

## Spotlight's on Doughty Engineering at Sadler's Wells



Sadler's Wells is a world-leading dance house, committed to producing, commissioning and presenting new works and to bringing the best international and UK dance to London and worldwide audiences. When the company was granted lottery funding for a technical refit, Graham Cutting, senior lighting technician at Sadler's Wells was keen to install new follow spots based on a system of tracked suspension mounts and brought Doughty Engineering on board to help turn the concept into reality.

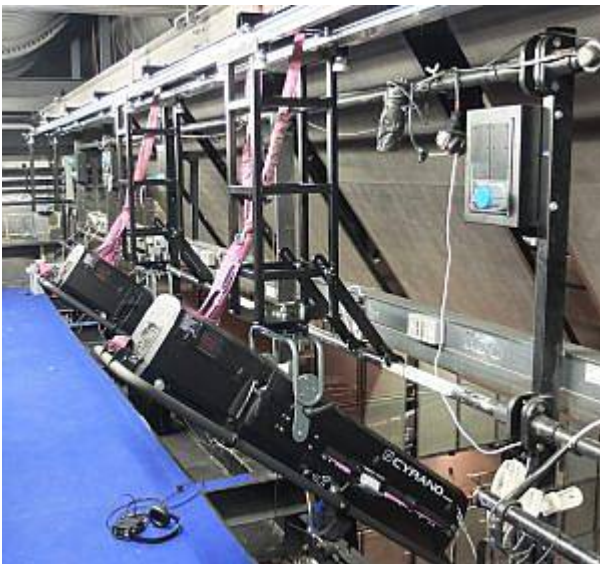
Graham said: "I'd started looking into the idea previously, but at the time we simply didn't have the funds to make it happen. Following the Arts Council grant, I realised that we could look at this new system which would allow us to address two issues that the existing system was causing. Firstly, being on a lighting bridge, we often had the need to remove or relocate one or all of the 4 spots. To do this safely we needed four technicians, two of which would have to wear restraint harnesses and with each spot taking 15-20 minutes. The second issue was one of an ergonomic concern for the operator. The existing tripods had to sit in such a way as to prevent the operator sitting in an upright position under the spot, always leaning slightly to one side. Not a big issue for one night, but over a two month run, this was far from ideal and could leave operators with back and shoulder problems."

Graham wanted a system that would allow quick and easy movement of the spot, ballast and all associated cabling by one person in just a couple of minutes – and a little more comfort for the operator was also high on his priorities. However despite having the concept in his mind, it soon became apparent to Graham that he needed to consult with someone on this. After talking to a member of the Doughty Engineering team at a trade show about the idea (at the time from the point of view of purchasing the correct off the shelf parts), it made sense to work together to make the vision a reality.



Mark Chorley, design engineer at Doughty explained: “Graham explained the problem the existing system was causing and following several conversations we came up with a rail system which is mounted overhead allowing the lights to be positioned anywhere on the length of the bridge. It also means the floor of the bridge is clear, making operating the system a much more comfortable task.”

The project incorporated a series of bespoke parts which were designed and fabricated by Doughty at its Ringwood HQ as well as several off the shelf parts – something Graham was keen to ensure for ease of future service. “We’ve used Doughty components here at Sadler’s Wells several times in the past, including clamps, arms, pulleys, boom bases and many others. A number of us are also trained in the replacement of half-coupler roll pins and eye bolts and so being able to incorporate some items designed specifically for us with standard kit made complete sense. Mark Chorley was vital to the project for both his site visits which allowed us to work on my original idea and in making suggestions for OTS parts needed, small adjustments and prototype ideas and then also in the drawing up and manufacturing of the bespoke parts when we came to the final design.”



The kit is now in full use at Sadler’s Wells and has been highly regarded both by the in-house technicians and operators as well as those visiting from touring companies. “For the industry, Doughty Engineering is without doubt an invaluable company, with some very clever and useful people working for them,” concluded Graham.

[www.doughty-engineering.co.uk](http://www.doughty-engineering.co.uk)