

Five hundred years old and more beautiful than ever: The Cathedral of Our Lady in Antwerp shines in a new light

With its art treasures and architecture, the Cathedral of Our Lady in Antwerp attracts around 360,000 visitors a year. Since autumn 2018 the masterpiece of Flemish Brabant architecture has been showcased with new illumination. The details of the rich ornamentation and tracery, the magnificent towers, pinnacles, gables, cornices and portals can now also be seen at night. At the same time, the cathedral appears as a brilliant highlight from afar on Antwerp's skyline. Lighting designer Susanna Antico used several hundred luminaires for her lighting concept – and a large proportion of them were supplied by WE-EF.

Cathedrals instead of mountains

With the chanson "Le plat pays", Belgian singer Jacques Brel wrote a famous lyrical homage to his native Belgium. In addition to thundering waves and the low-hanging sky, Brel sings about the cathedrals as the only mountains in the flat country because their towers are more visible than anything else in this region. They rise above the plain, serve as landmarks and are the pride of the towns and cities.

A prominent example of this is the "Onze-Lieve-Vrouwekathedraal" (Cathedral of Our Lady) in Antwerp. The north tower of the seven-nave church building is 123 metres high and a UNESCO world cultural heritage site. The cathedral can be seen from almost everywhere in the city and its silhouette dominates the skyline. In view of the immense importance of the building, the 500th anniversary of the tower's completion was duly celebrated in September 2018. What's more, to mark this milestone birthday the cathedral was given impressive new illumination.

A master plan and a competition

In 2012, the city of Antwerp laid down design and technical directives for public lighting in a master plan. Lighting is being successively renewed in many areas in accordance with these guidelines. The Cathedral of Our Lady is part of this long-term modernisation process. The guidelines of the lighting master plan also comprised the central criteria of the competition launched by the city for the illumination of the cathedral. The winning design was submitted by Susanna Antico. The basic ideas in the lighting designer's concept are fully in keeping with the master plan.

Less energy, stray light and glare

"The previous projectors featured high-pressure sodium lamps. They have been replaced by modern LED luminaires. Although the number of luminaires has increased significantly, the energy consumption of the entire system has been reduced by around 40 per cent," Susanna Antico explained. The efficiency requirements were easily met, and there have also been drastic improvements in the lighting quality. A key factor here was the repositioning of numerous projectors that had previously been installed on the surrounding roofs and facades and from which the light hit the building from a great distance in some cases.

"We have now brought many luminaires very close to the cathedral. This means lower luminous flux is sufficient and we achieve a much more precise lighting effect. Stray light is greatly reduced and glare is prevented – despite the many different angles from which the cathedral can be viewed," she said.

Challenging tasks, versatile lighting technology

Although installing the luminaires very close to the cathedral was a brilliant idea, the practical implementation presented challenges. On the one hand, work had to be carried out at considerable heights and with special safety measures; furthermore, only minimal interference in the historic building fabric was permitted and the Monument's Department demanded that luminaires installed on the Cathedral be quasi invisible.

As a result, many restrictions applied to the installation of the luminaires. "Nonetheless, in order to achieve the precise lighting effects desired, the great variety offered by the FLC projector series from WE-EF was very useful," Susanna Antico noted. In this project, large numbers of FLC230, FLC240, FLC260 and FLC141 projectors were installed.

The projectors are used with different lumen packages and light distributions from wide to extremely narrow beam. In some cases, they are fitted with additional flood or wall wash lenses. As a result, all areas of the cathedral as well as the many details and decorative elements are clearly illuminated. The considerable asymmetry of the building – the crossing tower is only half as high as the north tower – presented a particular challenge.

"Despite the very different dimensions, it was important to achieve harmonious light distribution – whether you're looking up directly from the base of the cathedral or seeing it from some distance away," Susanna Antico explained. She added that "throughout the project, but especially during the fine tuning of the luminaires and the features selected, we really appreciated the competent and prompt support provided by WE-EF and the Belgian WE-EF distributor Axioma."

Complex lighting solution

The complexity of this lighting project quickly becomes apparent from the lighting designer's detailed explanation of the solutions for the individual sections of the building. The extremely narrow distributions for the gilded tower clocks, the illumination highlighting the delicate columns of the bell chamber, the gentle shimmer on the dome of the crossing tower that contrasts greatly in colour and shape with the rest of the church, and the precise tracing of the buttresses on the naves and apse are just a few examples.

Many of these pillars as well as the portals with their pointed arches, columns and sculptures are illuminated with WE-EF inground luminaires. ETC130-GB and ETC140-GB are installed in the ground around the cathedral very close to the façade. Here, too, the WE-EF range offered the right lumen packages and light distributions for every lighting task. Furthermore, being gimbaled enabled the beam direction to be flexibly aligned around two axes.

Digital light control

The connection of all luminaires to a DMX light management system offers numerous options for showcasing the cathedral. WE-EF luminaires have the driver interface needed for this, and they each come with their own DMX address. Due to the large number of luminaires, groups were formed that can be individually controlled, i.e., dimmed and switched. In addition, pre-programmed lighting scenarios were designed and activated. The colour temperature is a constant 3,000 K. The warm light harmonises perfectly with the sandstone of the façade.



WE-EF LEUCHTEN GmbH

Toepinger Strasse 16

D-29646 Bispingen

Germany

Tel +49 5194 909 0

info.germany@we-ef.com

www.we-ef.com

Conclusion

A harmonious lighting solution has been implemented for Antwerp's landmark. In the evening and at night many architectural details of the cathedral are now clearly visible and are depicted much more vividly. The look of the church at night is now more closely integrated with the surrounding streets, alleys and squares. For this, Susanna Antico also planned and realised new street and façade lighting. In the overall ensemble, finely balanced light levels that define plausible hierarchies, and warm and cool white light enter an exciting dialogue. The high quality of the new lighting for the cathedral and the surrounding district has already received official recognition with an IALD Award of Excellence 2019.

Project: Illumination of the Cathedral of Our Lady in Antwerp

Client: City of Antwerp

Lighting Design: Susanna Antico Lighting Design Studio, Milan, in collaboration with arch. Gad Giladi, Lighting Designer and with input from arch. Helena Gentili, Lighting Designer, arch. George Balan, Lighting Designer and Mathieu Cieters, Graphic Designer

WE-EF distributor: Axioma, Waregem

Electrical Engineering and Project Management: Fluvius (formerly Eandis)

Electric installation: Maes Industriële Verlichting, Elektro Zwijsen, Verstraete Enterprises

October 2019 / Reprint free of charge, file copy requested / Further information:

WE-EF LEUCHTEN GmbH

Robert Diedrich

Head of Marketing

Toepinger Straße 16

D-29646 Bispingen

Tel +49 5194 909 146

Fax +49 5194 909 299

r.diedrich@we-ef.com

www.we-ef.com

AR-PR

Andrea Rayhrer

Kommunikation & Public Relations

Alexanderstraße 126

D-70180 Stuttgart

Tel +49 711 62007838

Mobile +49 163 5001978

andrea.rayhrer@ar-pr.de

www.ar-pr.de

The Cathedral of Our Lady in Antwerp



01 Since autumn 2018 the Cathedral of Our Lady in Antwerp has been showcased with new illumination. The north tower of the seven-nave church building is 123 metres high and a UNESCO world cultural heritage site.
Photo: Serge Brison for WE-EF



02 The cathedral can be seen from almost everywhere in the city and its silhouette dominates the skyline.
Photo: Serge Brison for WE-EF



03 In the evening and at night many architectural details of the cathedral are clearly visible and are depicted much more vividly. 04 Portals and many pillars are illuminated with WE-EF inground luminaires. Photos: Serge Brison for WE-EF



05 Although the number of luminaires has increased significantly compared to the previous solution, the energy consumption of the entire system has been reduced by around 40 per cent. Photo: Serge Brison for WE-EF



06 Many restrictions applied to the installation of the luminaires. "Nonetheless, in order achieve the precise lighting effects desired, the great variety offered by the FLC projector series from WE-EF was very useful," Susanna Antico noted.
Photo: Serge Brison for WE-EF



07 For precise illumination of architectural details, large numbers of FLC230, FLC240, FLC260 and FLC141 projectors were installed. Photo: Serge Brison for WE-EF

The Cathedral of Our Lady in Antwerp



08 The projectors are used with different lumen packages and light distributions from wide to extremely narrow beam. In some cases, they are fitted with additional flood or wall wash lenses. Photo: © Fluvius Belgium (formerly Eandis)



09 ETC130-GB and ETC140-GB are installed in the ground around the cathedral very close to the façade. Here, too, the WE-EF range offered the right lumen packages and light distributions for every lighting task. Photo: © Fluvius Belgium (formerly Eandis)



10 Although installing the luminaires very close to the cathedral was a brilliant idea, the practical implementation presented challenges. Only minimal interference in the historic building fabric was permitted. Photo: Serge Brison for WE-EF



11 Work had to be carried out at considerable heights... Photo: © Fluvius Belgium (formerly Eandis)



12 ...and with special safety measures. Photo: © Fluvius Belgium (formerly Eandis)



13 In view of the immense importance of the building, the 500th anniversary of the tower's completion was duly celebrated in September 2018. What's more, to mark this milestone birthday the cathedral was given impressive new illumination. Photo: © City of Antwerp (Belgium) – Thomas Geuens