





行多一步的新思維

**Go an Extra Mile**

堅實及鮮明的安全領導者

**Visible and Committed Leadership**

團隊精神，人人有責，各司其職

**Team Spirit, Safety is Everyone's Responsibility**

安全智慧工地系統

**Smart Site Safety System (“4S”)**

# 葵涌荔崗街地盤 司機被夾泥頭車與挖泥機之間 當場不治



2024年7月25日

葵涌一個地盤發生奪命工業意外，一名泥頭車司機在泥頭車旁工作期間，懷疑一部挖泥機突然轉動時，將其頭部夾在兩車之間，當場不治。

# 荃灣工廈工人15樓準備搭棚跣腳墮地亡



2024年7月20日

一名工人在15樓爬出單位，準備到外牆搭棚架期間，跣腳由15樓墮地，昏迷不醒，救護員到場證實工人當場死亡。

# 油麻地地盤吊臂車翻側 司機受傷送院



2024年7月13日

一名機手操作起重機期間，起重機意外翻側，吊臂橫瓦工地。機手手腕扭傷、腳趾骨折、大腿拉傷，救援人員趕至，即場為機手包紮，其後送院治理。

# 觀塘地盤男工人從2米高「夾斗車」墮地 昏迷送院搶救



2024年7月2日

一名77歲工人於該地盤工作期間，懷疑從2米高的「夾斗車」上墮地，頭部受傷，其後陷入昏迷。

據了解，地盤正進行更換水管工程，事主為一名「夾斗車」操作員，事發時他獨自操作吊臂，其間從座位墮地。

新油麻地公眾貨物裝卸區

男子落貨期間 突遭6米長水管砸頭  
送院不治



亞博館嚴重工業意外

33歲男工  
4米高棚架墮地  
顱內出血頸骨裂  
留醫ICU 育有一對幼兒 女友有身孕



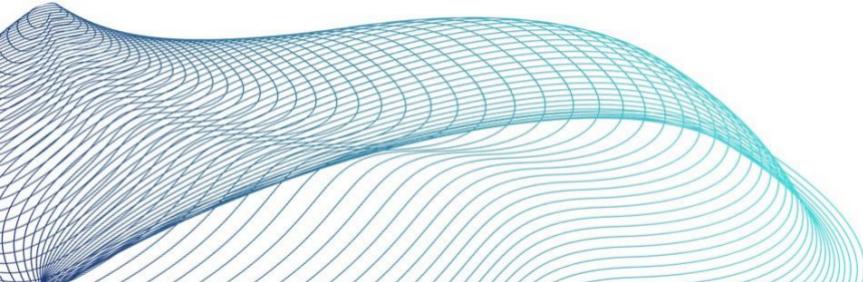
安全文化  
現在依然十分脆弱！  
Safety culture is still  
fragile NOW!

機場三跑地盤田螺車翻側  
司機被壓至盤骨骨折  
痛苦悲鳴：唔得啊



沒有進行 **×**  
動態風險評估

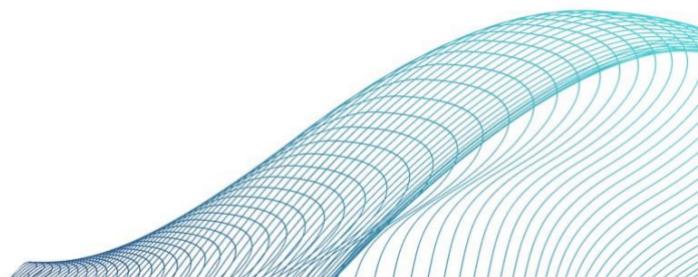
No Dynamic Risk  
Assessment (“DRA”)

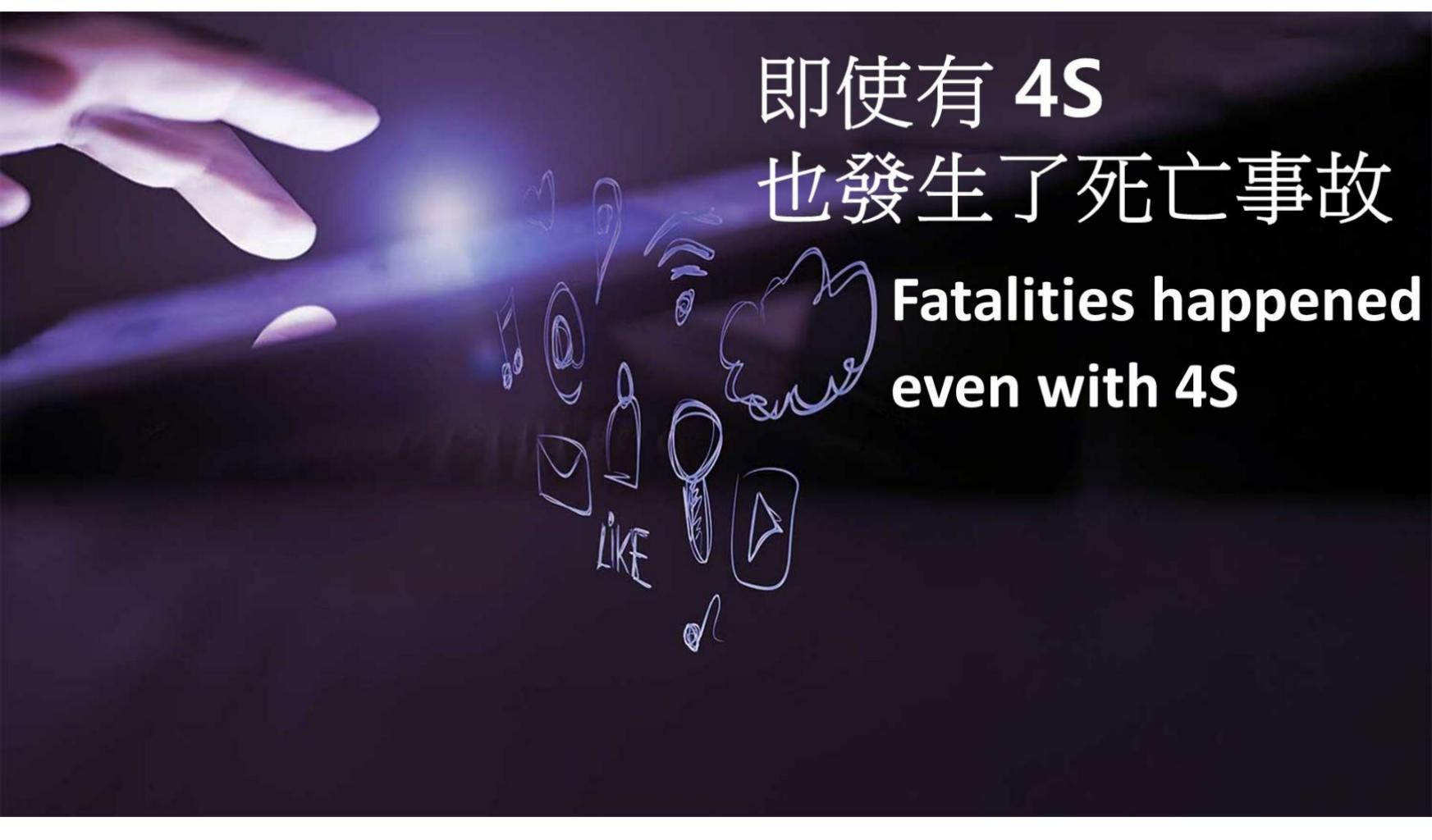




發生死亡事故時  
周圍無人監管

**No Supervision around  
when Fatalities happened**





即使有 4S  
也發生了死亡事故

Fatalities happened  
even with 4S

約有80%的死亡事故與  
前線管理人員及工友心態及習慣做成

**Around 80% of Fatality Cases related to  
the attitudes and habits of frontline  
management and workers**



2023年約有60%的死亡事故與  
打單泡有關

**Around 60% of Fatality Cases related  
to Not Working in Pairs in 2023**

約有50%的死亡事故與  
人體從高處墮下有關

**Around 50% of Fatality Cases related  
to Fall from Height**





約有42%的死亡事故與  
60歲以上的工友有關

**Around 42% of Fatality Cases related to  
workers over 60 years old**



誰是 “真漢子，真娘子” ？

管理層只是認為安全，而不是證明它安全

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**Who are the Real Guys?**

**Management just deemed Safe and NOT prove it Safe**

怎樣解決以上問題

How to solve the above



# Change the Culture/Habit/ Mindsets

**Safety is Everyone's  
Responsibility!**

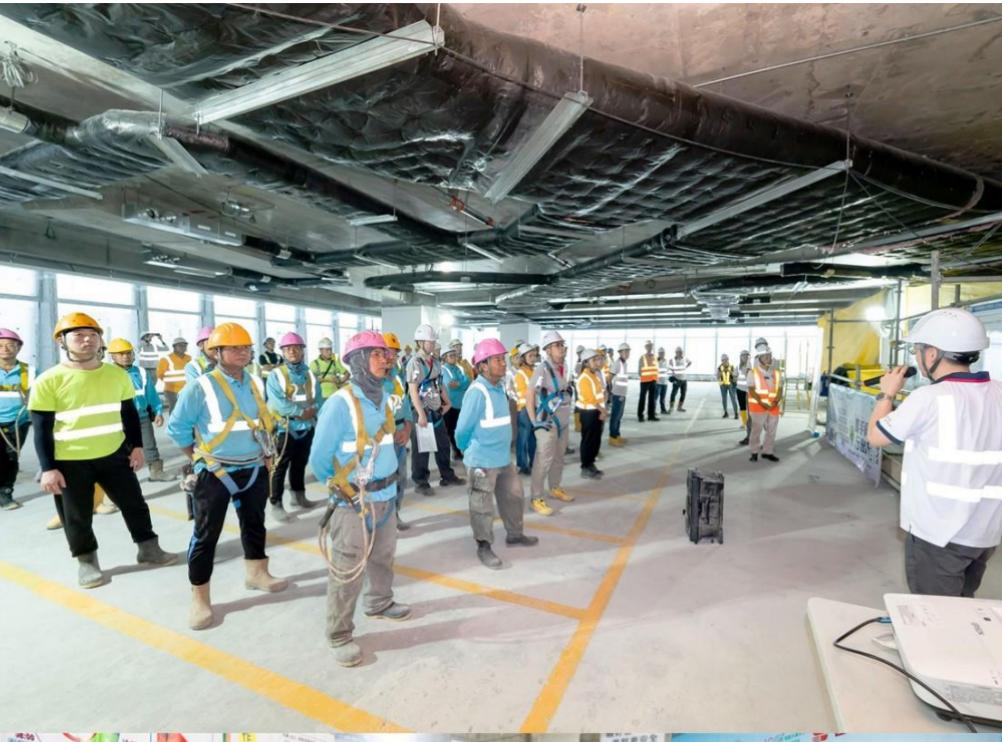
安全是每個人的責任!



改變文化/習慣/心態

## 領導者到工地舉行安全講座

Leaders conduct safety talk ON SITE



# 項目團隊需要落實： 檢查及測試計劃/ 數碼工程監督系統

**Project Teams need to do:  
Inspection and Test Plan/ DWSS**

監工前往監察  
Supervisors go to the  
spot

動態風險評估  
Dynamic Risk  
Assessment

相片紀錄並通過區塊鏈上  
傳到雲端

Photo records and  
upload to the cloud  
with blockchain



# 不可以不管不理

## We need to Manage

- 培養真漢子真娘子 (**Real Guys**)
- 工頭 (**Gangers**)
- 分判揸FIT人 (**Sub's Agent**)
- 座頭/分區管工 (**Foremen**)

必孖孖

Work in pairs



將關愛文化延伸到家庭  
以做好安全自豪！

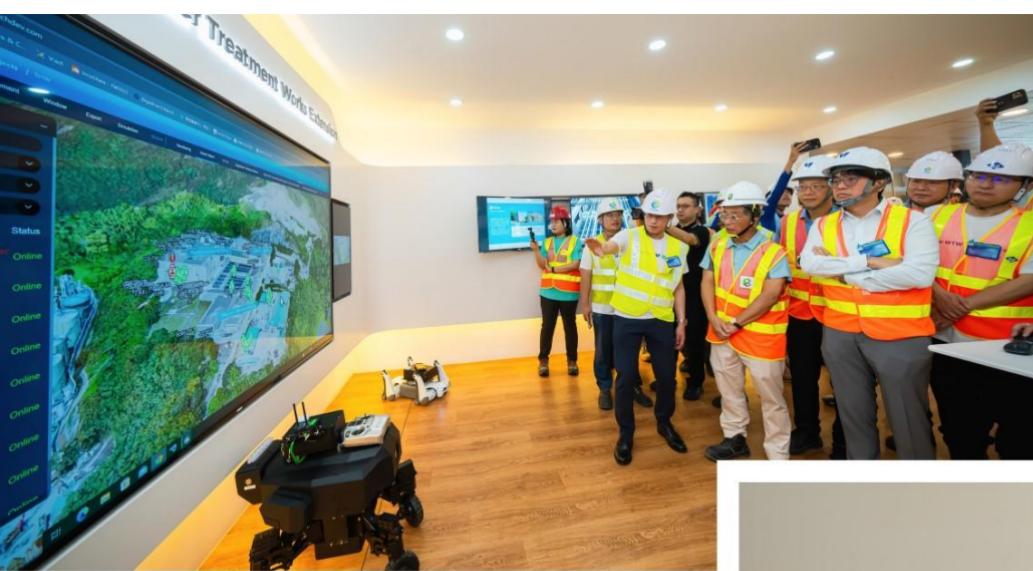
Cascade caring culture to home  
Proud to be Safe!



# 安全智慧工地系統

## 4S





18/WSD/21-  
提升貝澳原水抽水站及貝  
澳原水抽水站及沿嶼南道  
敷設原水水管



7/WSD/21 -  
興建小蠔灣濾水廠  
擴展部分及小蠔灣  
原水增壓抽水站



Siu Ho Wan Water Treatment Works Extension





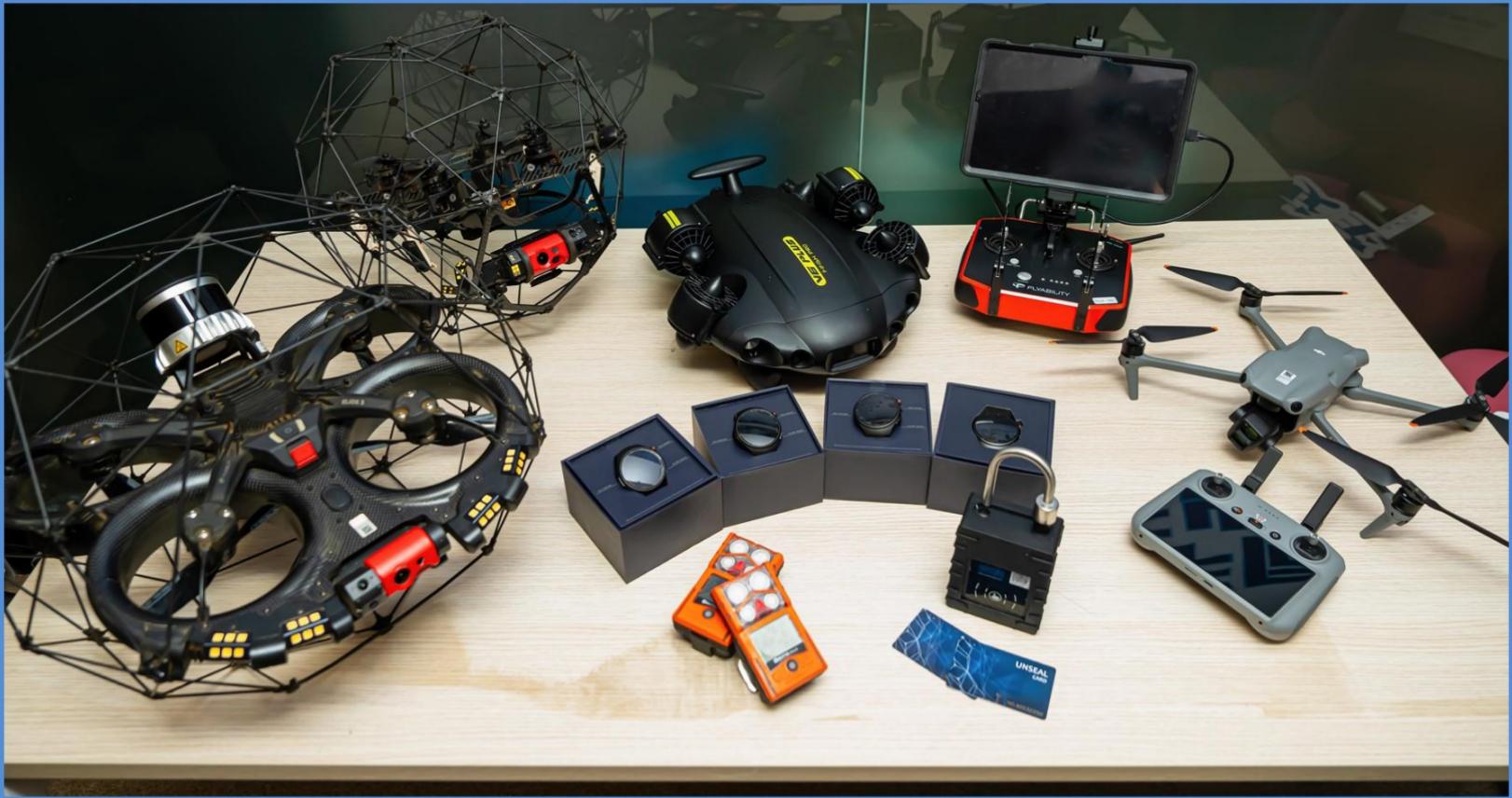


明興水務 - 中央數碼控制中心



# Smart Site Safety System







DC/2019/10  
元朗淨水設施 - 第一階段主體工程







管理層

沒有監督  
不能工作

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Management

No Supervision  
No Work

# 救命三寶 Three Life Saving Tips

## 動態風險評估 Dynamic Risk Assessment



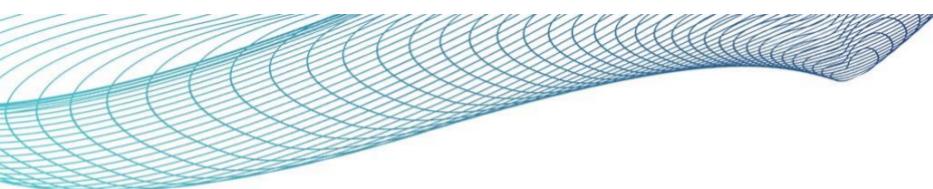
## 現場簡報 Field Control Briefing



現場環境或工序有變，  
應立即停止工作！！

If changes, Stop Stop Stop !!





致命區域  
進行管理及圍封

**Fatal Zone**  
**Carry out management  
and fence-off**



若誠實地使用4S，事故是可以避免！

Incidents could be avoided by honestly implementing 4S !



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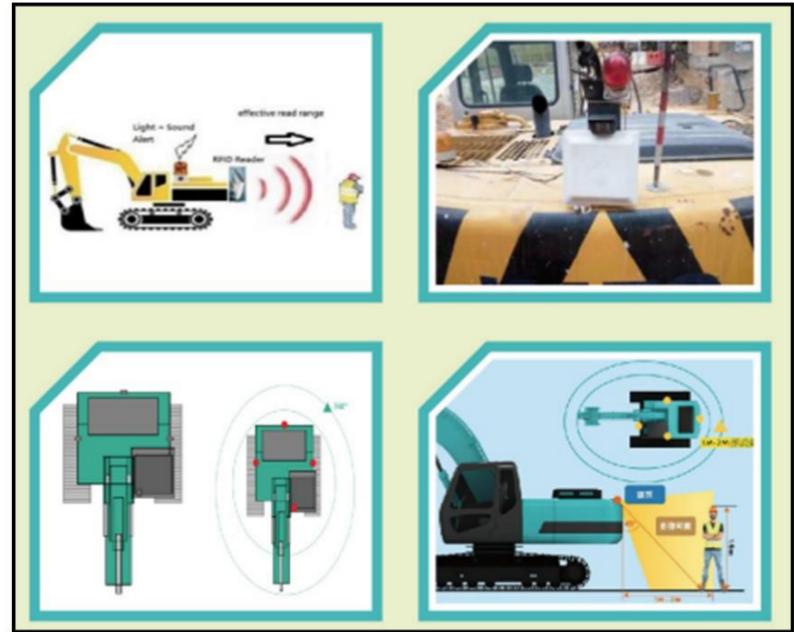


## 可行的解決方案：

1. 挖土機配備4S 智能感應器
2. 圍封致命區域
3. 座頭管工/看守員/工人的正確企位

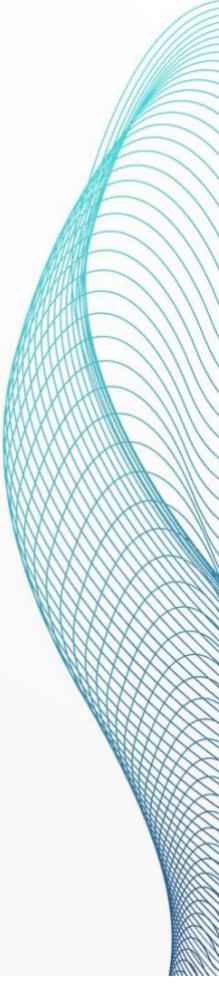
Applicable solution could be considered:

1. Equip the excavator with 4S sensor
2. Fence off fatal zone
3. Proper positions of Block Foreman/Lookout Man/ Workers



# **Can Really Save Lives**

## 真的可以拯救生命





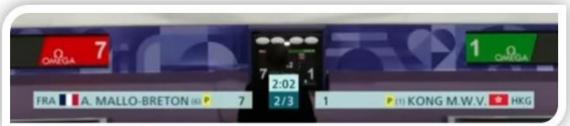
# 攜手同心 行出安全！

## Safety First

## Say NO to Danger!



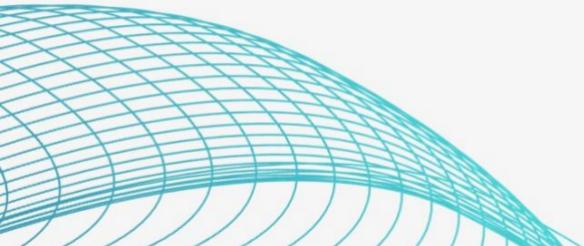
# 微笑劍后







謝謝  
Thank you



This is a clip from the 31 July 2024 recording of the

Hong Kong Housing Authority

“Safety Forum 2024 for Works and Property Management Services”

The speaker on stage is Ir Prof. Thomas Ho

Chairman of the Construction Industry Council (CIC)

He will give the opening address

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(00:20)

Ms Rosanna Law, Permanent Secretary, Chairman Mong

One thousand disciples of Lu Ban

I am glad to share with you today

some thoughts on safety culture

I think in the past twenty-plus years

everyone has done a lot of work

but who knows that within the industry

many cultural problems and bad habits still exist

So every year, there are still about twenty fatal accidents in construction

because our safety culture is still very fragile

It seems like last week, on 26 July

a worker was caught between machines and died on the spot

And two weeks ago

a worker did not fasten the safety harness properly

and fell to his death from the 15th floor

This is a cultural problem

How can we change the culture

and change the habits?

Time is limited, so I will briefly explain a few key points

I hope you can analyse them

I have done many investigations

Since 2023 until now

of the roughly thirty fatal accidents

there are some points that need special attention

Culturally speaking

none of these thirty fatal accidents

had conducted dynamic risk assessments

And at the time when these thirty accidents occurred

there were no management personnel on site

I think this is the fatal flaw causing accidents

So I thought about

how to change these two most important cultural issues

I have recently visited many sites

One site

since the start of the project until now

has reached six hundred thousand man-hours

with no accidents or incidents

How did they achieve this?

Firstly, they must have conducted dynamic risk assessments

Secondly, the site management personnel really managed strictly

After inspection

they took photos as records, proving the dynamic risk assessments were done

before starting work

Thirdly, they have mutual trust and support

with their frontline staff and managers

The Clerk of Works and Resident Engineers

chat with workers during tea breaks

They discuss any problems on site

After the discussion, they immediately installed toilets for workers

People's livelihood matters

and this built a mutual trust relationship

Fourthly, they used the Smart Site Safety System (4S)

Not just the Smart Site Safety System but beyond it

So when these points are added together

they are enough to address the issues I mentioned earlier

and can even achieve zero accidents and zero incidents to this day

Also, I visited a renovation and maintenance site

Their Centralised Digital Management Platform

can manage 5 to 6 construction sites

I was at the control centre with the Director of Water Supplies

We could ask the workers to do the tasks correctly

which really can save lives

They also use drones equipped with gas detectors

to fly into confined spaces and test gases inside

When safety levels are met, they use the "E-LOCK SYSTEM"

to control and approve workers entering confined spaces

This is a method beyond the Smart Site Safety System

Only with such methods can it truly be done

I also visited another site

this one is a water purification construction site

They installed about 100 AI cameras

to achieve the best possible monitoring

So they have reached 170,000 hours

without injury or incident

This story teaches us

zero accident and zero incident are achievable

The most important thing to remember is

the "Three Life saving Tips" that I often mention

In any case, before starting work on construction site

a dynamic risk assessment must be completed first

Second, take the workers and subcontractors to site

to explain how to hand over the tasks

detailing the step-by-step process before starting to work

The above are two lifesaving treasures

Third, if there are any changes in the working methods, stop first

This can truly solve the problem

I want to share this accident with you

This accident was the fatal incident last week

If there was a management personnel on site

they could have done a dynamic risk assessment immediately

This machine moves

vehicles move, people move

From a management perspective

it is important to identify the fatal zone immediately

Workers and drivers should do inspections outside the fatal zone

As a management personnel, we have to instruct workers and drivers how to do

Additionally, the Smart Site Safety System is quite affordable

Sensors can be directly installed on machinery

to detect the 360-degree environment

Then install sensors on guardrails

If a worker crosses the guardrail into the fatal zone  
an alarm will be triggered

to alert the worker to leave the fatal zone

This is a very good example

combining dynamic risk assessment, field control briefing, and Smart Site Safety System  
which can really save lives

Nowadays, many employers will inspect sites in person

and talk with workers

I want to give three examples

First, I visited the site with the Chairman of Chevalier Construction

What did the Chairman of Chevalier Construction talk to workers?

He said to them

I do not want you to have accidents

This is the message he shares with workers

Second, I visited the site with Mr Hung Cheung-shew from China State Construction (Hong Kong)

He also told his workers

Safety has no budget limit, spend as needed

Third, I visited the site with Mr Lee Chun-kong, CEO of Shui On

He told his workers

It is only a means of making a living, so there is no need to risk your life for it

These messages

truly convey the spirit of caring and concern

to the workers

Finally, I want to encourage everyone

After our Smiling Queen of Swords won the championship

she said a few words

that I am still savouring

"If I have not yet achieved the spirit of the Lion Rock, I will not give up"

This is the saying from Cheung Ka Long

Never give up

Right now, our safety culture score stands at one to seven against us

I hope everyone can genuinely embrace the Lion Rock Spirit

I firmly believe that we can reach zero accidents and zero incidents

The examples I just quoted are self-explanatory

Our fellow disciples of Lu Ban

The lyrics of this song

profoundly capture the feelings of thirty victims' families

I hope that, motivated by these lyrics

Everyone shall commit to ensure that such tragedies do not occur again

Shan't we?

Thank you all

Thank you for watching

(10:59)