vedanta transforming for good	Vedanta Safety Standard
Document Name	VSS-17 Lifts Safety Standard
Document No.	VED/CORP/SUST/VSS17
Date of Issue	30-03-2022
Revision No.	RO .
The management acknowledges the contribution of the following individuals for being a part of 'Cages & Lifts committee' and for their assistance in preparing this standard:	
CORE TEAM FOR STANDARD DEVELOPMENT	Mahesh Mahajan (Group Head- Health & Safety) Anrit Mukherjee (ESL) Devendra Kumar Yadav (HZL) Soumyanath Ghosh (VAL-J) Manish Lakhera (BALCO) Shubham Shirodkar (IOB) Hemant Kumar Sahoo (VLL) Manoj Kumar Gupta (TSPL) Dibyasakti Bhuyan (FACOR) Kalpesh Vaghasia (Cairn) Shane Links (VZI) Vikrant Natkar (SC) Vikranta Arora (Group Safety)
Issued By	Rajinder Singh Ahuja Group Head HSE & Sustainability



VSS17 LIFTS SAFETY PERFORMANCE STANDARD

1. Scope

This standard is applicable to all business units and managed operations, including new acquisitions, admin/corporate offices, research facilities located off site; during exploration, through all development phases and construction, operation to closure and, where applicable, post closure management.

- 1.1 This standard applies to personnel and equipment involved in use, operation, and maintenance of goods or passenger industrial / building lifts. (Note- Requirements of Cages, Shafts and Hoists are included in VSS-16 Shaft & Hoisting Standard and are exclusive of this standard).
- 1.2 Businesses are necessarily required to comply with local Lift related laws and regulations.

The objective of the standard is to eliminate the risk of fatalities, injuries or incidents resulting from any activities associated with use, operation and maintenance of goods or passenger industrial / building lifts.

2. People

- 2.1. Every Lift shall have one designated 'Lift Owner' who is trained & competent on all risks & maintenance requirements of lift and will have the responsibility to administer & maintain records of all routine / non-routine lift inspection / maintenance.
- 2.2. Any activity related to maintenance, repair, replacement or dismantling of lift must be carried out through its OEM or OEM authorized representative only.
- 2.3 Any person engaged in maintenance, repair, replacement or dismantling of lift must be trained, assessed, and certified as competent through OEM or OEM authorized representative. Prior to job start, Lift Owner must verify Authorization Letter / Certification from OEM for all the workers deployed on job.
- 2.3. In case a Lift is operated by a Liftman, then the Liftman must be authorized and trained on Safe use and Emergency Rescue Plan of Lifts and on VSS-17 Lifts Safety Standard and shall undergo refresher training annually.
- 2.4. All members of Emergency rescue team shall be trained on Emergency Rescue Plan of Lifts and on VSS-17 Lifts Safety Standard and shall undergo refresher training annually.

3. Process

Requirements specific to Routine / Non-routine maintenance of lifts:

- Permit shall be ensured for every routine / non-routine maintenance activity carried out on Lifts by authorized person.
- 3.2. All maintenance activities on lifts must undergo a specific risk assessment considering OEM guidelines with focus on job specific risks and control measures that must be implemented during the job. Same must be communicated to all members of the lifting team in a pre-lift meeting conducted before executing the job.
- Lift owner shall maintain records of complete maintenance history of the lift.

Requirements specific to Periodic inspection / fitness check of lifts:

- 3.4. Lift owner shall monthly inspect safety features of the Lift based on a pre-defined NO-GO Safety Checklist as per OEM recommendation. In case any safety feature is missing / non-functional then Lift operation must be STOPPED. Records of the same must be maintained by the Lift Owner.
- 3.5. All lifts must have a PM Plan in SAP with checklist & tasks recommended by the lift OEM.

- 3.7 Every quarter, a thorough Fitness check of the lift should be done through OEM. Recommendations by OEM should be implemented on priority. Fitness certificate shall be issued by OEM only after joint witnessing / verification of healthiness of Lift by Vedanta Lift Owner. The fitness certificate shall be signed off by Vedanta and OEM jointly and lift shall be put in normal operation after Certification only.
- 3.8 Thorough inspection including structural stability analysis shall be conducted for all industrial & building lifts every 5 years through reputed OEMs or reputed Lift manufacturers.

Requirements specific to Lift Operation:

- 3.6. All lifts shall have safety interlocks installed in them as per Indian Standard IS 14665 and local laws as applicable. In case any feature is missing, it must be retrofitted through OFM
- 3.7. Industrial Lifts in the high-risk areas (E.g., Chimney lifts / Blast Furnace lifts etc.) should have additional process specific controls in place such as user restrictions, authorized lift operator and process specific safety controls (like CO / SO2 exposure monitoring etc.).
- 3.8. Every lift must have Do's and Don'ts instruction displayed or pasted inside it, in both English and vernacular language, for public.
- 3.9. All Lifts must have Instructions displayed or pasted inside it, in both English and vernacular language, for actions to be taken during emergency.
- 3.10. All Lifts must have an intercom facility with the display of all the emergency contact numbers which are manned round the clock.
- 3.11. All lifts must have compliance against periodic maintenance check with next due date pasted inside the lift.
- 3.12. Battery Operated Automatic Rescue Device (ARD) shall be provided on all lifts to take the lifts to the nearest possible landing in case of power failure.
- 3.13. All Lifts should have an Emergency Light inside the cabin for illumination in case of power failure.
- 3.14. Fire-resistant enclosures and doors shall be provided where required by local laws and ordinances.
- 3.15. Lifts that are equipped with an opening shall be provided with either a car top or car side emergency exit.
- 3.16. Penthouse / Machine room doors shall be always locked, except when repairs are being made or when the machinery is being inspected or serviced through authorized person. Location of the key must be mentioned at the door of winch room.
- 3.17. In case a visible abnormality is observed in the Lift, then Lift operation must be STOPPED and same should be reported to its Lift Owner. Lift Owner must ensure that lift is reused only after re-certification by OEM on Lift healthiness.

4. Review

- All documentation including recorded lifts data is to be preserved.
- Periodic review of standard compliance by Site Management.
- 4.3. Annual audit by corporate.

Rajinder Singh Ahuja Group Head HSE & Sustainability