



### Stage Machinery Working Group

#### E1.71 - 202x, Powered Curtain Machines Public Review 3 Comment Resolutions

Reference document: E1.71 - 202x, *Powered Curtain Machines* (Document number SL/2022-10006r2)

ANSI Public review period: 12 May 2023 through 26 Jun 2023

**Question:** In your opinion, do you think the requirements of E1.71 - 202x, *Powered Curtain Machines* (DCN SL/2022-10006r2) are reasonable, and adequately address the intended subject matter?

#### Responses:

Commenter	Response
Paul Zagajeski, Wenger Corp	OK, but needs improvement
Bruce Darden, InterAmerica Stage, Inc.	Yes

#### Individual Comments:

No.	Section	Comment	Reason	Resolution
1	2.2	Change reference to NFPA 70:2020 to NFPA 70:2023.	Reference the most recent version.	ACCEPT
2	4.2.2.1	Change "standard bottom pipe" to "bottom pipe".	"Standard bottom pipe" is not defined in this standard. In fact, if I were to follow this and use a standard 1/2" or 3/4" schedule 40 pipe as is typically used in the industry, I would exceed the 0.5 lb/ft limit in 4.2.2.3.	ACCEPT
3	4.2.4.3, 4.3.4.2, 4.4.4.2	Change "allow user intervention" to "provide for operator intervention"	"User intervention" is not defined in the definitions, "Operator intervention" is. Since it's a function the control station needs to contain, "provide for" is a better term than "allow."	ACCEPT
4	4.3.2.3, 4.4.2.3	Add an upper limit to the bottom pipe weight.	4.4.2.4 allows for "heavy bottom pipe", while 4.3.2.3 and 4.4.2.3 allow for bottom pipes to exceed 0.5 lb/ft. From these statements, any bottom pipe exceeding 0.5 lb/ft (which is just about any pipe) could be used in a level 3 or 4 system and section 4.4.2.4 is redundant. If the intent is to limit the weight of pipe for "normal" bottom pipes, it should be explicitly stated.	AIP – 4.4.2.4 will become an annex note to 4.4.2.3
5	4.4.4.4	Delete.	There are no parts of Chapters 6 or 7 of this document that require redundant features for level 4 machines except for the statements that apply to	AIP – Good catch! Clause re-written to "When required by RA/RR, lift curtain machines shall incorporate redundancy in controls and mechanical

			the operating media for level 3 and 4 lift machines. Without specific requirements, this statement makes it appear the requirement is to have redundant controls and machinery. Alternatively, identify which components are intended to be redundant (brakes, limit switches, etc.)	components while complying with the requirements of Chapters 6 and 7 of this document. Redundant components may include brakes, limit switches, or other sensors.”
6	6.4.2.2	Move this to between 6.4.1.5 and 6.2.2 and renumber as 6.2.2	This statement sets a maximum peak load for the operating media of multi line lift machines. It would be appropriate for level 1 and 2 machines in addition to 3 and 4.	ACCEPT
7	6.4.5.6	Change to "Fabric shall be flame retardant or treated to be flame retardant in accordance with NFPA 701 and other applicable codes".	Change to match 11.3.1. This statement mentions the particular standard to meet.	ACCEPT
8	6.6.6	Change to "Blocks shall be used in accordance with manufacturer's instructions."	While there may be some manufacturers who make a distinction between blocks for motorized and manual, there are also many that do not. This statement also prevents the use of blocks in vertical systems that were designed for horizontal systems and other misuse.	AIP - 6.6.6 Blocks shall be used in accordance with manufacturer's instructions and be designated for motorized operation.
9	7.1.2	Delete first sentence so section reads "Machinery and controls exposed to heat, cold, rain or splashing water shall have their application specifically investigated and mitigated using the RR/RA process."	Sections 7.3 and 7.2.8 require the equipment to be built to function in the anticipated environmental conditions. This section shouldn't limit it to indoor, climate controlled locations.	ACCEPT
10	7.3.4.1	Change the end of the sentence to "...may be done in many ways." Suggest moving this section to the annex, move annex note to 7.3.4.	This sentence does not contain requirements for the user of the standard, rather explanation and would better belong in the annex.	ACCEPT
11	7.5.4, 7.8.2, 7.8.2.2, 7.8.2.3, 7.8.2.4, 7.8.2.5	Change the word "Operator" to "Actuator"	The term actuator is defined by the current edition of NFPA 79 as "The part of the actuating system to which an external actuating force is applied." and used in the manner "Operator" is in this draft. The public review draft of E1.64 is using both terms to mean the same thing. The working group should come to a consensus of which terms to use across our standards.	REJECT – this standard is being drafted to harmonize with the forthcoming E1.64 controls standard. Some instances of the word “Actuator” has been replaced with “Operator” to achieve this goal. Other instances of the word “Actuator” as used to refer to a device providing motivation.
12	7.9.3	Define BAC	This acronym is not defined or used elsewhere in the standard.	AIP – Acronym replaced with “Building Automation System”

13	7.9.3.3	First bullet - change "... deliberate initiation by the control system..." to "... deliberate initiation by the user..."	In most of the groups standards, after a fault user intervention is required to reset the system and restart motion to prevent unexpected motion.	REJECT – This is not necessarily a machine fault condition but rather a loss of the control signal. In this case the controls system is considered to be the user and therefore could initiate a new run command should the control signal be re-established.
14	9.7	9.7 is duplicated, renumber	Duplicate numbers	ACCEPT
15	11.1.3	Change to "Systems shall be inspected and tested..."	After these events, the system should be inspected for defects before it is tested.	ACCEPT
16	A7.2.10	Move to correct place in Annex	This is located between A6.2.2.3 and A6.2.4. Please relocate to the correct place.	ACCEPT
17	A11.1.5.3	Add this as part of the standard as 11.1.5.4	This statement modifies the inspection interval for some machines. Since it is a requirement, it should be part of the standard.	AIP – The annex note is intended to be an example. Annex language will be amended to reflect this position.