

CASE STUDY MUSIKTHEATER

Musiktheater Linz: State-of-the-art stage technology Automatic backdrop and scenery warehouse



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ESA-theatre technology

- *Server cabinet with servers for the warehouse management software, barcode reading system and SQL database*
- *Siemens S7 controller status displays and alarm management with WinCC*
- *86 Lenze servodrives for scenery & backdrop warehouse, networked with Profibus*
- *Two cable hoists with individual drives, implemented with motion control and SSI*
- *Absolute barcode encoders*
- *Mobile panel with wireless connection, including protective functionality*
- *Full remote maintenance access: 1*

HIGHLIGHTS

- Allocation of storage resources to performances
- Stock removal of performances or individual storage resources
- Storage resource management with list of contents
- Status information with remaining time display
- Weight monitoring in the scenery warehouse
- Preprogrammed provisioning schedules
- Chaotic placement in storage with automatic storage resource identification by barcode
- Pre-sorting of performances in order to achieve time-optimised removal from storage
- Fail-safe data management on SQL I Server
- Simultaneous access to the software from stage and stage manager's office

Automation and systems installation for the backdrop and scenery warehouses

On behalf of ICM Airport Technics GmbH - a subsidiary of Unitechnik -ESA Wolfers implemented the automation and systems installation for the backdrop and scenery warehouses. The warehouse management software builds on experience from the modular ESAweight system in the field of weighing and metering. In very little time, ESAtheater was developed as a tailor-made product for theatres.

In the backdrop warehouse, the stage backdrops (part of the stage set) are stored in a total of 28 backdrop trays with a length of 17.1 metres. The 15 levels are stopped at by a cable hoist. With a telescopic arm, the cable hoist lays down the backdrop trays in the warehouse or picks them up and transfers them to the extraction trolley.

Parts for the decoration of productions are stored in the scenery warehouse. There a total of 55 scenery containers for this purpose, each measuring 8.2m x 2.4m x 2.2m. The scenery is stored in 5 levels. A cable hoist transports the scenery containers to level 0, where an input/output station is located.

Depending on the scope, a number of backdrop trays and scenery containers are filled with contents and designated unambiguously in ESAtheater. They can then be allocated to a performance. Removal from storage can be started immediately or at a predefined time. Placement in storage takes place according to a random principle, after checking weight and shape.



WE FOCUS ON SATISFIED CUSTOMERS:

„No props or scenery, no performance - consequently, 100% availability of the warehouse is the first and foremost priority. With ESA, we have an extremely competent partner, who has supplied a highly available and well-thought-out automation system. ESA's 24/7 hotline with qualified employees is particularly noteworthy. Dipl.-Ing. (FH) Johannes Böhner