

Antwerp Coordination Center: A characteristically “generous frame” by KAAAN Architecten

Located on the west bank of the river Scheldt, 25km north of the city center of Antwerp and edging towards the Belgian-Dutch border, the Antwerp Coordination Center (ACC) is to become a new beacon for ships entering the Flemish harbour. Gathering the various specialised units of port operations under one roof, it integrates and coordinates the manifold authorities and services upkeeping port activity into one holistic ‘nautical chain operation’. Successively, the building becomes the principal figure coordinating and navigating ships in and out of the port and harbour. It also forms part of a larger urban redevelopment plan, where the building lends itself to the regeneration of the ecological landscape of the ensemble of plateaus it sits on. Selected by the port authority of Antwerp, KAAAN Architecten’s design is set to demarcate, reorganise, and continuously supervise the entrance to Antwerp’s port.

It is positioned on the plateau in-between the grand 500m long twinned Zandvliet lock (ZAS) and Berendrecht lock (BES), from where it overlooks and navigates the port on a 24-hour basis. Due to the necessity of uninterrupted operation, the design intention is to predominantly be practical, comfortable for its users, and resilient enough to endure and maintain itself as permanent director of the locks. In this, its annually energy neutral design puts forward a building which is to last and naturally adapt itself to the brute industrial environment it is to facilitate.

The port opens the way to the second largest harbour of Europe, part of which stretches all the way along the right banks of the Scheldt from Antwerp up to the border with the Netherlands. Around 15,000 ships per year navigate in and out of it, and need also to navigate past the difficult Western Scheldt which is the effective lifeline of the harbour. Vessel Travel Services (VTS, VHF and radar), together with also traffic controllers, pilots, and the available port services, guide the boats in and out from the North Sea to the quays, and offer services like towing facilities, freight handling, and lockage and mooring of locks. The ACC will cluster these manifold port services into one entity, optimising the coordination between its parts. This is supported by clear 360-degree unobstructed views and a considerable display and supply of information through which the building supervises port activity.

Central upon the plateau, the eight-storey rectangular building lies between the locks, parallel to their long sides and the flow of the river. Apart from the overview, this central position also enables a clear recognition of the control tower itself. It is distinguished by a spacious but prominent load-bearing framework, creating large openings within bold, defined members. At night, as the building illuminates from within, this open framework inverts visually, and the building remains present in turn as a form of lighthouse.

Beyond being architectural and defining a practical layout, the structure is also the foundation of a strictly modular design. This enables an adaptable volume within which voids are created to form internal terraces and loggias, and at the same time shape the building in relation to the necessary sightlines. By being modular it allows for future spatial reconfiguration and can remain optimally adept to its role irrespective of any alterations in its surroundings.

As additional facilities it houses a training center, a relaxation area for staff, and a visitors’ circuit. Port visitors can take tours around the building, with interactive information stations and observation platforms. Highlights include a discreet glass bridge from which the double-height, highly equipped operations room can be overlooked. The tour then culminates at the panorama terrace, a final plateau from which visitors can view the vast majority of the harbour and on some clear days the city center of Antwerp.

For the design and construction of the port building for ACC, KAAAN Architecten is part of the team brought together by Van Roey Contracting, supported in part by Van Roey Group construction company in Belgium. Additional partners include SVR-Architects, based in Antwerp, and Sweco Engineering Consultancy’s offices in Belgium, the Netherlands, and the UK.