Here is the footage of
"Site Safety Forum for Works Contracts and Property Services Contracts 2017" which was held on 6th July 2017.
The speaker is
the director of refurbishment work in Schindler Lifts (Hong Kong) Ltd,
Mr. Lee Man-kit.
His presentation topic is
the alarm system at the bottom of lift shaft.

Good afternoon, I am Lee- Man-kit, representative of Schindler Lifts (Hong Kong) Ltd..
I would like to share about the safety improvement facilities
for the lift with you today.
The topic of today is concerning about the alarm system for the lift pit.
In view of my previous experience for the lift works,
there were lots of accidents involving workers working at the lift pit,
especially during testing and commissioning.
When the staff were working at the lift pit,
they were not aware of the movement of the lift car or the counterweight.
Finally, the staff were hit by the lift car or the counterweight
Leading to serious accidents.
Here is an old newspaper cutting to share with all of you.
It is about an accident involving serious casualty.
For instance, a worker was working at the lift pit.
He was not aware of the movement of the lift.
When the counterweight was going down,
the worker was hit and died.
Another industrial accident happened at the lift pit too.
This worker worked in a common shaft of three lifts.
There were two to three lifts sharing a common lift shaft.
When the worker passed from one side of the shaft to the other side,
he was not aware of the movement of the lift car.
and was fatally hit by the counterweight.
From the above two accidents, we summarise two main reasons for fatality below.
Firstly, the staff was unauthorized to enter the lift shaft
when the lift was operating.
Secondly, when the staff was working at the lift pit,
he was not aware of the movement of the lift or the counterweight
and was hit fatally.
Regarding the first case,
we can limit the access right for entering the lift shaft
by implementation of working permits
and control the access right of the staff for going into the lift shaft.

In the absence of a suitable working environment,
workers are prohibited to enter.
As mentioned by the speakers,
The use of Radio Frequency Identification (RFID) technology
could be adopted to
limit the access of the workers to the lift shaft.
Today we would like to focus on the second case.
Very often, when the workers worked at the lift pit,
there was distraction of workers'attention or lack of insufficient communication
and workers would easily be hit by the counterweight or lift car
leading to accidents.
Of course, workers communicate through intercom when they are working.
During the installing or testing,
all emergency stop buttons at machine room, lift pit and top of the lift car
have been installed properly.
However good communication is the most important even you have used it properly.
In order to avoid accidents caused by the hitting of moving counterweight or lift car,

no matter it is incurred by careless and unnoticed,
we have developed an alarm at the lift pit.
What is the purpose?
When the worker was working at the bottom of the lift shaft,
another coworker was controlling the lift cabin on the top of the cabin
and was operating the lift under maintenance mode.
This alarm device will be functioned when the lift cabin goes up or down.
The alarm will alert the workers, who are working at the bottom of the lift shaft, for the moving objects.
It meant that the moving counterweight thallium or lift cabin, will cause casualties.
This device was installed at the bottom exit of the lift shaft, just next to the ladder,
close to the emergency stop.
It is make sure that all workers are clearly found the device when they were working at the bottom of the lift shaft and
no obstruction was found.
it is along with the sound system to alert the workers who are working at the bottom of the lift shaft.
When the sound is coming, it reminds the workers to pay attention for the moving objects.
Here is a short video explaining the operation of this device.

Screen viewers play a short film

From the video, we heard the sound and saw the flashing lights.
Hopefully the lights shall not be too shiny and affect the works.
But it cannot be too dark without any warning function.
Usually, the device will be installed at the exit of the lift shaft, just adjacent to the cat ladder,
at the bottom of the emergency stop.
It will not affect your daily operation when we installed the alarm system.
The alarm device will be functioned effectively under maintenance mode.
When the lift cabin is moving up or down,
the alert device will be activated.
Since it involved the changes of cables network,
you are better to seek for the consent from the owner before installation
Here is the end of my sharing.

The following part is the questioning time from guess to audience.
Mr. Lee will question the audience right now.
Usually, the alarm device is not function frequency
What kind of the operation mode will make it work?
An audience raised up his hand.
Audience is answering the question.
Maintaenance mode
Guest response
Yes, under maintenance mode, when the lift cabin is going up or down.
Congratulations to you!
Thank you, Mr. Lee.