

DAYTONA

STAGE HIRE

DS100 MAIN STAGE DECK AND PA WING SPECIFICATION AND LOAD CALCULATIONS

GENERAL INFORMATION

- All load calculations contained in this section have been sourced from the deck manufacturers and our structural engineers Anthony Ward Partnership Ltd.
- The Stage and PA decks of the Daytona DS100 Mobile Stage have been purposely designed and manufactured to vastly exceed any anticipated loadings that they may be subjected to in their normal course of duty. Despite this, it is the responsibility of the Event Organisers or their on-site representative to ensure that the following load limits are strictly complied with. Failure to adhere to these limits may severely compromise Health and Safety issues associated with this type of structure. Therefore, Daytona Stage Hire shall not be held responsible for any damage or consequential loss if these limits are exceeded. Furthermore, should damage occur to any of Daytona's equipment or staff as a direct result of exceeding these limits, the Event Organiser or their on-site representative shall be held responsible.

SPECIFICATION

- Stage Deck Framework Type: 2 of 10 metre wide x 2.5metre deep x 250mm thick steel framework sections, hinged onto central main chassis section measuring 10 metres x 1.1metre with 6 of 3.33 metres x 0.8 metre in-fills.
- Stage Deck Supporting Legs: The central main chassis section of the stage is supported by 8 main legs, 4 of which are hydraulically operated load-bearing landing legs, 2 are hydraulic stabilising legs, and 2 are manually operated stabilising legs. The fold out deck sections are supported by 12 (6 each side) 100mm x 100mm steel box section legs with screw adjusters on the foot end. These are then connected to each other and back to the main chassis with 50mm Ø aluminium tubing to produce a 10m x 8m footprint to aid stability.
- PA Wing Deck Framework Type: 2 of 3 metre wide x 2.4 metre deep x 227mm thick aluminium ladder truss framework.
- PA Wing Deck Supporting Legs: The PA Wings are supported by a combination of connection to the steel framework of the main stage deck at the inner edge, and 2 100mm x 100mm steel box section legs (as used on the main stage deck) with screw adjusters on the foot end at the outer edge.



DS100 MAIN STAGE DECK AND PA WING SPECIFICATION AND LOAD CALCULATIONS continued

SPECIFICATION continued

- Stage Deck and PA Wing Deck Platform: 24mm 17 ply Finnish plywood which is phenolic resin cross-bonded using weather resistant glueing according to EN 314- 2/class 3 (DIN 68705 Teil 3: BFU 100; BS6566 Part 8:WBP). The surface is a brown (abt RAL 8017) phenolic resin impregnated multi-layer laminate with hot-pressed high friction pattern.
- Standards:
 - BS 979-3 : 1991 Specification for wrought steels for mechanical and allied engineering purposes.
 - BS EN 10025 : 1993 Hot rolled products of non-alloy structural steels.
 - BS 3692 : ISO metric precision hexagon bolts, screws and nuts.
 - BS 6399 : Loading for buildings.
 - BS 7905-2 : 2000 Lifting equipment for performance, broadcaster similar applications.
 - BS EN 287-2 : 1992 Approval testing of welders for fusion welding.
 - BS EN 288-4 : 1992 BS EN 288-8 : 1995 Specification and approval of welding procedures for metallic materials.

DIMENSIONS

- Stage Deck: 10 metres wide x 8 metres deep x 274mm thick
- PA Wing Deck: 3 metres wide x 2.4 metres deep x 303mm thick
- Trim height: 1.5 metres

LOADINGS

- Overall: 7.5kN/m² which is approximately equivalent to 750kg/m²
- Point Loading: 4.5kN which is approximately equivalent to 450kg/100mm²