SIMPLEMOTION PROJECTS

Cirque Alice 2025 Performer Flying – Letter of Certification.

Monday, 6 October 2025.p

To Whom It May Concern:

This letter confirms that the theatrical automation system provided to the 2025 touring production of “Cirque Alice” for Cirque Alice Pty Ltd has been manufactured in full compliance with the relevant Australian Standards. The Australian Standards are derived from the International Standards.

The theatrical automation system, as well as the sub-components of Hoists, Diversions, Structural elements, and Control System have undergone thorough testing and evaluation to meet **AS1418.8-2008 - Cranes, hoists, and winches - Special purpose appliances.**

The Australian Standard **AS1418.8-2008** is an extension of **AS1418.1-2021 - Cranes, hoists and winches, Part 1: General requirements**. **AS1418.1-2021** specifies the general requirements for cranes, hoists, winches, and their components, and appliances intended to carry out similar functions, as defined in AS 2549 and ISO 4306 (series). With the adoption of **AS1418.1-2021** the required International Standards (ISO) have been incorporated.

The design of the theatrical automation system includes all the accepted standard features and industry best practice required in a modern theatrical automation system used in a hoisting application. For example:

- **Primary and Secondary fail-safe mechanical brakes with brake feedback.**
- **Primary encoder and Secondary safety encoder monitored independently.**
- **Safety monitoring, or overwatch, system built on SIL3 compliant hardware.**
- **Primary and Safety speed monitoring.**

To ensure that SimpleMotion.Projects Pty Ltd has delivered a theatrical automation system of the highest quality and safety, only industry leading and reputable third party suppliers have been used. All of the listed suppliers originate in Europe and have been established within the automation industry for decades, these suppliers include:

- **Beckhoff Industrial Control.**
- **SEW Eurodrive Gearmotors and Drives.**
- **Mayr Silencio Secondary Brakes.**
- **Sick Industrial Encoders.**
- **Stromag Industrial Limits.**

The automation and rigging equipment were fully serviced, inspected and certified on 27th August 2025 prior to departing the Sydney workshop. This certification is valid for a period of 12 months from this inspection. Further checks and inspections are undertaken during each load-in with daily checks and inspection of the equipment undertaken each morning of a performance.

It is SimpleMotion.Projects Pty Ltd position that the “Cirque Alice” theatrical automation system is compliant and has been designed, engineered, manufactured and installed to the relevant Australian and International Standards that we currently understand are in force.

Should you require any further information or wish to discuss any of the details please do not hesitate to contact me via email.

Sincere Regards,

Greg Gowans, (greg.gowans@simplemotion.com)

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CERTIFICATE OF REGISTRATION

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Date of Issue
08-Aug-2025

Table 7.1 — Clauses of AS 1418.1—2002 superseded by Australian Standard (ISO adoption)

AS 1418.1—2002 Clause	Title	Superseded by	Specific relevant AS 1418.1—2002 clauses
7.1	General	AS 5227.1 , [ISO 10972-1:1998 (MOD)]	
7.2	Mechanisms	AS 5227.1 , [ISO 10972-1:1998 (MOD)]	
7.3–7.3.3	Basis of design	AS 5227.1 , [ISO 10972-1:1998 (MOD)]	
7.3.4	Classification	AS 5227.1 , (ISO 4301-1)	
7.4	Mechanism loadings	AS 5228.1 , (ISO 8686-1)	
7.5	Principle loads	AS 5228.1 , (ISO 8686-1)	
7.6	Additional loads	AS 5228.1 , (ISO 8686-1)	
7.7	Special loads	AS 5228.1 , (ISO 8686-1)	
7.8	Load combinations	AS 5228.1 , (ISO 8686-1)	
7.9	Determination of load combinations	AS 5228.1 , (ISO 8686-1)	7.9.2.6 retained in AS 5227.1 , [ISO 10972-1:1998 (MOD)]
7.10	Mechanical components	AS 5227.1 , [ISO 10972-1:1998 (MOD)]	7.10.1 (Shafts) retained in AS 5227.1 , [ISO 10972-1:1998 (MOD)]
7.11	Driving media	AS 5227.1 , [ISO 10972-1:1998 (MOD)]	
7.12	Braking	AS 5227.1 , [ISO 10972-1:1998 (MOD)]	7.12.3, 7.12.4, 7.12.8.2, 7.12.8.9
7.13	Motion limits and indicators	AS 5236.1:20YY , [ISO 10245-1:2008 , (MOD)]	
7.14	Ropes and reeved systems	ISO 16625	7.14.2, 7.14.3
7.15	Guys	ISO 16625	
7.16	Reeved systems	ISO 16625	
7.17	Sheaves	AS 5227.1 , [ISO 10972-1:1998 (MOD)]	7.17.4
7.18	Drum and sheave diameters	AS 5227.1 , [ISO 10972-1:1998 (MOD)], ISO 16625	
7.19	Drums	AS 5227.1 , [ISO 10972-1:1998 (MOD)], ISO 16625	Appendix
7.20	Wheels and rails	AS 5228.1 , [ISO 16881-1 (MOD)]	7.20.10 covered by ISO 12488-1
7.21	Guides for moving parts		
7.22	Detachable parts	AS 5227.1 , [ISO 10972-1:1998 (MOD)	7.22
7.23	Directly fitted hooks		
7.24	Counterweights	AS 5227.1 , ISO 10972-1:1998 (MOD)]	Appendix ZZ
Appendix L	Theoretical thickness of hoist drum	AS 5227.1 , [ISO 10972-1:1998 (MOD)]	Appendix ZZ, AS 5227.1 , [ISO 10972-1:1998 (MOD)]