



Project Case Study

Large dvLED Installation

Remote Towers Centre, Norway

Project Details

- **Project name**
Remote Towers Centre
- **Duration total project**
08/15-10/20
- **Client**
Avinor Air Navigation
Services AS
- **Integrator/project manager**
Kongsberg Defence &
Aerospace
- **Mounting**
System X from
B-Tech AV Mounts
- **Mounting supplier**
Solvo-Tech AS
- **Screens**
Samsung 65" QM65R



The Challenge

Aviation is vital in a country like Norway, where distances are large, tourism is growing, and businesses are internationally focused. As many of Norway's control towers are due for refurbishment or total replacement, the change to remote towers provides a tremendous opportunity to increase efficiency, reduce costs, and train new personnel quicker. At the same time, accuracy and safety always remain the top priority. Therefore, the solution must provide the same or better performance than a traditional physical tower service located at each airport.

To emulate the same "out of the window" view from the towers to the digital screens, the right mounting solution had to be selected. As Jens Petter Duestad, Head of Operations of Remote Tower Centre Bodø, stated, "It is of great importance that the AV mounting solution provides consistent curvature and seamless transition between each and every screen. It must be robust and steady enough to endure cleaning and enable replacement of individual screens swiftly". On top of that, he emphasized the importance of a future-oriented solution, "We also demand the AV mounting system to be flexible in screen height and curvature since we are still in an experimental phase. Larger and more complex airports, implemented later in the Remote Tower Programme, might make other demands".



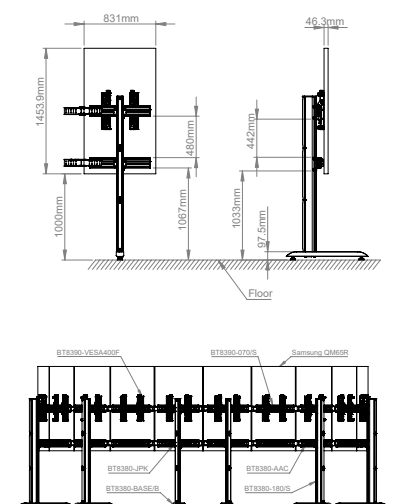
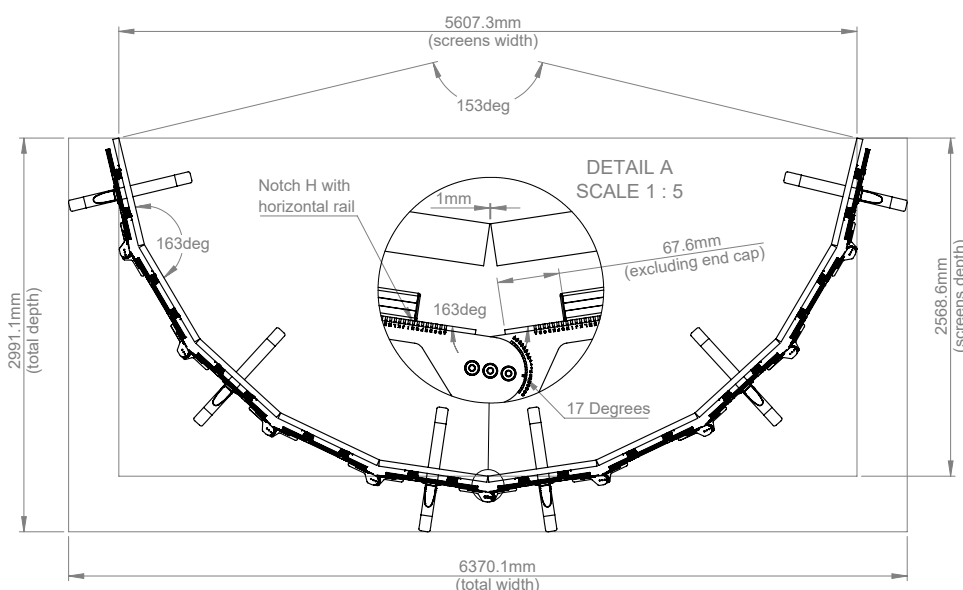
The Solution

Two centuries of innovation, transformation, and delivering results have made Kongsberg a recognised global technology leader and a leading supplier in defence, surveillance, space, aerostructures, and MRO. Their experience in complex missions and their highly skilled team made them the perfect fit for the challenge in this project. They developed an advanced solution with extreme high-resolution camera sensors, capable of capturing details at the accuracy of the human eye and sometimes even better using advanced features such as infrared cameras.

To provide the operator with a realistic viewpoint of the airport tower they are controlling; each module would be installed with a 10-screen curved videowall. Ole Preben Tenold, Service manager Aviation & Security at Kongsberg, recognized early on the advantages that B-Tech products would provide in this case and personally supervised the physical installation of the video walls. According to him, the B-Tech products were chosen for their “robustness, precision alignment to achieve a smooth videowall curve, ease of install and aesthetic appearance.”

Using the incredibly versatile System X range, B-Tech’s technical team developed a mounting solution that perfectly fit the client’s requirements. The result was a robust yet elegant curved design, easily installed and able to firmly secure ten Samsung 65” QM65R screens in portrait orientation. Micro-Adjustment throughout the stand allowed screens to be perfectly aligned and the content displayed correctly. Furthermore, each unit provides adjustment of screen height and curvature and easy maintenance or replacement of screens. Norwegian B-Tech distributor Solvo-Tech AS acted as an intermediary to get the B-Tech goods approved and supplied, counting a volume close to 20m3 and a shipping weight of near 5 tons.

All parts of the video walls are standard off-the-shelf components from B-Tech, using our adjustable connector to create a smooth curve, allowing an angle of up to 45 degrees. Our technical team works out how and where the connector should be mounted to create the desired curve angle. Technical drawings are provided from B-Tech to everyone involved with the design and planning of the project and the installer on site.



The Result

Since the Remote Towers Centre opening in October 2020, there are already four towers successfully operating, and eleven more will be rolled out by the end of 2022.

The technological innovation power of Kongsberg made this project a success, providing improved safety and performance while at the same time offering unique flexibility through scalability. B-Tech AV mounts and Solvo-Tech AS are therefore proud that their mounting solutions met the project's high demands in terms of flexibility and reliability.

The project was nominated as a finalist for an InAVation Award in the "Best Control Room" project category 2021.

