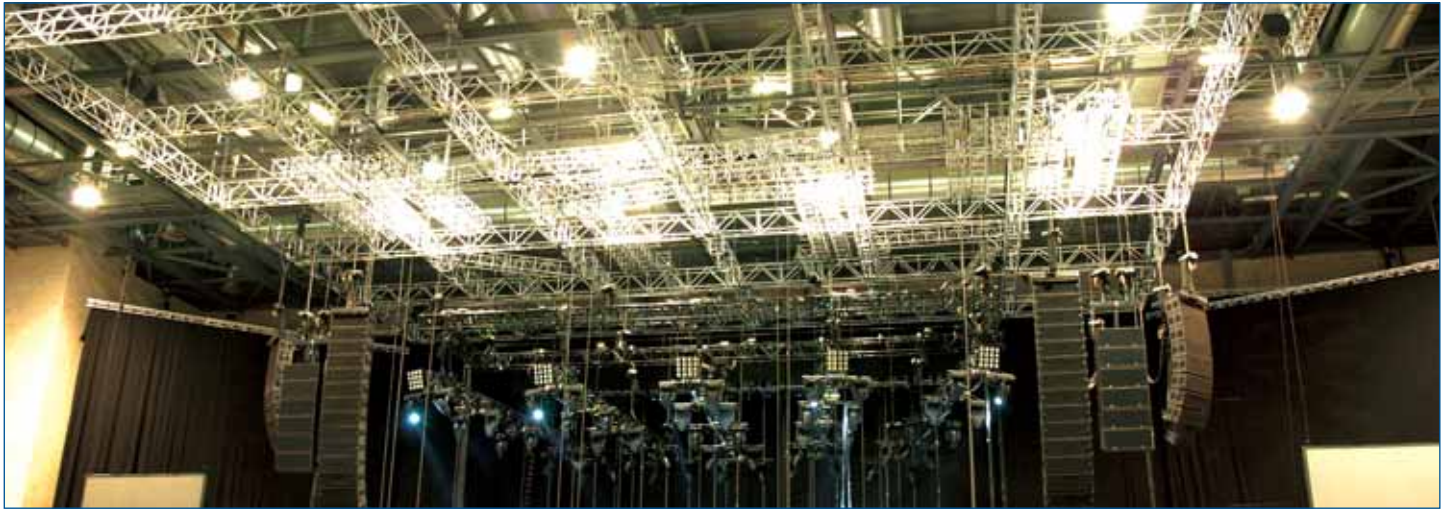


Enhanced safety at Echo Arena, Liverpool

LoadGuard 



Speed is a dangerous imperative where rigging is concerned, yet with twenty-first century entertainment proving to be one of the more resilient businesses in the current economic climate there is an ever-growing demand for fast efficient turnover of productions.

The Echo Arena, part of Arena and Convention Centre Liverpool (ACC Liverpool), is the most recent addition to the UK's circuit of large-scale indoor events venues and has addressed this demand head on. Whilst one rigging grid system is installed over the usual stage area, a second grid can be deployed anywhere in the venue. This happens quickly and safely due to the 'Active Roof Technology (ART of Rigging)™' that sees every roof node fitted with active load-cells and pre-wired with hoist power, control and data network. David Bond of Star Events Group Ltd said "Our 'ART of Rigging™' system has speed, safety and the reduction of Working at Height hours at its core."

The whole grid system was installed and is operated on behalf of the Echo Arena by Star Events Group Ltd.; the control and hoist system at the heart of the Active Roof Technology installation comes from Lift Turn Move (LTM), a specialist entertainment rigging hardware supplier based close by in the Wirral.



"This is one of the largest house system installations LTM have worked on." Explained John Jones at LTM. "The input and knowledge sharing we've received from Star Events has proved invaluable. The main grid is supported on twelve 3 ton LoadGuard™ chain hoists, the re-locatable grid from eight more.

"These class leading hoists, bring real advantages to the operation of the complete system," added Bond. "They conform to BS7906: Part1, Category A specification, as such they exceed the requirement for secondary attachment. We 'dead off' the grid once it is raised to trim, but the added reassurance of the double brake, 4 position limit switches, and drive-train independent clutch design of the LoadGuard™ hoists makes the whole operation of the grid firmly focussed on simplicity and safety."



LTM has been supplying these specific LoadGuard™ hoists for more than three years: "We've been putting them into theatres, multipurpose venues and schools," said Jones. "Most venue operators prefer not to fit secondary's if they have the choice; the features of the hoist specification means a truss can be flown, simply unplugged, and left in position –without the need to rig safeties at height."

The two grids are based on a new steel truss (model FGT7) that is lighter than an aluminium grid of equivalent strength, designed specifically for this application by Star Events, and are fitted with personnel catch-nets between all node points for added safety. The hoist set is controlled using an IBEX system linked to the Active Roof Technology™ installation. Again supplied by LTM, the IBEX system is programmed to self level the grid every three metres as it rises from stage level to trim, thus ensuring no single point can become overloaded, or the total grid structure become adversely stressed.

"In consultation with Star Events we determined to install the control centre up on a platform within the catwalk network of the arena roof structure," explained LTM's Jones. "This gives the duty lead rigger several clear advantages;

- A good top down view on the grid as it ascends.
- It positions the operator at the same level as all electronic parts of the grid control system, with mains and data run along the venue's roof beams.
- Because they are physically isolated from the feverish activity that is a typical rigging load-in below, the operator is unlikely to be distracted from visually monitoring the IBEX system by events on the arena floor."

The IBEX system monitors load data from the Active Roof Technology™ system, receiving data from both hoists and secondary's once the grid is at trim and the secondary's are attached, essential in this day and age where complex shows often feature large moving elements such as LED screens, creating hefty dynamic loads across the grid. "LTM have given us the right product for the job", concluded Bond. "Their contribution has been a significant factor in the success of this project."