

Automated Masking Sets Method Statement

Show: Sunday in the Park with George

Venue: The New Athenaeum Theatre, The Royal Conservatoire of Scotland

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Overview

The designer has requested that, in the last sequence of Act One, three full sets of masking (full stage border and two hard legs) be flown in, in time with the score. This masking must begin at a high enough trim so as not to be seen by the audience, and must be able to fly OUT again in the final sequence of the show.

Design Considerations

For sightline purposes, each masking set is required to be the full width of the stage area (16,000mm). It has also been requested that hard legs be used, rather than softs, to achieve a sharper look.

Safety Considerations

The system lifting the track will be the in-house automation systems. The majority of the performers will be located on the centre stage raised platform during the effect, and should not come into contact with any element of the flying system.

Risk Assessments and Safe Systems of Work for automation and flying shall be adhered to, and the system shall be checked daily

Construction/Structure

The system is constructed from three spans of Prolyte H30V truss, suspended on automated lift points. The side flattage is supported by steel drifts attached to hemp lines, which in turn are diverted through pulleys hung from the truss and terminated on the SR and SL fly floor rails.

The system will be installed by the show's Technical Stage Department, consisting of the Stage Supervisor; Head of Automation and Flies; and Technical Stage Crew. The system will be operated by the Head of Automation and Flies.

Expected point loading is detailed in accompanying documentation (please see 'Load Calculations MASTER')

Method

Three 16m truss spans will be assembled, and each suspended on two lift points. Two pairs of these points will be Liftket motorised hoists, with the remaining truss attached to two BT200 drum winches. Positioning of these is specified in the 'Master Rig Plan'.

The truss will be flown to 'working height' and a 16x5m border hung to the front, top chord. Spot block pulleys will be attached to the truss at specified points, bridled centrally by use of two 500mm slings and a 2T shackle.

Hemp lines will be run through the pulleys and attached by a shackle to drift lines of two 2400x6000mm hard legs. The excess line will be run to the extreme SR and SL of the system respectively.

The truss bar will fly to 6.25m and the border shall be conduited.

The truss bar will be raised until the border is above head height. In turn, each of the flats shall be walked up and moved to be below their suspension points. The excess line shall be taken up to the adjacent fly floor and tension taken up.

The truss will fly to a 'Show IN' height suitable for the border to cover the top of the leg (around 10500mm). Tension shall be taken up on leg lines, and they will be cleated off securely to their adjacent fly rail.

Functionality

The system is designed to suspend the legs on a double purchase, affected by the single purchase truss. This allows the legs to fly twice the distance that the border does over the same length of time in the same cue.

The excess rope between the pulley suspension point and the top of the flat allows for the extra travel, and for the majority of the flat to disappear behind the border in its OUT position.

When the effect is required the truss is lowered, with weight of the flats pulling them to the ground.

Deads and limits will be set so as the hemp knot which the drifts attach to will not catch in the top pulleys.

In its OUT position, the bottom point of the hard legs should sit at an approximate height of 8800mm - 2.3m above all lighting bars.

The system shall be checked each day over its full travel. This shall be performed in working light, allowing any issues to be easily spotted.

Trusses shall be programmed in 'Locked Groups' ensuring that - should any point fail or become out of sync with the other - the truss affected will stop completely and will not tilt.