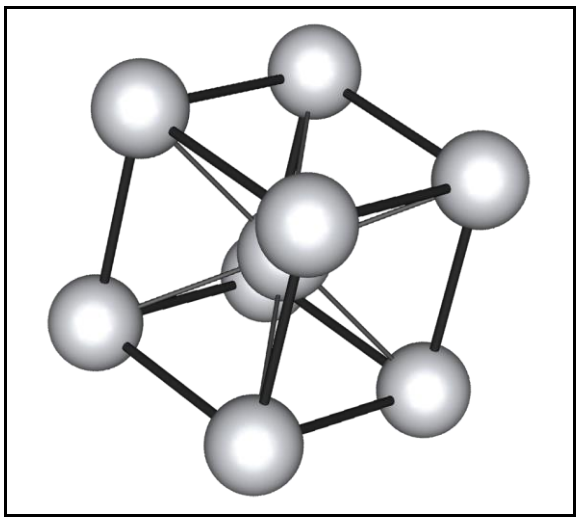
The Atomium was built on the Heysel Plateau for the 1958 Brussels World Fair.

This exhibition, the first after WWII, welcomed more than 51 nations in a climate of cold war, arms race between East and West. It was also the birth of Europe, the consumer society and the emergence of new technologies.

A true technological and industrial showcase, this exhibition offers different nations the opportunity to showcase their economic, industrial, political, social and cultural progress. This event is an exchange area around a common goal, from transport to agriculture, peace and human rights respect.

Belgium, the host country, occupied almost half of the Heysel site. Some 80 pavilions invited the public to discover the Belgian know-how thanks to the represented companies, sciences, culture, sport, fashion and Belgian gastronomy.

That year, science was in the limelight. Indeed, everyone was convinced that science would solve all problems and improve life. It was necessary to find a way to magnify the atom and its applications through an exceptional pavilion. André Waterkeyn remarks that in nature, iron atoms are organized according to a regular cubic structure that can be easily reproduced on the scale of a building. He thus realizes a crystal of 9 iron atoms enlarged 165 billion times which gives a cube shaped structure on its tip.



This is how Belgium offered her visitors an unmissable monument: the Atomium.

The Atomium was to be dismantled after the exhibition but its popularity and success have made it one of the emblems of Brussels and Belgium.

It was and will remain forever a landmark monument of this period of history, which knew a great scientific and technological advance. This monument halfway between sculpture and architecture is a real technical and architectural feat.
There are similarities with the Eiffel Tower, emblematic monument of France this time, built on the occasion of the 1889Universal Exhibition which was also a technical performance and was kept for the same reason as the Atomium: its popularity. Thanks to it, it is possible to advance the idea that the technical and architectural progress that men make every day guarantees a better world and accounts for our History as well as the genius of our era.

Design

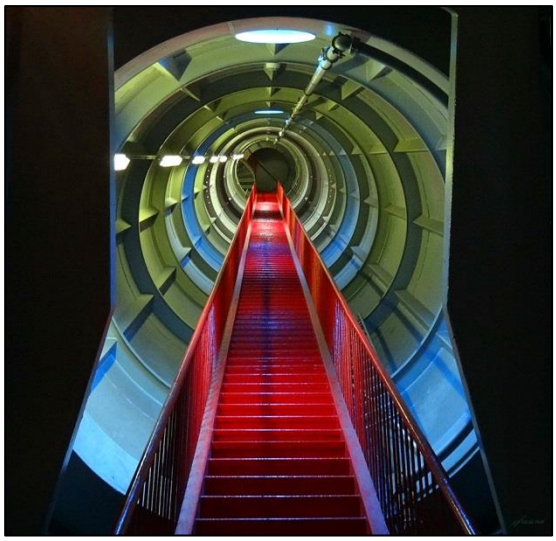
Engineer André Waterkeyn (1917-2005) created the Atomium. The spheres were arranged by architects André and Jean Polak.
This monument had to be original and turned towards the future, that is why Mr Waterkeyn had the idea to represent the infinitely small into the very large by choosing as symbol an iron crystal 165 billion times magnified, thus paying tribute the peaceful use of atomic energy and the flourishing Belgian steel industry.

This building is halfway between a sculpture and an architectural monument. We can talk about futuristic style for the time.

When we look at the Atomium and its surroundings we notice that it seems to come out of nowhere, that it is isolated from the rest of the city. Indeed, in 1958, the Heysel plateau was composed of parks and cultures and offered a clear space on the edge of town that allowed the building of a new city, Expo 58, without feeling cramped.
With the exception of the American Pavilion Theater, the Benelux Gate and the Art Deco 1935Palaces, the other buildings of Expo 58 have disappeared. Hence this feeling of amazing isolation for a building of such magnitude.

Presentation

This incredible building represents the elementary mesh, the iron crystal - and not a molecule or an atom - magnified 165 billion times and represented by an assembly of steel and aluminum composed of 9 spheres connected to each other by 20 tubes. Inside, 80 steps to climb, 186 to climb down, 4 escalators, a lift that was the fastest in Europe in 1958 and three support pillars, all measuring more than 100 m in height.



Originally intended to stay only the 6 months of the exhibition, this extraordinary construction aged over the years and required a major renovation. The Atomium was totally renovated between 2004 and 2006, both in terms of external cladding, originally made of aluminum and replaced by stainless steel, and the rebuilding of the areas of the various exhibition and reception rooms, shops and restaurant. This renovation continued with the building of an outdoor pavilion housing a boutique and the ticket office. The public area around the Atomium has been completely redesigned to make it more user-friendly and accessible to everyone.

Of its 9 spheres, six are open to the public.
They host a permanent exhibition, temporary exhibitions and a restaurant. Some are available for rent for the organization of events.

The Atomium in a few figures:

- *Overall height: 102 m* - *9 spheres* - *Diameter of the spheres: 18 m* - *Masse d'une sphère (1958): 250 tonnes* - *20 tubes* - *Diameter of the tubes: 3,30 m* - *Length of edged tubes: 29 m* - *Length of the diagonal tubes: 23 m*	- *80 steps to climb* - *186 steps to climb down* - *4 escalators 29 m long* - *Speed of the lift: 18km/h* - *Base pavilion diameter: 26 m* - *Total mass (1958): 2400 tonnes* - *Total mass after 2006: 2500 tonnes*