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History lessons

RSC AT THE ROUNDHOUSE

The Royal Shakespeare Company (RSC) has recreated the auditorium from its Stratford-upon-Avon-based Courtyard Theatre within the space of the Roundhouse in London, ensuring its staging of The Histories reaches an even wider audience

RSC

Over the last few years the Royal Shakespeare Company has effectively been rebranded – not just in its production presentation style, but also in the physical incarnation of its venues. Since artistic director Michael Boyd took the helm in March 2003, he's remodelled the company, transformed the staging configuration from apron to thrust and offered a new perspective to Shakespeare's universal stories. The combination of these modifications has revolutionised public and artistic interest in the RSC, taking it on a journey that six years ago would have seemed inconceivable.

An element of the RSC's rebranding has been in the closing down and transformation of the main Royal Shakespeare Theatre – due to complete in 2010 – and the construction of the RSC's temporary replacement home – The Courtyard Theatre. A prototype auditorium format for the main house, the Courtyard has provided an intimate thrust stage configuration for part of Boyd's *Complete Works Festival* – the serialised staging of Shakespeare's eight History plays.

So successful has this soap opera style offering been that Boyd decided to transfer everything to London for a short, imaginatively programmed, show-packed season – a move that proved a formidable challenge for the RSC's technical department.

Part of Boyd's remit for the London transfer was to present The Histories without major changes to their original staging. This meant

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View of the stage from the grid (left); and large tow winches from Stage Technologies were used to lift and move seating units (right)

finding a venue, in central London, which could accommodate the distinctive thrust stage format of The Courtyard, while preserving good sight lines and necessary seating capacity. A tall order – in fact the only venue that came close to satisfying it was the Old Vic. However, time scales and budget were preventative.

The RSC called on Charcoalblue (CB) – theatre consultants responsible for the main RST transformation and The Courtyard Theatre. "Capacity, sightlines plus the need to accommodate complex aerial work over the audience were key drivers in our choice," explains Gavin Green, CB's design director. "Having visited numerous central and West End venues plus a variety of disused buildings, nothing proved suitable. The only feasible place to recreate the thrust stage and auditorium of the Courtyard and still provide suitable audience facilities, such as bars, restaurants, toilets, disabled access, etc, was the recently refurbished Roundhouse, Camden."

Venue acoustics

The successful delivery of the dynamic three-dimensional shows relied on good venue acoustics. However, a round auditorium inside another higher roofed, round room sporting a sloping wooden ceiling is a testing environment.

"Nick Edwards of Acoustic Dimensions did a fantastic job," enthuses Bailey. "A black skirt between the Roundhouse roof and the auditorium walls along with reflective acoustic sails suspended above, lowered the height of the ceiling keeping sound inside the space. The front panels of the lower auditorium tier lean by one degree to help with acoustic reflection."

The biggest hurdles for audio was the show relay and announcement system for the back of house areas. RSC head of sound Jeremy Dunn, explains, "Normally we would install our own system but we were using the Roundhouse backstage rooms as well as the RSC built dressing rooms, wardrobe, tech offices, etc. Thankfully Stage Electrics managed to extend the Roundhouse relay and announcement system to our temporary built rooms backstage which meant the DSM only had to use one microphone to make calls."

Carbon copy

The plan was to carbon copy the Courtyard auditorium and stage. However, it became clear that what was required was a similar yet more economical and functional structure, sympathetic to the Roundhouse's architecture. Green continues, "We agreed on a concept scheme, which Alan Bartlett, RSC head of construction and technical design, and Peter Bailey, deputy technical manager and project manager, developed further."

Bartlett adds, "We were taking a big chance: tickets went on sale in September 2007 – we hadn't even started building the structure, never mind obtained planning or licensing permissions."

Bartlett's approach to the design process was key to the successful technical and economical realisation and delivery of what became known as the 'Roundyard'. His attention to detail saw meticulous surveys of the Roundhouse and hundreds of CAD drawings and plans of the Roundyard prepared.

"There was little tolerance in our plans," admits Bartlett. "Given that we had over a week to erect the auditorium, if there'd been a clash in either the survey or our calculations, the outcome would have been disastrous. We decided to build the whole thing in our warehouse first."

The budget was a major concern. The successful economic delivery of the project would require careful management of a number of key areas: Manual handling, the time required for the fit up, logistics and staffing, how many RSC stock items could be built into the design, the cost of transport, and the RSC's existing commitments all had to be carefully considered. Where possible, staff and materials were used from within the RSC, to keep manufacture costs to a minimum.

The identical nature of the Roundyard stage facilitated seamless transfer of productions from Stratford. Complex fight scenes, aerial acrobatics and blocking required no restaging, saving time, stress and money. Lighting bridges, catwalks and rigging are Courtyard replicas, which ensured Tom Piper's set and Heather Carson's lighting needed no expensive modification or re-rehearsal.

"Physically it's one of the biggest projects the RSC has undertaken," Bailey enthuses. "Every detail has been deliberated right through to matching the bracketry of the auditorium pillars with those of the Roundhouse's structural wrought iron ones."

Right first time

Once onsite the big challenge was to get the venue up in time to allow technical fit up and rehearsal of the productions. Bailey elaborates, "Every element is jigged – it had to fit first time. We produced various aids to help speed up the get in, including lifting units and beams to lift and move the seating units around."

Julian Cree, London technical manager and project manager for the fit-up says: "Every day was tightly scheduled. There was no option to fall behind. I had seven project managers responsible for seating, lighting, staging, audio, rigging, flying and set – they did a brilliant job."

Indeed, elements of the structure had to fit implausibly tightly into the Roundhouse space and though the Roundyard structure could neither be supported nor fixed to its host, the two entities appeared seamlessly fused. Bartlett explains, "Various partners helped us to achieve this. Structural engineers Price and Myers confirmed our calculations and helped realise the design in lightweight strong materials – steel tube and ply. Total Fabrications recreated Courtyard catwalks and lighting bridges and designed the mother grid, Summit Steel took on the rigging and London Borough of Camden Building Control ensured we were on the right track as far as licensing and building regulations were concerned."

Backstage facilities

Where the Roundhouse did struggle was housing the 65 members of the RSC cast and crew. Peter Bailey, deputy technical director and Roundyard project manager, explains, "We had to build extra facilities backstage – rooms such as wardrobe, the technical office and green-room were all rooms

Planning and building regulations

The 'Roundyard' had to be fully compliant with all local building regulations. Peter Bailey, project director, explains: "From the start we sent absolutely every plan and suggestion to Camden Planning office for approval. We pre-built the structure in our workshops, firstly to ensure that it all fitted together properly, within the constraints of the Roundhouse dimensions, and secondly so Camden planning officers could visit and iron out any issues we might encounter on site. This approach was extremely constructive and the Roundyard had few problems obtaining a licence."

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The RSC's Alan Bartlett, head of construction and technical design, reviews progress, (left); and the view from the outside of the auditorium – inside the Roundhouse!

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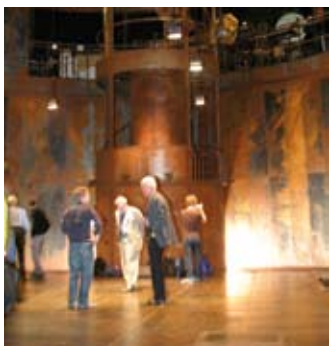

The 'Roundyard' auditorium (top); the stage (below, left); and lighting rigs (below, right)

within a room and required automatic fire detection and alarms, which were then wired directly into the Roundhouse's fire detection system."

All these rooms required lighting and power sockets, etc: "We've installed extra showers and bought in our own industrial washing and drying machines – the history plays involve quite a lot of blood, gore, mud and make-up, so adequate washing facilities are essential, especially when we do the marathon run of all the plays over a weekend," explains Bailey.

Back in the auditorium, Summit Steel fitted the mother grid from which the Total Solutions-built catwalk and lighting bridges are rigged. Each element interlocks with another and how it integrates with the Roundhouse is inspired.

The Mothergrid takes all the diversions for 16 Stage Technologies' 'BigTow' winches. "Creating linear wire paths in a circular Victorian building is a challenge!" notes Bartlett. "The winches themselves sit on the floor under their own weight – around 3.5 tons including frames. Luckily the weight each supports is not substantial and we've popped in a few compression beams, which help. All loadings had to be submitted to Camden for checking. We found peak weight over the eight shows was 14.948 tons, well within the Roundhouse 20 ton limit – a pleasant surprise to us."

House lighting and emergency lighting had to tie in with the Roundhouse's own emergency systems. Based on RSC head of lighting, Vince Herbert's design for The Courtyard theatre, they were installed by Stage Electrics. "The lighting in the Roundyard is a temporary touring system, which had to be demountable yet meet with tight London building and lighting system controls," explains project manager, Jonathan Porter Goff. "Short timescale meant we had to get building control approval early in the design process."

Unlike stage lighting, in the event of an emergency, house lighting must remain operational. Porter-Goff elaborates: "A self-contained, LED emergency lighting system has been installed along with 12 GDS, dimmable LED exit signs. The RSC demand minimal background noise, so buzz from the 120 50W MR16 house lights was prevented by using twelve Swisson sine wave dimmers, which worked brilliantly."

Military precision

Although the Roundyard could more appropriately be compared with a major building project, what made its construction so successful was that the RSC treated it in the same way they would any theatrical fit up. All fixings were predrilled, everything was labelled and the build was planned with military precision from the very launch of the design process.

The beauty is that the venue has the potential to sit in any space with the capacity to take it. Designed in rectangular blocks that can be used in any number of alternative configurations, economically this solution to touring distinctively staged shows has wider implications.

The RSC Roundyard heralds the idea that with fewer than expected costs, a theatre auditorium, stage and technical infrastructure can be created in almost the same way as a set design is built on a stage. After all, once the lights go down, as long as they're comfortable, the focus of the audience is on the performers, not where they're sitting. ■

Author

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