



# SMART SITE SAFETY SYSTEM THROUGH INTEGRATED ASSET MANAGEMENT

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# LIFTING GEARS AND LIFTING APPLICANTS ARE ONE OF THE COMMONLY USED ASSET IN JOBSITE, REGULAR INSPECTION BY QUALIFIED PARTY IS CRUCIAL TO AVOID ACCIDENT

## Typical Lifting Gear in jobsite



## Form 7 for Lifting Gear cert.

Name of owner 業主/人姓名		Form 7 表 7		[Reg 18(1)(a)] [Section 18(1)(a)]	
Factories and Industrial Undertakings (Lifting Appliances and Lifting Gear) Regulations 工廠及工業操作(起重機及起重裝置)規例					
CHAINS, ROPES AND LIFTING GEAR CERTIFICATE OF RESULTS OF THOROUGH EXAMINATION IN THE PRECEDING SIX MONTHS 吊索、繩索及起重裝置 在過去六個月內進行徹底檢驗結果證明書					
Form approved by the Commissioner of Labour for the purposes of regulation 18(1)(a) of the Factories and Industrial Undertakings (Lifting Appliances and Lifting Gear) Regulations 本表格為勞工處總監根據《工廠及工業操作(起重機及起重裝置)規例》第18(1)(a)條的條文所認可					
Address of installation 安裝地址		Date of examination 檢驗日期		Result of examination 檢驗結果	
				Entry details of repairs required on delivery, if any under "Repair" and entry relation to safe working order 檢驗結果：如有需要，請於交貨時填妥有關修理紀錄，並填妥安全運作紀錄。	
I hereby certify that the gear described in this certificate was thoroughly examined by me and that the above particulars are correct. 茲此證明本人證明：(1) 該起重裝置經本人徹底檢查，(2) 上述各款均屬事實。					
Signature of Registered Professional Engineer 註冊專業工程師簽署		Signature 簽署			
Date of certificate 簽發日期		Duration 有效期間			
Any competent person or competent person who delivers to an owner a certificate or makes a report which is to his knowledge false or in a material particular that be guilty of an offence under the Factories and Industrial Undertakings (Lifting Appliances and Lifting Gear) Regulations.					

Biannually inspection for lifting gear is essential to ensure up-to-standard quality of lifting gear to avoid failure when loading

# CHALLENGES IN MANAGING THE LIFTING GEARS WITH TRADITIONAL METHOD

## Managing thousands of physically LG

**Challenges:** Multiple excels to manage the data base of LALG information, including purchasing, location assignment and certificate management

**Impact:** misaligned information from different excel, causing missed certificates for existing LALGs



ID	Name	Brand	Model	Serial No.	Purchase Date	Status
1	Hyundai	Hyundai	HY1000-10T	10001001	2018-01-01	Active
2	Hyundai	Hyundai	HY1000-10T	10001002	2018-01-01	Active
3	Hyundai	Hyundai	HY1000-10T	10001003	2018-01-01	Active
4	Hyundai	Hyundai	HY1000-10T	10001004	2018-01-01	Active
5	Hyundai	Hyundai	HY1000-10T	10001005	2018-01-01	Active
6	Hyundai	Hyundai	HY1000-10T	10001006	2018-01-01	Active
7	Hyundai	Hyundai	HY1000-10T	10001007	2018-01-01	Active
8	Hyundai	Hyundai	HY1000-10T	10001008	2018-01-01	Active
9	Hyundai	Hyundai	HY1000-10T	10001009	2018-01-01	Active
10	Hyundai	Hyundai	HY1000-10T	10001010	2018-01-01	Active

Excel 1

And many other excels.....

Excel 2

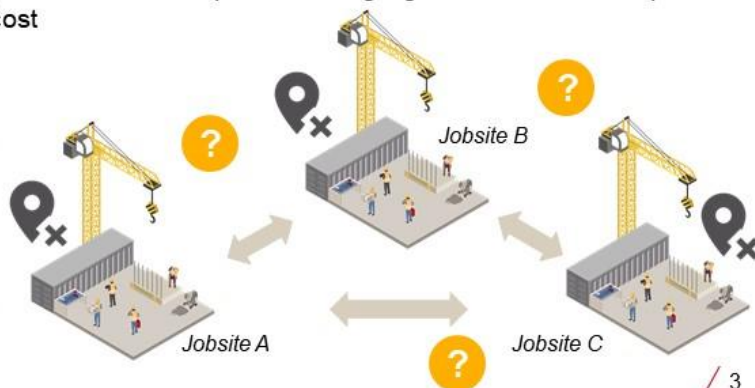


Type	Model	Serial No.	Location	Status
LG001	LG001	10001001	Jobsite A	Active
LG002	LG002	10001002	Jobsite B	Active
LG003	LG003	10001003	Jobsite C	Active
LG004	LG004	10001004	Jobsite A	Active
LG005	LG005	10001005	Jobsite B	Active
LG006	LG006	10001006	Jobsite C	Active
LG007	LG007	10001007	Jobsite A	Active
LG008	LG008	10001008	Jobsite B	Active
LG009	LG009	10001009	Jobsite C	Active
LG010	LG010	10001010	Jobsite A	Active

## Identifying the real time location of expired LG

**Challenges:** Unable to locate the exact location of expired LG, as LG can moved around different jobsite and LG of same model looks identical. Workers fail to transfer asset in the system to report last updated jobsite of the LALG

**Impact:** The location of LALG can be wrong in report. Contractors might have to inspect all LG of the same model at the same time even just a few LG are expired. Causing high labour cost and inspection cost





# UTILISE SSSS SOLUTION (ON!TRACK SOLUTION) TO MANAGE LALG DIGITALLY TO OVERCOME CHALLENGES



ON!Track



*Proactive Tracking with  
Smart Tag Solution*

## Smart tagged LALG asset



## Install gateway in LA



## Training to key stakeholders



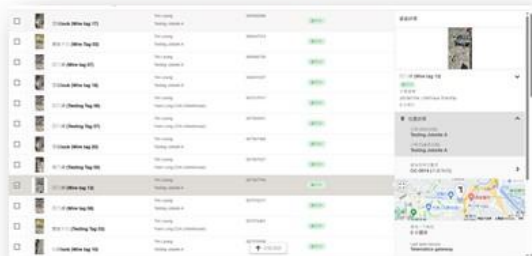
Smart Site Safety System through integrated asset management

# UTILISE SSSS SOLUTION (ON!TRACK SOLUTION) TO MANAGE LALG DIGITALLY TO OVERCOME CHALLENGES



ON!Track

## ✔ One stop platform



- ✔ Cloud based server to manage all LALG in one platform.
- ✔ Real time update and aligned information

## ✔ Real time location tracking



- ✔ Real time tracking of geolocation of LALG
- ✔ No manual management of LALG location required, minimize human error from data input
- ✔ Use mobile to track the exact location of LALG to search expired asset in jobsite

## ✔ Service alert and management



- ✔ Service alert will be sent to user in apps / by email when certificate is going to expired / already expired
- ✔ Stored all historic certificates in apps / webpage for future reference and inspection

# HILTI ON!TRACK IS IN CITF PRE-APPROVED LIST UNDER SSSS IN CATEGORY 2



CITF DIGEST

二零二三年三月 MAR 2023 / 第十五期 ISSUE 15

融匯科技 創建香港 WE INNOVATE, WE BUILD

## 安全智慧工地系統 Smart Site Safety System

超過 50 種預先批准的 SSSS 產品可供選擇  
More than 50 pre-approved SSSS products for selection

**APPLY NOW**  
立即申請

CITF 資助業界使用  
安全智慧工地系統  
每位申請者最高 \$750 萬!  
CITF supports the industry to adopt  
"Smart Site Safety System"  
Max. \$7.5M funding per applicant!

## PA19-025 | ON!Track

此產品是一個專為建築業而設的數碼化資產管理解決方案，有關資產資料透過網站和手機應用程式存取在雲端上。

用戶可以在資產上附加耐用的二維條碼/二維碼作識別用途，並透過掃描來查閱資料，資料包括圖片、文件、位置、採購資訊、保養到期日及預定服務。

ON!Track is a digitalised asset management solution designed for construction industry. It uses cloud-based server for information storage and can be retrieved or updated with two interfaces which are web portal and mobile app.

User can attach a robust 2-D barcode/QR code on the asset for unique identification purpose and the information can be retrieved by scanning. Asset information includes pictures, documents, locations, purchase information, warranty expiration dates and scheduled services.



ON!Track

## 安全智慧工地系統10個主要類別 10 Main Categories of SSSS Products:

1 中央管理平臺  
Centralised Management Platform

2 數碼化追蹤系統 (工地機械、電動工具及梯架)  
Digitised tracking system for site plants, powered tools and ladders

3 數碼化工作許可系統 (高風險工作)  
Digitalised permit-to-work system for high risk activities

4 危險區域進出管制 (電子鎖系統)  
Hazardous areas access control by electronic lock and key system

5 移動設備操作區域的不安全行為/危險情況警報  
Unsafe acts / dangerous situation alert for mobile plant operation danger zone

6 天祥吊運區域的不安全行為/危險情況警報  
Unsafe acts / dangerous situation alert for tower crane lifting zone

7 前線工人智能監控設備  
Smart monitoring devices for workers and frontline site personnel

8 人工智能安全監察系統  
Safety Monitoring System using Artificial Intelligence

9 密閉空間監控系統  
Confined Space Monitoring System

10 虛擬實境安全培訓  
Safety Training with Virtual Reality Technology



基金配對資助\*  
Co-fund by CITF

70%

類別  
Cat. 2

Hilti (Hong Kong)  
Limited



Smart Site Safety System through integrated asset management



現在放映的是2024年7月31日

香港房屋委員會

「2024年工程和物業管理安全研討會」的片段

台上的講者是喜利得(香港)有限公司工具服務營銷主管

蘇浩麟先生

他的講題是

「打造安全智慧工地- 以雲端數據服務簡化設備管理」

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(00:27)

大家好，我是喜利得的蘇浩麟

今日我會為大家分享一下

如何通過軟件技術帮助大家提升工程安全

我想大家對喜利得的第一印象

就是電動工具或者是螺絲錨栓

其實我們在軟件上也做了很多事情

我先說一下公司背景資料

其實我司有開發資產管理的軟件

在一些常見的工地

會有很多一模一樣的起重裝置

可能有一千多條的起重裝置

例如一些鐵鍊吊索，都是一模一樣的

但剛才也提及

有一些意外是來自於高空墮物

而原因有機會是因為鐵鍊有勞損

它們勞損了，然後破壞了

所以定期需要填寫表格七

去檢測一下它是否仍然符合使用標準

但去到現場操作

傳統的方法是有很大的挑戰

我也跟同業了解過

要管理這些起重裝置

是用試算表去記錄管理

但不同的工地有不同的試算表格

然後一個工地有十個試算表

可能更新了一個試算表

其他全部都沒有連結在一起

使其餘試算表沒有同步更新

我覺得最大的挑戰是第二點

第二點就是起重裝置的外表一模一樣

經常被放在不同的工地使用

或者放在工地的不同位置

半年之後要做檢測

其實是沒有可能找到這起重裝置

因為已經不知道它放在哪個位置

全部起重裝置一模一樣

我跟同業討論過

其實都是找不到這起重裝置

要進行檢測，要將整個工地的起重裝置

做一次檢測

才可以確保所有起重裝置證書是最新狀況

這樣就很浪費時間

喜利得的解決方案

就是運用一個追蹤系統



把智慧標籤貼在起重裝置、在重型機械安裝網絡連接器

這樣系統就會報告所有起重裝置的位置

同時我們在重型機械安裝網絡連接器

覆蓋整個工地

甚至是培訓主要持份者

主要是安全主任

因為我們希望大部分的操作都能在辦公室處理

在現場的工友就越少越好

將所有的東西自動化是最好的

那出來的效果就是

我們將所有東西放在平台內去管理

同時可以實時地去監察這些起重裝置

究竟在哪個位置

它的全球定位位置在哪裡

當它需要維護的時候

它就傳送一個提示到系統

可能透過中央管理平台

通知客戶哪些起重裝置需要維護

然後一查就知道它在哪個工地

大概是在哪部起重機附近

那就可以作出相關行動

最後我們這個「ON!Track」系統

都是建造業創新及科技基金所批核的一個軟件

所以大家如果在一些私人的項目上

想去應用這個軟件

都可以透過建造業創新及科技基金的平台申請資助

今天分享此

如果大家想了解更多資料

可以參觀我們的展覽攤位

謝謝

謝謝觀看

(03:58)