
Grundfos plug-and-pump solution in innovate building project by the North Sea

IN THE MIDDLE OF ROUGH AND BEAUTIFUL WEST JUTLAND – CLOSE TO DUNE PLANTATION, NATURE RESERVE, FJORD, SEA AND 60 KM OF SANDY BEACH STRETCHING FROM BLÅVANDSHUK TO HVIDE SANDE – THE NEW SEAWEST HOLIDAY COMPLEX IN NR. NEBEL, DENMARK BOASTS 300 ARCHITECT-DESIGNED HOLIDAY HOMES INCLUDING A LARGE MAIN BUILDING HOUSING ADMINISTRATION AND AN ADVENTURE CENTRE WITH SUBTROPICAL SWIMMING POOLS, RESTAURANTS, WELLNESS, FITNESS AND OTHER LEISURE FACILITIES.

IN LINE WITH THE REST OF THE ULTRA-MODERN BUILDING CONSTRUCTIONS AT SEAWEST, ADVANCED GRUNDFOS PLUG-AND-PUMP DRAINAGE SYSTEMS ARE INSTALLED TO SECURE THE MAIN BUILDING AGAINST PENETRATION OF GROUNDWATER AND MOISTURE FROM THE UNDERGROUND.

THE SITUATION

Providing harmony between architecture and surrounding landscape, and yet giving the main building at SeaWest, “the Transparent Dune”, a truly unique and eye-catching expression were the ultimate design goals for the architects. The outcome is a sand-coloured glass building spiralling from 4 metres below to 16 metres above ground level. As the groundwater level in this particular area is extremely high, just 1.5 metres below ground level, the building will literally be floating in water, if the groundwater level is not lowered by means of effective outer and inner drainage systems.

TOPIC:

Innovative Grundfos drainage solutions add substantial value to the prestigious SeaWest holiday complex

LOCATION:

Nr. Nebel, West Jutland, Denmark

COMPANY:

Grundfos

The consulting engineers and the building owner opted for the Grundfos plug-and-pump solution for drainage of the main building to avoid the voluminous task of designing and specifying drainage pit, auto coupling, pump and control unit as individual components.

Another decisive factor in incorporating Grundfos solutions into this prestigious building project was the availability of online technical information and documentation, which is used by the consulting engineers in connection with project design, management and updating of drawings.

THE GRUNDFOS SOLUTION

The building is constructed with a watertight outer shell at the bottom, and further protected against penetration of groundwater by a Grundfos plug-and-pump drainage system consisting of an Ø800x1500 drainage pit, a submersible Unilift AP35B pump, drain pipes, cables and other accessories.

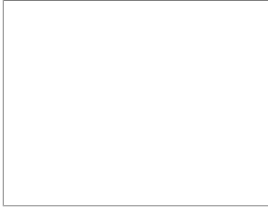
Likewise, an inner plug-and-pump drainage system driven by a Unilift KP250 pump is installed to double-protect the inside of the building against both penetration of groundwater and water from the subtropical swimming pools and other wet installations in the building.

THE OUTCOME

The turnkey philosophy of the Grundfos drainage pits greatly facilitates the design phase and reduces possible fault parameters in connection with design, specification and subsequent installation of the pump systems.

With the Unilift pumps in action, “The Transparent Dune” will be effectively protected against damage from water intrusion and overflow from the wet installations.

Related Products



UNILIFT AP
Vertical, single-stage, submersible centrifugal pumps



UNILIFT KP
Single-stage submersible drainage pump for pumping drain water and grey wastewater