

# Design Win EME006

## Problem

Today's Stages in Theaters and Concert Halls incorporate a lot of different motion actuation. This comprises heavy loads for large Lift Platforms with more than 30 tons, Stage Scenery, Curtains, Lighting with about 8 tons. Various Motion Technologies such as Hydraulics and Electromechanics need to be used. There are special requirements for quiet and safe operation.

Project: Theater

## Solution

Hybrid Solution based on Electromechanical (Compax3) and Hydraulic Drives (C3F)

- Up-to 180 different Actuators with
- 110 Servo Drives – Compax3
  - 20 Servo Drives with more than 80 amps – Compax3/890
  - 50 Hydraulic Drives - C3F

- Technology Functions range from
- Simple Motion Control Profiling – T11
  - Free Programming (IEC61131-3) – T30
  - Electronic CAM – T40

Connectivity via Field Bus CANopen / PC Based Control

Market: Entertainment Industry



## Stage Automation and Control



### Key Success Factors

- **Hybrid Solution Capability based on Hydraulics and Electromechanics**
- **Single Control Platform for both Technologies (applying the same Technology Functions, and Communications)**
- **Single Software Tool with advanced Optimization Capabilities**
- **High Servo Loop update rate for both Technologies (safety relevant operation)**

### Customer Value

- **Single Controller Platform for Motion Control and Communication simplifies the need for additional training and support**
- **Single Source Supplier reduces time and cost**
- **No additional equipment for safe Motion Control operation required**

### Products: Compax3, C3F

Market: Entertainment Industry  
Customer: Confidential  
Competition: Various  
Sales: Parker Hannifin PLC  
Contact: Robert-Bosch-Str. 22  
77656 Offenburg, Germany  
e-mail: [sales.hauser@parker.com](mailto:sales.hauser@parker.com)  
☎ +49 (0)781 509 0