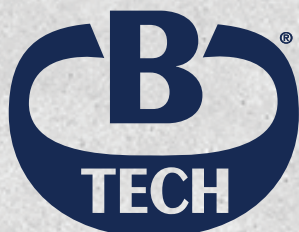


EST. 1972



B-TECH AV MOUNTS

B-TECH AV MOUNTS

PROFESSIONAL AUDIO VISUAL MOUNTING SOLUTIONS

CASE STUDY: REMOTE TOWERS CENTRE



CASE STUDY: REMOTE TOWERS CENTRE, BODØ, NORWAY



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REMOTE TOWERS CENTRE BODØ, NORWAY



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**INAVATION
AWARDS**
PROJECT FINALIST
2021

B-Tech AV Mounts are proud to have supplied a key component for the world's largest Remote Towers Centre project, in Bodø, Norway. This exciting project, executed by global technology leader Kongsberg Defence & Aerospace for Norway's national navigation service provider Avinor, is at the forefront of air navigation development. Fifteen modules, each complete with a 360° "out-of-the-window" display, allow the remote management of airport traffic from multiple airports from a single, remote location. This high-tech environment naturally demands the most reliable AV hardware and so B-Tech's System X videowall stands were selected for the project and supplied to project manager and integrator Kongsberg, by Norwegian distributor Solvo-Tech AS.

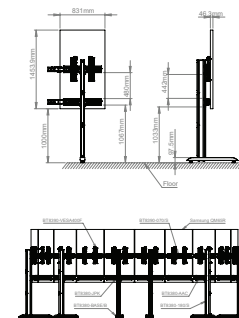
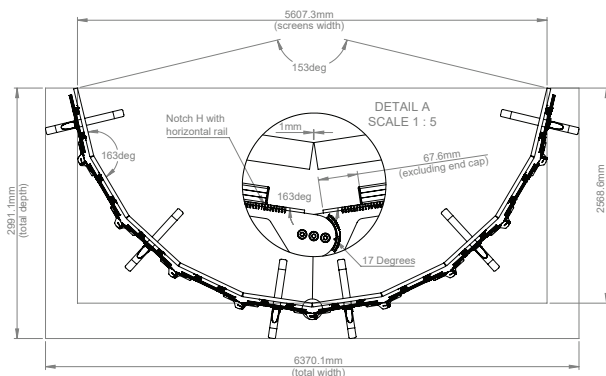


Avinor Flysikring / Catchlight Fotostudio

PROJECT DETAILS

- Project Name**
Remote Towers Centre - Bodø Norway
- Total Project Duration (concept to opening)**
August 2015 - October 2020
- Client**
Avinor Air Navigation Services AS
www.avinor.no
- Integrator/Project Manager**
Kongsberg Defence & Aerospace
- Mounting System Manufacturer**
System X BT8373 stands by
B-Tech AV Mounts
See final page for full details
- Mounting System Supplier**
Solvo-Tech AS www.solvotech.no
- Displays**
Samsung 65" QM65R

FUTURE-PROOF VIDEOWALL MOUNTING



B-Tech AV Mounts

All parts used to assemble the videowall structures are standard off-the-shelf B-Tech components, including the adjustable connector used to create the smooth curve. B-Tech's technical team calculated how and where the connector should be mounted to create the desired curve angle. Technical drawings were provided by B-Tech to aid the design and planning of the project and the installers doing the on-site assembly.



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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 were due for refurbishment or total replacement, replacing physical towers with a remotely controlled system provided 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.

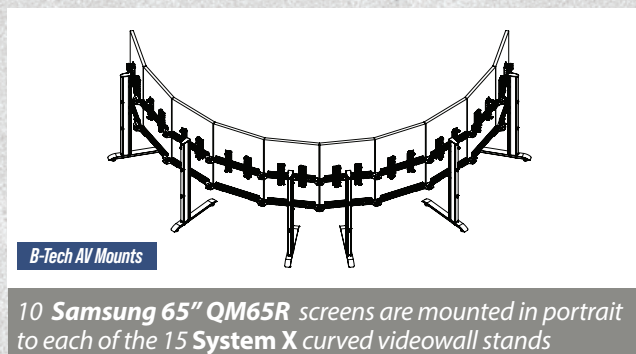
To provide the operator with a realistic viewpoint of the airport tower they are controlling, each module would be installed with a 10-screen curved videowall. Ole Preben Tenold, Service Manager for Aviation & Security at Kongsberg, recognised early on the

advantages that B-Tech products would provide and personally supervised the physical installation of the videowalls. As he states, "the B-Tech products were chosen for their robustness,



Avinor Flysikring / Catchlight Fotostudio

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. B-Tech's Norwegian 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.



B-Tech AV Mounts

10 Samsung 65" QM65R screens are mounted in portrait to each of the 15 System X curved videowall stands

SYSTEM FOR A PIONEERING AVIATION PROJECT



Avinor Flysikring / Catchlight Fotostudio

THE RESULT

Since the opening of The Remote Towers Centre in October 2020, four remote towers have begun operating successfully, with eleven more to 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.

"Being able to quickly specify and supply mounting systems that met the project's high demands for flexibility and reliability, was precisely what our System X Range was designed to do, so it is fantastic to see it being utilised so successfully in this prestigious project" -Nick Spencer, Director of Marketing & Communications for B-Tech AV Mounts.

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

THE MOUNTING SOLUTION

SYSTEM X

BT8373 UNIVERSAL CURVED VIDEOWALL STAND

FEATURES

- Configurable mounting solution available to order to your requirements, from stock - see www.btechavmounts.com/systemx-configurator
- Universal design suitable for all videowall screens
- High-end aesthetic quality
- Easy to use angle adjustment - set before or after installation
- Integrated angle guides eliminate the need to measure required angles
- Integrated rail mounting guides ensure the join position is consistent throughout the installation without the need to measure
- Tool-less micro-adjustments for seamless screen alignment
- Also available with pop-out interface arms
- Heavy duty freestanding base allows columns to be individually assembled and positioned, for an easy installation
- Supplied with adjustable levelling feet to accommodate uneven floor surfaces
- Integrated cable management
- Universal screen position spacer to speed up the installation process
- Safety screws help prevent unauthorised removal of screens
- Simple installation with all mounting hardware included



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Club du
Digital
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AFDAE

Singapore
Manufacturing
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Designed & Engineered in the UK

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