ASSOCIAZIONE NAZIONALE IMPRESE DI COSTRUZIONE E MANUTENZIONE ASCENSORI

Safety in the workplace in the Italian lift sector, between present, past and future

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INTRODUCTION

- In Italy, a decree also known as the "Testo Unico di Sicurezza sul Lavoro e Salute dei lavoratori" has been in force since 2008
- The Decree 81/2008 represents the culmination of the evolution in the field of safety at work in our country, which began in the 1950s

- **Lets have a quick look to this evolution**

The Decrees in the ‘50s

- The D.P.R. no. 547 of 1955, containing rules for the prevention of accidents at work
- The D.P.R. no. 164 of 1956, containing rules for the prevention of accidents at work in the construction industry and on occupational hygiene
- The D.P.R. no.303 of 1956, for the hygiene at work

- **Points in favor**

- Changed the approach to safety at work >"preventive protection of the psycho-physical integrity of workers"

- **Metodology**

- The above Decrees adopted a concept of prevention based above all on technological measures, to be compulsory introduced to mitigate the severity and probability of the accidental events
- This justifies the adoption without reductions of certain objective technical measures such as devices, construction solutions, environmental conditions, personal means of protection, etc.

Decree 626/94

- The Decree 626 issued in 1994 marks a very important turning point
- First of all, the concept of shared safety at European level is gaining ground
- Second, the Decree introduces a new mentality in the approach to safety and prevention, in which prevention is structured in a programmatic and organised way

- **Innovation**: the employer's obligation to carry out a "risk assessment"

Decree 81/2008

- With the Decree 81/2008 the evolution of legislation in the field of safety at work is fulfilled
- The decree:
  - confirms the innovations already introduced in 1994
  - extends the scope of application
  - updates the rules for the attribution of powers, duties and responsibilities with an accurate description of the figures of the employer, the manager, the person in charge and much more
  - …

What about the Italian lift industry?

- Since the Decree no. 626/1994 and, above all, the Decree no. 81/2008 were issued, the level of awareness of safety at work in the Italian lift industry has greatly increased
- The Italian lift industry has always been attentive to safety issues, as it has been regulated, at national level, and at European and international level

What about Italian small and medium sized lift companies? / 1

- The Italian lift sector, although used to worrying about safety, has seen a certain delay in the full implementation of the rules laid down in the new decrees
- This is particularly true for small and medium-sized companies which:
  - Are very attentive to the concrete aspects of the work and
  - Find it difficult to adapt to certain formalisations, so important today

What about Italian small and medium sized lift companies? / 2

- The typical activities of the lift companies have a high degree of danger, or if we want to risk, because the lift personnel face important dangers very often
- This happens as in the activity of new installation on site, as in that of maintenance, ordinary or extraordinary

What about Italian small and medium sized lift companies? / 3

- The construction site is notoriously a **dangerous working environment**
- **Maintenance, on the other hand, takes place in finished buildings**, often private, such as residential condominium buildings, which are workplaces, at least for lift staff
- In these cases the client perceives the presence of safety problems for the suppliers, including the lift company, only in the case of significant extraordinary work, but in fact **this is not the case**

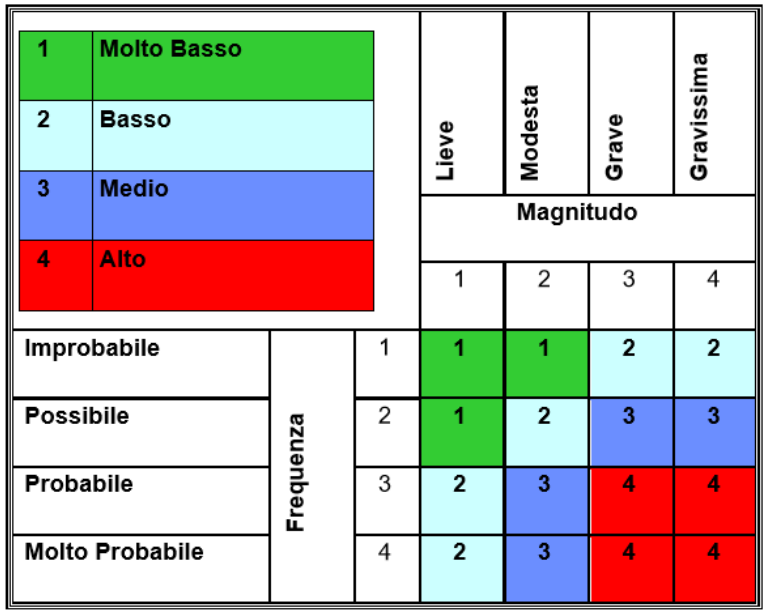
The risk assessment

- The risk assessment, which the employer must necessarily carry out for each activity done by its employees, must aim at **introducing risk mitigation actions**
- The mitigation actions intervene mostly on probability (less often it is possible to act on gravity)

Example of risk assesment

ASSESSMENT FORM

Source of risk	**INSTALLATION, MAINTENANCE AND MODERNISATION OPERATIONS CARRIED OUT AT A HEIGHT OF > 2 M**
Dangers / Risks	Fall into the shaft from the roof of the cabin, for various reasons
Prevention and protection measures	If the risk of falling is present (i.e. with spaces greater than 20 cm as required by accident prevention regulations), promote the installation of a parapet on the roof of the cabin, if it still does not have one, and if this does not lead to other greater risks (crushing at the maintenance technician's head). In the case of lifts without a parapet on the car roof: **CASE OF CABIN IN MOTION** When the installation has to be in motion for technical reasons, the use of slings held by lanyards should be avoided because of the serious risk of the worker getting caught while moving together with the cabin with organs fixed to the walls of the shaft. **CASE OF STATIONARY CABIN** When the cabin is stationary use restraint and fall arrest systems (lanyard harness and energy absorber). The protection system must be secured, directly or by means of a connector along a guide or life line, to stable parts of the cabin roof. The length of the lanyard must be in any way such as to prevent the risk of the person being suspended in a vacuum, as he or she may be working alone, and in any case it is not ensured that help is received within the necessary time (approx. 20 minutes). Personnel suffering from vertigo should not be employed.
Probability	Probable
Injury	Extremely serious
Risk assessment	Medium
Interventions for improvement	Observe the provisions of the Operational Safety Plan for the operations concerned for work at height. Carry out mandatory training in the use of appropriate PPE (in addition to anti-fall devices, helmet and shoes). Prepare and carry out periodic checks for anti-fall devices (harness, lanyard, carabiner, absorber, etc.), and keep staff informed and trained in their use.
Residual risk	**Made LOW, then it is ACCEPTABLE**



The product directives / The harmonised standards

- The **product directives** which regulate the design, installation and commissioning of lifts and other similar equipment, **help lift operators in their work**
- Example: crushing at the extremities of the shaft
- The Lift Directive indicates this requirement in the Annex I which the lift installer must assess and solve
- The harmonised standards >>> the technical requirements which allow the risk to be reduced to an acceptable value

Annex I of the Lift Directive

Example

- **2. Risks for persons outside the car**
  - 2.1. The lift must be designed and constructed to ensure that the space in which the car travels is inaccessible except for maintenance or in emergencies. Before a person enters that space, normal use of the lift must be made impossible.
  - 2.2. The lift must be designed and constructed to prevent the risk of crushing when the car is in one of its extreme positions.
    The objective will be achieved by means of free space or refuge beyond the extreme positions […]

Harmonised standard UNI EN 81-20:2014

Example

Dimensioni degli spazi di rifugio in testata

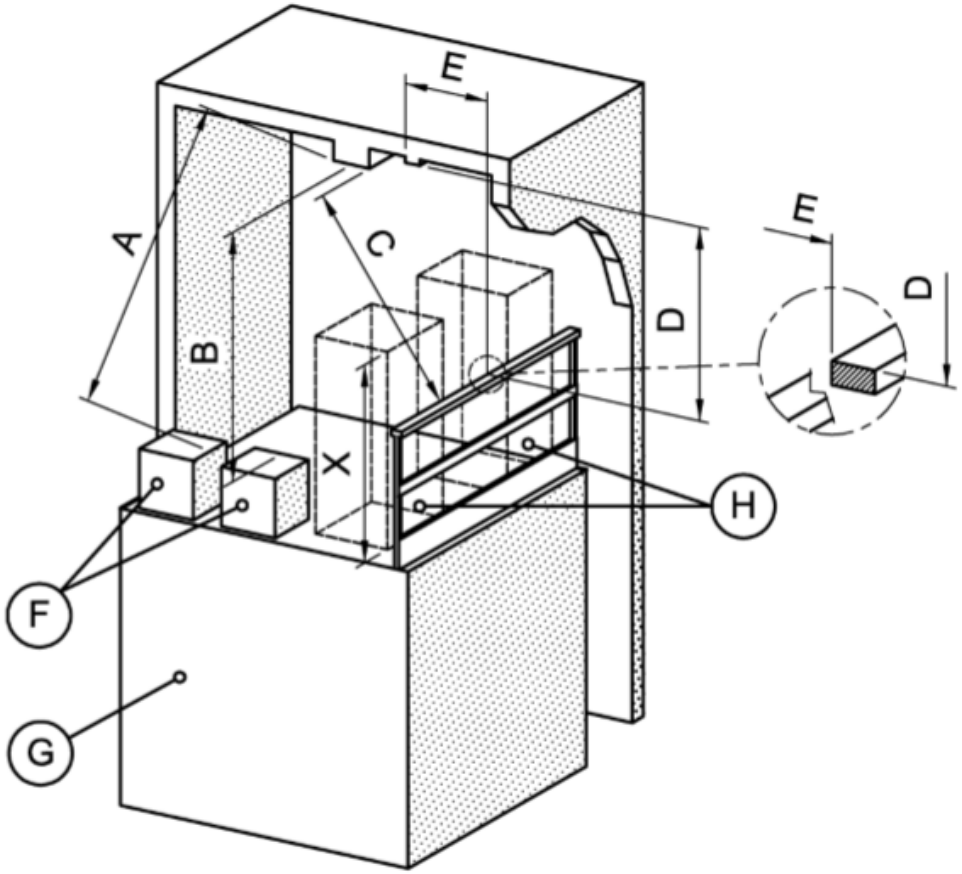
Tipo	Postura	Pittogramma	Dimensioni orizzontali dello spazio di rifugio (m x m)	Altezza dello spazio di rifugio (m)
1	Eretta		0,40 x 0,50	2,00
2	Accucciata		0,50 x 0,70	1,00

Legenda per i pittogrammi

1 Colore nero
2 Colore giallo
3 Colore nero

Harmonised standard UNI EN 81-20:2014

Example



Distanze minime tra gli organi fissati sul tetto della cabina e le parti più basse del soffitto del vano di corsa

What could be the future developments in the safety field?

- It is not repression or negative sanctions that should be encouraged, but rather prevention
- Two examples of prevention could be "positive sanctions" and "economic incentives"
- ”**Positive sanctions**", encourage compliance with the rules through the provision of rewards
- ”**Negative sanctions**" discourage the violation of a rule through the administration of penalties
- **Economic incentives** seem to be very much appreciated

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Thanks for your attention!

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