



# 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 名 有 人 的 名		
Factories and Industrial Undertakings (Lifting Appliances and Lifting Gear) Regulation CHAINS, ROPES AND LIFTING GEAR CERTIFICATE OF EXAMINATION EXAMINATION IN THE PRECEDING SIX MONTHS		
Form approved by the Commissioner for Labour for the purpose of replacing forms of the Factories and Industrial Undertakings (Lifting Appliances and Lifting Gear) Regulation 工廠及工業場所起吊裝置及鏈索及繩索裝置 關於鏈索、繩索及起吊裝置 在第六個月內由工廠或工場所起吊裝置及鏈索及繩索裝置之定期檢查證明 本表格為由工廠或工場所起吊裝置及鏈索及繩索裝置之定期檢查證明 FORM 7 英 稱 七		
Address of installation 安 裝 地 址		
Description of chains, ropes or gear, e.g. type, size, material, etc. 鏈索、繩索或裝置的描述，例如：類型、尺寸、材料等		
Date of examination 檢 查 期 限	Safe working load 安全工作荷重	Date of inspection required or defects 檢 查 期 限 或 缺 陷
(1)	(2)	(3)
I hereby certify that the gear described in this certificate was thoroughly examined by me on _____ and that the above particulars are correct. 我在此特此證明，上述所列之裝置已由我仔細檢查過，並確定上述資料正確無誤。		
Signature of Professional Engineer 工程師簽名		
Date of certificate 簽 證 期 限		
Any criminal conviction or complaint process which delivers an order or sentence or makes an order or sentence in his knowledge false or in a criminal procedure shall result in a fine of up to \$200,000 and/or imprisonment for 12 months. 任何刑事定罪或申訴過程，如果判決或命令為虛偽或在刑事程序中為虛偽，將會處以最高\$200,000元罰金和/or 12個月監禁。		
LAW		

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

Serial Number	Category	Model	Brand	Manufacture Date	Capacity (GB)	Condition	Unit Status	Details
1	Energy Charger	Model A	Logitech	2023-01-15	1000-1500	Good	Online	<a href="#">View Details</a>
2	Smart Home Controller	Model B	Samsung	2023-02-20	500-1000	Medium	Standby	<a href="#">View Details</a>
3	Smart Cleaning Robot	Model C	Ecovacs	2023-03-10	100-500	Good	Standby	<a href="#">View Details</a>
4	Smart Lock	Model D	Yale	2023-04-05	500-1000	Medium	Standby	<a href="#">View Details</a>
5	Smart Camera	Model E	Ring	2023-05-01	100-500	Good	Standby	<a href="#">View Details</a>
6	Smart Thermostat	Model F	Nest	2023-06-15	100-500	Medium	Standby	<a href="#">View Details</a>
7	Smart Speaker	Model G	Amazon Echo	2023-07-05	100-500	Good	Standby	<a href="#">View Details</a>
8	Smart Plug	Model H	Belkin WeMo	2023-08-10	100-500	Medium	Standby	<a href="#">View Details</a>
9	Smart TV	Model I	Sony	2023-09-01	1000-1500	Good	Standby	<a href="#">View Details</a>
10	Smart Refrigerator	Model J	LG	2023-10-05	1000-1500	Good	Standby	<a href="#">View Details</a>
11	Smart Microwave	Model K	Kenmore	2023-11-10	100-500	Medium	Standby	<a href="#">View Details</a>
12	Smart Dishwasher	Model L	Whirlpool	2023-12-01	1000-1500	Good	Standby	<a href="#">View Details</a>



*And many other excels....*

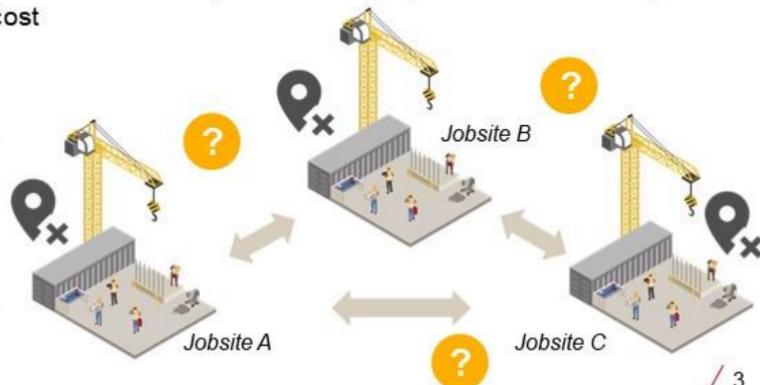
Excel 1

Plant and L4 Summary									
Type	Customer/Supplier	Plant/Office	Location	Placeholder: Imported Date	Model	Serial No.	Current In Stock	From 1/1 Imported	From 1/1 Expired
WSGL	CGC001	北京公司		18-Feb-20	LW4H7 HEM100H	100102	-	N/A	28-Feb-20
WSGL	CGC002	北京公司	车间 A	20-Mar-20	LW4H7 HEM100T	100102	-	N/A	4-Mar-20
WSGL	CGC003	北京公司	车间 B	10-Mar-20	LW4H7 HEM100T	100102	-	N/A	10-Mar-20
WSGL	CGC004	北京公司	仓库	11-Mar-20	KD001 70000	J001-003281	-	N/A	11-Mar-20
WSGL	CGC005	客户 A			LW4H7 HEM100H	100103	-	N/A	22-Mar-20

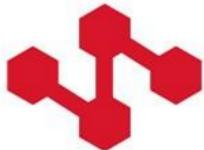
## Identifying the real time location of expired LG

**Challenges:** Unable to locate the exact location of expired LG, as LG can move 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 Site Safety System through integrated asset management

Smart tagged LALG asset



Install gateway in LA



Training to key stakeholders



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



ON!Track

## One stop platform



## Real time location tracking



## Service alert and management



- ✓ Cloud based server to manage all LALG in one platform.
- ✓ Real time update and aligned information
- ✓ 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 will be sent to user in apps / by email when certificate is going to expire / 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

The image shows the front cover of the CITFDIGEST magazine. At the top left is the CITFDIGEST logo with a green geometric pattern. To the right is the CITF logo with the text "CITF 建造業 制造基金". Below the logos is the text "二零二三年三月 MAR 2023 / 第十五期 ISSUE 15" and "聯匯科技 制造香港 WE INNOVATE, WE BUILD". The main headline on the cover is "安全智慧工地系統 Smart Site Safety System". Below it, it says "超過 50 種預先批核的 SSSS 產品可供選擇 More than 50 pre-approved SSSS products for selection". A large circular graphic on the left features the text "CITF 資助業界使用 安全智慧工地系統 每位申請者最高 \$750 萬!" and "CITF supports the industry to adopt 'Smart Site Safety System' Max. \$7.5M funding per applicant!". On the right, there's a "APPLY NOW 立即申請" button. The background of the cover is a blurred image of a construction site with various industrial elements.

## PA19-025 | ON!Track

此產品是一個專為建造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，並通過掃描來查閱資料，  
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 中央管理平台<br>Centralised Management Platform   | 6 天秤吊運區域的不安全行為/危險情況警報<br>Unsafe acts / dangerous situation alert for tower crane lifting zone |
| 2 數碼化追蹤系統 (工地機械, 電動工具及梯架)<br>Digitised tracking system for site plants, powered tools and ladders         | 7 前線工人智能監控設備<br>Smart monitoring devices for workers and frontline site personnel             |
| 3 數碼化工作許可系統 (高風險工作)<br>Digitalised permit-to-work system for high risk activities                         | 8 人工智能安全監督系統<br>Safety Monitoring System using Artificial Intelligence                        |
| 4 危險區域進出管制 (電子鎖系統)<br>Hazardous areas access control by electronic lock and key system                    | 9 封閉空間監控系統<br>Confined Space Monitoring System  |
| 5 移動設備操作區域的不安全行為/危險情況警報<br>Unsafe acts / dangerous situation alert for mobile plant operation danger zone | 10 虛擬實境安全培訓<br>Safety Training with Virtual Reality Technology                                |



基金對資助\*  
Co-funded by CITF 70%

類別  
Cat. 2

Hilti (Hong Kong)  
Limited



Smart Site Safety System through integrated asset management

现在放映的是2024年7月31日

香港房屋委员会

「2024年工程和物业管理安全研讨会」的片段

台上的讲者是喜利得(香港)有限公司工具服务营销主管

苏浩麟先生

他的讲题是

「打造安全智慧工地- 以云端数据服务简化设备管理」

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(00:27)

大家好，我是喜利得的苏浩麟

今日我会为大家分享一下

如何通过软件技术帮助大家提升工程安全

我想大家对喜利得的第一印象

就是电动工具或者是螺丝锚栓

其实我们在软件上也做了很多事情

我先说一下公司背景资料

其实我司有开发资产管理的软件

在一些常见的工地

会有很多一模一样的起重装置

可能有一千多条的起重装置

例如一些铁链吊索，都是一模一样的

但刚才也提及

有一些意外是来自于高空堕物

而原因有机会是因为铁链有劳损

它们劳损了，然后破坏了

所以定期需要填写表格七

去检测一下它是否仍然附合使用标准

但去到现场操作

传统的方法是有很大的挑战

我也跟同业了解过

要管理这些起重装置

是用试算表去记录管理

但不同的工地有不同的试算表格

然后一个工地有十个试算表

可能更新了一个试算表

其他全部都没有链接在一起

使其余试算表没有同步更新

我觉得最大的挑战是第二点

第二点就是起重装置的外表一模一样

经常被放在不同的工地使用

或者放在工地的不同位置

半年之后要做检测

其实是没有可能找到这起重装置

因为已经不知道它放在哪个位置

全部起重装置一模一样

我跟同业讨论过

其实都是找不到这起重装置

要进行检测，要将整个工地的起重装置

做一次检测

才可以确保所有起重装置证书是最新状况

这样就很浪费时间

喜利得的解决方案

就是运用一个追踪系统

把智能标签贴在起重装置、在重型机械安装网络连接器

这样系统就会报告所有起重装置的位置

同时我们在重型机械安装网络连接器

覆盖整个工地

甚至是培训主要持份者

主要是安全主任

因为我们希望大部分的操作都能在办公室处理

在现场的工友就越少越好

将所有的东西自动化是最好的

那出来的效果就是

我们将所有东西放在平台内去管理

同时可以实时地去监察这些起重装置

究竟在哪个位置

它的全球定位位置在哪里

当它需要维护的时候

它就发送一个提示到系统

可能通过中央管理平台

通知客户哪些起重装置需要维护

然后一查就知道它在哪个工地

大概是在哪部起重机附近

那就可作出相关行动

最后我们这个「ON!Track」系统

都是建造业创新及科技基金所批核的一个软件

所以大家如果在一些私人的项目上

想去应用这个软件

都可以通过建造业创新及科技基金的平台申请资助

今天分享此

如果大家想了解更多资料

可以参观我们的展览摊位

谢谢

谢谢观看

(03:58)