

# MECHANICAL DESIGN

Working with artists, directors, producers, architects, and theater consultants, EPS has proven our team's expertise in creating complex mechanical systems for any market.



# CONCEPTUAL IDEAS TO REALITY

- Translating the creative team's vision into conceptual models that help the client visualize the end result.
- Taking the design from concept to fabrication-ready drawing packages.

# SIMPLE, RELIABLE, & EASY TO MAINTAIN

- Working with clients to develop an elegant solution that takes into account client preferences for maintenance and operation, while realizing the creative team's vision.
- Collaborating with both the client and other vendors to ensure designs allow for easy construction and installation, while providing a reliable and low maintenance project.

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# **CAPABILITIES**

- Technical Direction
- Project Management
- Conceptual Design
- Mechanical Design
- Facility Impact Studies
- Motion Studies

- BIM Management
- 3D Modeling
- Static & Dynamic Calculations and Simulations
- Power Estimates
- Horsepower Calculations

- Technical Consulting
- Fabrication Drawings
- Show System Integration
- Technical Writing
- Rigging Design

- On Site Supervision and Installation Support
- Training
- Maintenance
- Inspections







# **ROYAL CARIBBEAN'S AQUATHEATER**

Utilizing EPS' experience with water shows and theater rigging, Royal Caribbean engaged EPS as one of the main consultants in the creation of the brand's "AquaTheater," blending diving acrobatics with high wire stunts. Working on the open deck of the cruise ship, EPS devised a rigging system together with the project team to support performer flying as well as carrying the heavy load of a one-of-a-kind special effect: the Aquatic Catherine Wheel. Designed by EPS to spurt water in a colorful twirling array like the traditional catherine wheel firework, this 400-pound show element is safely hoisted from the back of the audience to high over the stage in one of the AguaTheater's productions onboard Oasis of the Seas.

Onboard Oasis of the Seas. Harmony of the Seas, Symphony of the Seas

**Year Opened:** 

Rigging & Inspections Mechanical Design Spectaculars Performer Flying

Royal Caribbean International



Established in 2007 in the entertainment capital of Las Vegas, EPS is comprised of a talented team of mechanical and electrical designers, engineers, project managers, artists, technicians, riggers, and installers that are ready to work alongside our partners to take on any challenge.

CONTACT US TODAY TO LEARN HOW EPS SOLVES MECHANICAL DESIGN