

Production Managers Examine

Power Flying

Geoffrey Joyce meets Mark Ager from Stage Technologies, and makes the case for Power Flying

Is there a fear of automation in this country and, if so, how much of this stems from National Theatre's adverse experience in the early days of power flying? Theatre owners have been accused of refurbishing their theatres with only audiences and not technicians in mind. I agree that foyers and auditoria should be attractive but I do take issue with those theatre owners who ask "what is the *minimum* we have to do to make the stage better?"

Like theatre owners, producers can also be keen to hold on to the cash. However, it is clear the only shows that make the touring producer money are those that fit up and open on a Monday. I recently toured with a production of *The Gondoliers*, which had a typical Monday evening opening. It was a struggle to rig, focus, hold a technical rehearsal, set up the orchestra and have a singers' warm up, all in one day. Such strain is always taken by the theatre technician.

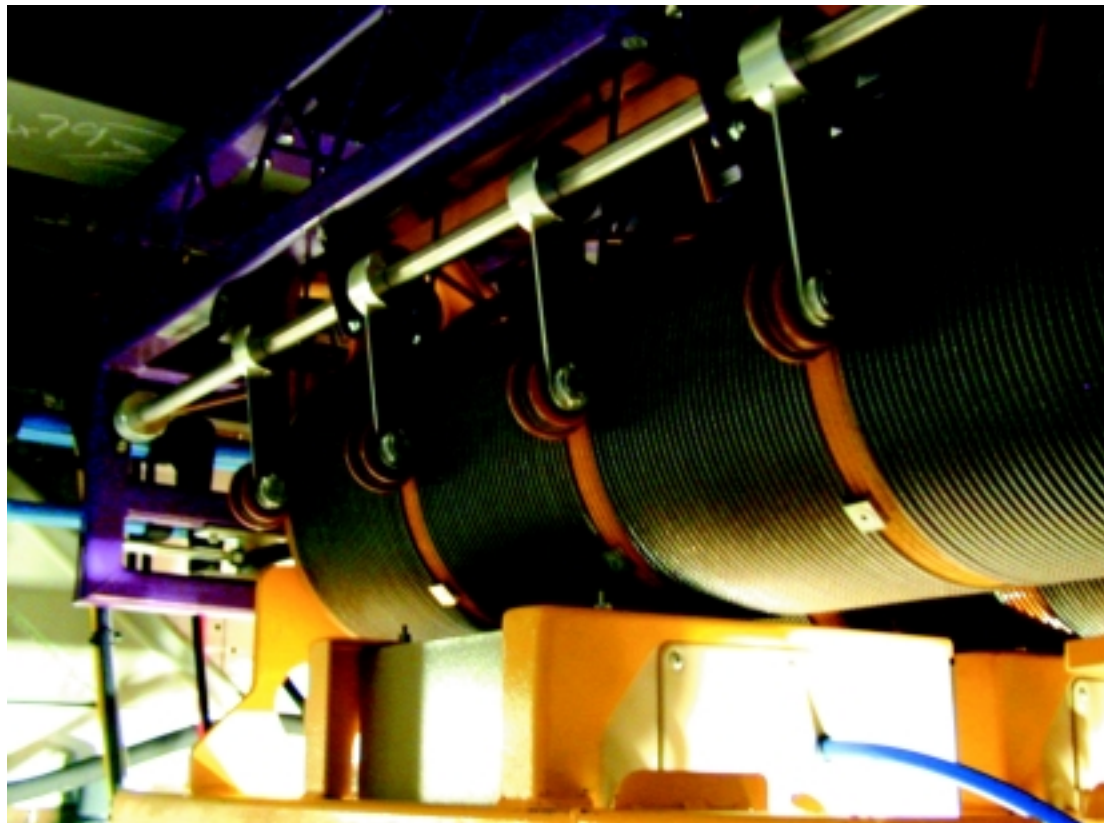
In today's technological world, should we not be thinking about installing power flying in our theatres? With counterweight systems there are health and safety aspects to be considered. Those working in the flies are vulnerable to injuries resulting from twisting whilst hauling on ropes, from continual bending, reaching awkwardly during loading flying cradles, or strain from lifting weights.

Many of our older cradles compound these problems by being side-loading. Production managers and technicians awake! If tighter and tighter schedules are to become the norm, should we not be asking for the proper tools to help us get the job done?

The Dutch Government has taken positive steps towards good Health & Safety practice by insisting that power flying be installed in their repertory houses. Interestingly, they have backed this initiative with financial assistance.

From an operational point of view power flying is fantastic. I had personal experience of power flying when working as technician at the Linbury Studio Theatre at the Royal Opera House. The speed and the ease of rigging became apparent very quickly. In the main house there is the amazing 37m high triple grid with 112 power flying bars.

At Sadler's Wells, also equipped with power flying, one person can operate the flying console, while the same show on tour has to use three flymen. On occasions on the production in question, two people had to be sent from the stage to the flies to help out. Power flying helps to reduce show running costs. Rigging time can also be reduced; it can take up to 10 minutes to load a counterweight cradle with a large flying piece and get it airborne. During this manoeuvre nothing else can happen since the fly man is only able to



View of Rotterdamse Schouwburg power-flying winch (lifts 500kg at 2m/s).

work on one bar at a time. If you need to add or reduce weight to balance the system, the cradle is usually in an awkward position, which can expose the flyman to injury.

Power flying means that the production manger doesn't have to wait. When the flying piece is attached, the bars will creep out smoothly until the weight is fully transferred to the system, without any shuddering. This could save a great deal of time over a fully rigged show.

Mark Ager of Stage Technologies, suppliers of the controls for power flying, admits that initially, power flying installations are more expensive. A counterweight set would probably cost several thousand pounds, whilst a power flying installation, where all the steel, motors, gear box and control have to be purchased, would be several times that cost. Both the Royal Opera House and Sadler's Wells installed their flying systems at a time when development costs were high. Mark explains: "We constantly strive to reduce the costs of power flying systems. In Holland, because of the demand created by the statutory requirement to replace counterweights, the demand for power flying is high which brings the costs down. However, their costs are also reduced by accepting lower specification

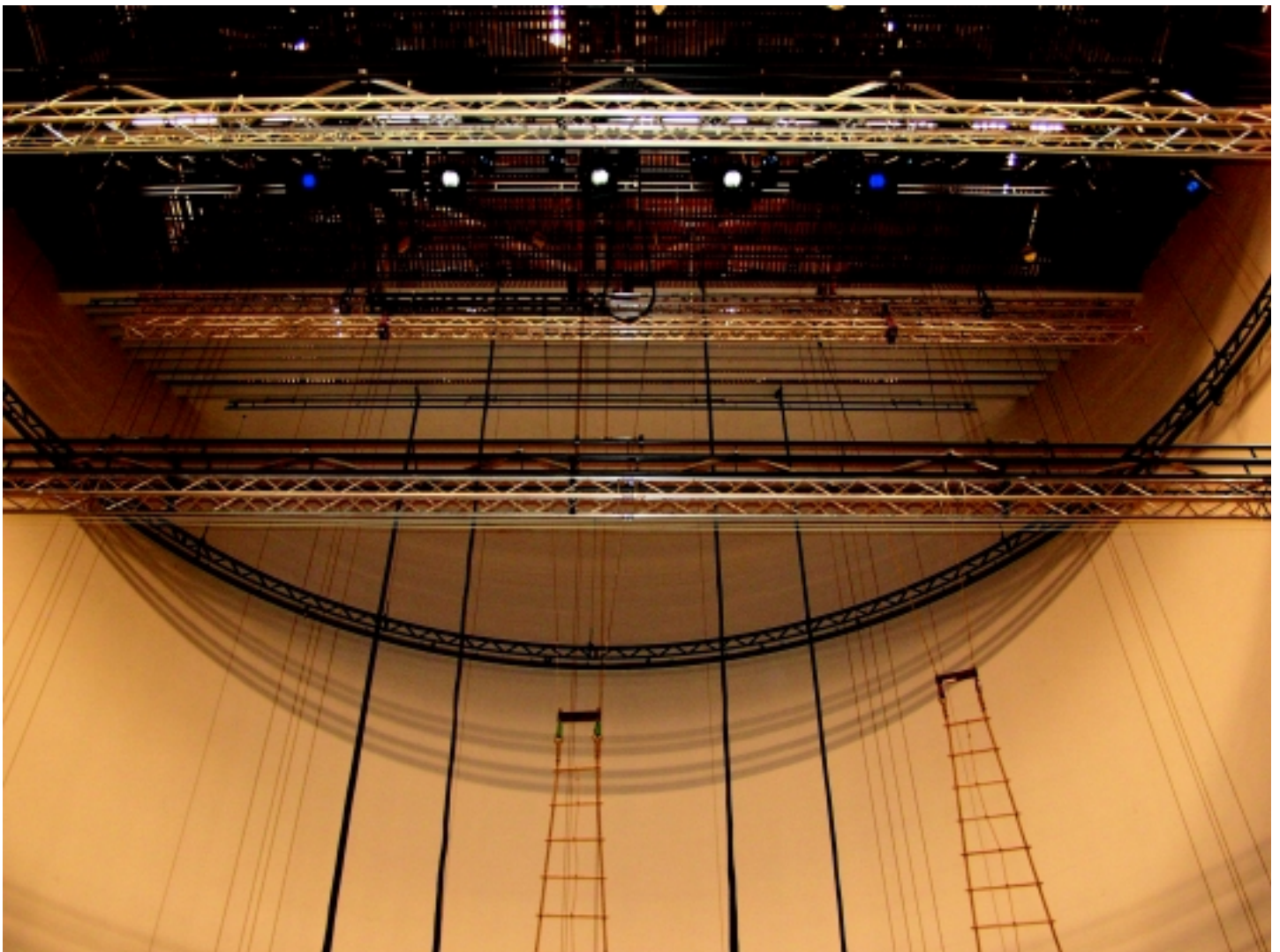
systems than those we have installed in this country."

Why is it in this country we are not prepared to spend money on the technical side of the theatre while the rest of the Europe is leaping ahead? Mark knew of at least three or four power flying projects in Sweden alone, while he knows of only one theatre in Britain contemplating power flying. "We have to remember that the subsidy in the continent is much higher than in Britain. In some case as much as 98 percent. Meanwhile in some British theatres we are unable to afford full conventional flying bars. Spaces are left in the grid in the hope they will be fitted later!" The other option is to partially fit power flying, and through the use of diverters, assist counterweight bars carrying lighting and heavy scenery.

The first people to benefit from power flying are the producers, whose fit-ups and get-outs become faster. The long-term benefits for crews are to their health and safety. Back pain, from lifting and twisting will be reduced; there will be no more rope splinters – and a much improved working environment.

There are still many questions yet to be answered. For example, do theatre owners have a duty to improve working conditions?

View of underside of grid at the Göteborgs Stadsteater.



Does the Arts Council need to review its policy on equipping theatres or does it require Government intervention to instruct improvement? We have a complicated theatre hiring system in this country. West End theatre is usually bare walls hire and 'tenants' put in motors and take them out at the end of a run. Power flying also requires a different set of skills from conventional flying. A fly man will not only need the experience and knowledge of conventional flying but he also has to learn how to operate a computer and learn to trust it to work.

Stage Floors

In order to accommodate the set for Phantom of the Opera, a trap had to be cut in to the stage of Her Majesty's Theatre. For Chitty Chitty Bang Bang, the famous revolve at the London Palladium was removed and replaced with a modular stage. Designers and producers should be ecstatic, as it's now there for all time. You can put in stage elevators where you want; modules can be taken out anywhere, and replaced. The steel work at the

Palladium was built by Delstar Engineering, one of our leading stage engineering companies. The standard is based on a module 2.5m x 1.2m or a Steel Deck 8m x 4m - such a simple solution. If you contemplate this in your theatre scheme, take care to see that the engineers don't run steel up the centreline. It is important to have a removable module running on centre with steel supports mirrored either side.

Another show idea is accommodating a 200mm show deck within a theatre stage (see the review of *Anything Goes* pages 8-11 this issue). However, shows that tour with a show deck can end up compromising the stall sight lines. In the West End *Oliver*, *Contact* and *Jesus Christ Superstar* are all shows that necessitated the re-raking of the theatre stalls - what misery!

Geoffrey Joyce

Footnote: Congratulations to Mark Ager and John Hastie, founders of Stage Technologies, who collected the Orange 'Excellence in Exporting Award' last month (see below).

Stage Technologies Win Orange Business Award

The Orange Business Awards 'Excellence in Exporting' category was specifically dedicated to those companies that have "excelled in the international market place and that have understood the importance of overseas growth as a way of expanding their business". The short listed companies for this category included Stage Technologies, Reynolds Geo-Sciences Ltd, Blue Chip Feed Ltd and Nucoda. Despite this stiff competition the judges including Trade Partners UK and Emma Crosby from CNBC, voted Stage Technologies the clear winner, with their international approach and implementation of trading practices being hailed as outstanding.

Stage Technologies was founded in 1994 by Mark Ager and John Hastie in order to develop and supply automation systems to theatres and entertainment venues worldwide. Initially, the company was known only within the very limited UK theatre production market to where it rented bespoke, engineering solutions. These venues provided potential new clients with a prestigious demonstration of our expertise at sites in the heart of London's theatre-land, which is recognised and appreciated worldwide as a centre of excellence. The spectacular and dramatic scenic effects that have been integral to the success of major musicals such as *Miss Saigon*, *Phantom of the Opera* and *Sunset Boulevard* and *Chitty Chitty Bang Bang* would not have been possible without an automation system and the shows significantly raised the company's profile. Now only eight years later, Stage Technologies is a leading provider of

automation solutions for theatre venues and concert productions in countries from Iceland to Australia.

Stage Technologies' commercial director Nikki Scott commented: "Winning the Orange business awards is a just tribute to the dedication and passion of everyone at Stage Technologies that has helped this company to become the truly global player that we are today."



John Hastie and Mark Ager with the Orange Business Award for Excellence in Exporting