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Princess Cruises Chooses Robe for Groundbreaking Sun Princess ship - First in New Sphere Class

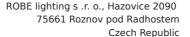
Products Involved

FORTE® FS ESPRITE® iPAINTE® PAINTE® iTetra2™ iSpiider® Spiider® iBeam 350™ LEDBeam 350™ LEDBeam 150™ Spikie® T11 Profile™ iBar 15™ RoboSpot™

Princess Cruises has chosen Robe Lighting for its brand-new Sun Princess, the latest addition to the Princess fleet.

With a capacity of 5,900, the Sun Princess boasts brand-new entertainment venues and innovative concepts. The ship has recently been equipped with a comprehensive Robe Lighting package, including 4 x FORTE FSs, 4 x RoboSpot systems, 27 x ESPRITES, 76 x PAINTES, 22 x Spiider LED wash beams, 24 x LEDBeam 350s, 43 x LEDBeam 150s, 57 x Spikie+s and 14 x T11 Profiles with gobo modules, plus 21 x ParFect 150s, 42 x Tetra1s, 30 x iPAINTES, 13 x iSpiiders, 17 x iBeam 350s, 5x iTetra2s and 19 x iBar 15s.

The Sun Princess, the most impressive and luxurious "Love Boat" ever created, introduces an innovative ship platform designed exclusively for the world's most iconic cruise brand. Mesmerizing shows and engaging activities abound across the ship, highlighted by transformational entertainment venues. **The Princess Arena**, the most technologically advanced Princess Theater design, offers three configurations to maximize sightlines and deliver a truly captivating experience. **The Dome**, featuring a pool by sunlight and a stage for shows by starlight, is a glass-enclosed space inspired by the hills of Santorini. It showcases acrobatic performances created in partnership with the renowned Cirque Éloize. **Princess Live!**, an intimate lounge, offers non-stop entertainment throughout the day and night with trivia, game shows, the daily Wake Show, live concerts, and late-night comedy. **The Piazza**, the ship's hub, spans three decks and features outward-facing suspended spheres that transport guests to new dimensions with expansive ocean views, complemented by world-class entertainment supported by moving stages, performer flying, and a 3-story LED wall. Additionally, **O'Mally's Irish Pub** offers good food, good drinks, and





lively music from a resident Irish folk band. Robe Lighting plays a vital role in bringing these spaces to life and more.

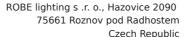
Built at Fincantieri in Monfalcone, Italy, the Sun Princess is the largest cruise ship ever constructed in Italy, weighing in at 178,000 gross tons and featuring a total guest and crew capacity of 5,900. As part of Carnival Corporation's green cruising initiative, the Sun Princess is one of 11 new ships in the corporate fleet powered by LNG (liquefied natural gas) fuel technology, reducing greenhouse gas emissions. The ship also features ingenious energy recovery systems for eco-conscious cruising.

The lighting design for the Sun Princess was selected and coordinated by Princess Cruises' Fleet Supervisor for Lighting/Video & SFX, Matt DeJong, who explained that Robe was the clear solution for this new build project.

In coordinating the lighting systems, including lighting positions and fixture selection, Matt DeJong noted that multiple rounds of reviews were necessary to finalize the system design for the venues. As the Sun Princess is a concept ship, creating the venues from scratch required careful planning with venue architects, LES Integrators, and the shipyard. On a cruise ship, overhead availability is always a concern, and since trim heights are often lower than in traditional venues, selecting fixtures with the right size, zoom range, and features was key.

Robe's TE (TRANSFERABLE ENGINE) family of fixtures emerged as the perfect solution for the Sun Princess. Additionally, the ship is entirely LED, with both entertainment and public area lighting. This decision aligns with Princess's commitment to eco-friendly cruising. Robe's TE series provided various light engine options, allowing for a balanced lighting rig that still delivers powerful performance. "We could select the most recent fixtures, and ones that best served the needs of our productions and designers. Not being locked into the shipyard supply, which is often defined years and years in advance, allowed us to stay relevant and up to date with the latest and greatest lighting technologies that matched exactly what we needed," said Matt when explaining the process and benefits of the option to "owner-supply" the main moving light package for this new build project.

The lighting rigs on a new ship are expected to last about 8-10 years from delivery. The onboard production staff manage the day-to-day maintenance and operation of the lighting systems. The TE family was an ideal choice for Matt because the easy swapability of the light engine extends the lifespan of the fixture beyond the rated hours of the light engine. The future-proof TE series, along with fantastic support from Robe, made it the ideal choice for Sun Princess. The TE family includes a range of fixtures with varying sizes, light engines, and





feature sets, enabling Matt to select fixtures with reliable feature sets based on the available overhead space and venue requirements. The Dome also required IP-rated fixtures as it serves both indoor and outdoor functions since humidity plays a factor with the venue containing a pool and open-air opening. Having the option to use the same type of fixtures, such as the PAINTE, Spiider, and LEDBeam 350 in both IP20 and IP65 with iSeries fixtures was a significant advantage for streamlining onboard storage of spare parts and maintenance items.

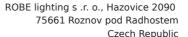
Matt and the Princess Production Resource team, led by Denise Saviss and Mark Simons, have had great success with Robe in the past for main lounge refits. A combination of an impressive feature set, light output, size, weight, and strong support presence made the selection of Robe fixtures an easy decision. Tony Perez, Robe's global maritime sales director, played a key role in supporting Matt and the Princess team by coordinating shootouts prior to the specification phase.

Tony's support and ability to coordinate special requests, such as custom factory gobo loads, made the entire process very smooth and ensured that Princess received exactly what they needed and wanted. Tony's assistance was also crucial in ensuring the on-time delivery of lighting fixtures to the shipyard for installation onboard, meeting the deadlines of both the shipyard and the creative teams.

The Robe Lighting fixtures are the primary workhorses for the production shows and entertainment on board this next-generation ship.

The Arena Theatre production shows include **Vallora, A Pirates Quest** (lighting by Ben Cracknell, programming by Matt Davis), **Fiera!** (lighting by Mat Stoval & Trevor Burke for Visual Noise, programming by Zach Matusow), **Viva La Musica** (lighting by Ignacio "Iggy" Rosenburg, programming by Max McDougall), and **Stage Struck** (lighting by James Whiteside, programming by Michael Fox). The Dome and The Piazza feature Princess Cirque shows with Montreal-based Cirque Éloize: **Art Beat**, **Blue**, and **Come Fly Away** (lighting by Laurent Routhier, programming by Hunter McCune). The Piazza events were designed and programmed by Nathaniel Cromwell and Michael Gionfriddo for EMF Lighting, with additional lighting design and programming by Matt DeJong, Sandee Roque, and Octavio Ahumada.

The numerous creative teams appreciated the Robe fixtures for their impressive output and consistent color mixing between the TE range and the LEDBeam/Spiider range. Lighting designer Laurent Routhier from Cirque Éloize, who utilized the iPAINTE, iBeam 350, iTetra2, and iSpiider in the Dome, remarked,





"Robe is my favorite brand so I knew it would work. The design of the dome being quite special with no top lights and few backlights meant we needed some moving lights we could rely on, and as usual Robe delivered. And the small size vs the brightness of the lamps was perfect for that venue." The Princess Cirque shows from Cirque Éloize play in The Dome and feature three full shows that run 2-3 times a night during a voyage. Laurent also had the pleasure of using the Robe fixtures in the Piazza for a special Champagne Toast event featuring a trapeze act performance with the circus artists.

Nathaniel Cromwell and Michael Gionfriddo, working with EMF Lighting, were responsible for the design and programming of all shows and events in the Piazza, the ship's heart. This venue, which runs all day and features anything from daytime washes to game shows and full production shows, needed dynamic and reliable fixtures. Michael remarked, "I think that the selection of fixtures from Robe in the Sun Princess Atrium was a perfect fit for the space. The PAINTE as a hard edge with an LED engine provides great color clarity and low maintenance considering the location of the fixtures. The Spiiders and Tetra1s live up to their reputation, providing vibrant looks and endless FX possibilities." The Piazza also serves as one of the two nightlife spaces, featuring late-night discos in the center of the ship. Nathaniel added, "Robe lights consistently proved themselves to be the right job for the role. The Piazza is an important centerpiece to the Sun Princess. Having fixtures that are vibrant, quiet, and reliable is essential to the space, and Robe excelled in all categories."

The Arena Theatre presented several challenges due to its multi-configurable nature. Matt explained, "The lighting rig needed to function for proscenium mode, in-the-round mode, and thrust mode, all without re-hanging the rig and without placing fixtures where they were only useful in one mode." One key challenge was determining the follow spot locations. "From the start, it was clear we needed four or more fixtures to support the venue," explained Matt. In the end, four FORTE fixtures were carefully placed to be functional in all modes. Four RoboSpot base stations were selected to run the FORTE fixtures from a backstage loft area. The ultimate architectural design of the venue prevented traditional follow spot locations and systems. "The ability to use the Base Stations and fixtures like a matrix selection was the most impressive feature, as it allowed us to be more flexible in our user needs, and the setup was easy enough to change as needed for the different configurations," said Matt. The FORTE fixture's large zoom range also contributed to its selection for this venue. The long throws combined with the 5.5-degree minimum zoom meant that a more traditional follow spot system was no longer required.

In the Arena Theatre, four full production shows are installed. Each show will run twice each night during a voyage, featuring fully produced performances with the production cast, scenery, media, and lighting. Lighting designer Ignacio Rosenburg shared his experience: "I



absolutely loved designing a show on Princess' new vessel. It's certainly a departure from my usual haunts, but walking into a theater as impeccably beautiful and modern as this was breathtaking. We have a long history of using Robe products, and we often turn to them for their light quality, feature sets, and dependability. It really speaks to the attention Princess pays to their entertainment division that this theater was stocked full of the latest and greatest from Robe's catalog. Having access to both entertainment-style fixtures like Spikie and PAINTE, as well as powerhouse theatrical ones like ESPRITE and FORTE, and the fantastic RoboSpot system, meant I could thread the needle between my more rock-and-roll style lighting and the needs of a theater environment."

The Arena Theatre features a large LED wall at the back that runs for all shows. The impressive engine output from the TE fixtures like FORTE, ESPRITE, and PAINTE, along with the Osram engine from the Spiider and LEDBeam fixtures, was crucial to allow the lighting to cut through the video content.

The Dome and the Piazza lighting were installed in just two days by Videlio HMS. The lighting rigs in the Arena, Princess Live, and all other venues were installed by Matt DeJong, Karen Hii, and the supernumerary install and setup team, including Sandee Roque, Dusan Milosavljevic, Octavio Ahumada, and Sabiniano (Buboy) Martinez. Across all venues, over 400 individual fixtures were delivered across Europe, stored in a warehouse, and then loaded into the Monfalcone shipyard using various shipping and handling options. Matt and the Princess team were impressed that each unit worked right out of the box. Matt explained, "Normally, with the volume of fixtures for this project, you would expect a few issues or small problems with one of the units. However, there was a 100% out-of-the-box working rate, which proves the quality control and care that goes into production from the factory in the Czech Republic." The on-time delivery and 100% working rate were instrumental in keeping the installation and creative phases on track during the new build process.

The Sun Princess Robe lighting rig continues to perform exceptionally. The availability of service documents and ongoing support from Robe North America and the global support team, along with the dedicated communication and support from Tony Perez, positions the Sun Princess for long-term success. The entire Princess Entertainment technical team, show creation team, and onboard technicians are delighted with the performance, reliability, and features of the Robe fixtures onboard Sun Princess. The Robe moving light rig is complemented by other conventional units, and additional moving lights were provided by Videlio HMS for select venues.

About Princess Cruises



Princess Cruises, established in 1965, is renowned for its innovative ships, exceptional customer service, and worldwide cruising. With 16 modern vessels and more than 170 different itineraries, Princess Cruises offers travelers the opportunity to explore destinations across seven continents. Part of Carnival Corporation, Princess Cruises is dedicated to creating lasting memories and authentic connections for guests, crew, and local destination experts. The Sun Princess has completed her inaugural summer season in the Mediterranean and will begin her inaugural Caribbean season in October, sailing from Florida.

Sun Princess is the first in the Sphere Class for Princess Cruises.

