



## **Aligning Technological Innovation with Culture of Care: Keller's Journey to Enhanced Safety and Productivity**

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*BCAA-IOSH WSH Conference 2025: Shaping The Future of WSH: Innovation, Culture, And Resilience in Built Environment*

[keller.com](https://www.keller.com)





Vibro Stone Column



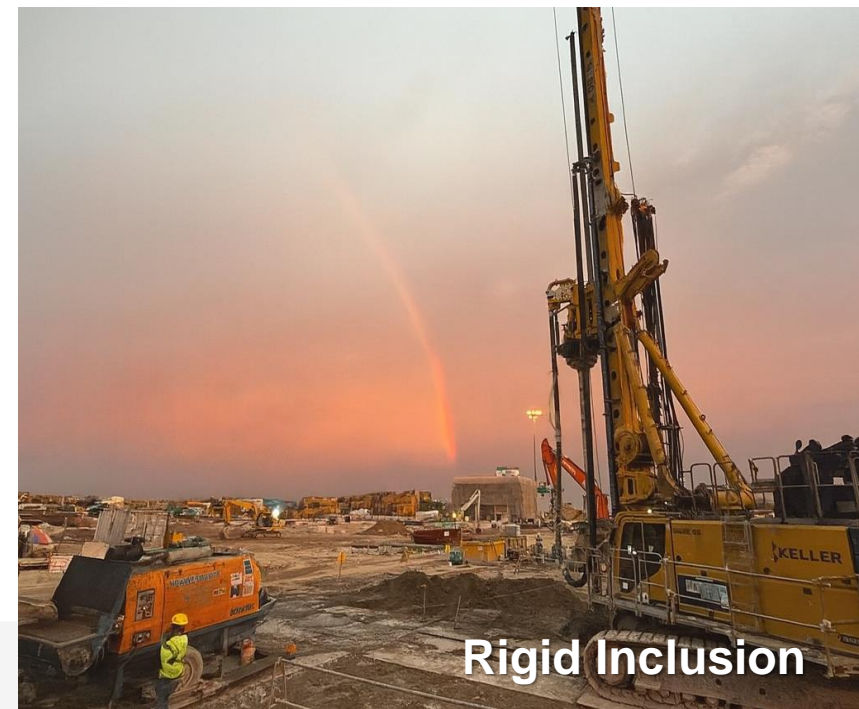
Soil & Rock Grouting



Vibro Compaction



Deep Soil Mixing



Rigid Inclusion





# PEOPLE

is at the Centre of Everything We Do





# Creating Culture of Care through Wellbeing Framework

***Wellbeing: Being healthy and fulfilled – at work and at home, now and in the future.***





# BODY Balanced & Healthy Lifestyles

- Health workshops
- Regular physical activities
- Gadgets for health tracking



Fruits Day



50km Walk to Celebrate Keller 50 Yrs in SG

KELLER | pulse  
Go further  
together

Fitness  
Tracker with  
12 mths  
Fitness  
Program



Half- Marathon Together



SG60 Team Challenge





# BODY Safety at Work Site

- Leadership
- Programs
- Competency Building
- Technology





# Leadership Engagement

- Culture of Trust & Openness
- Management commitment & KPI
- Communication



**Employee Communication**



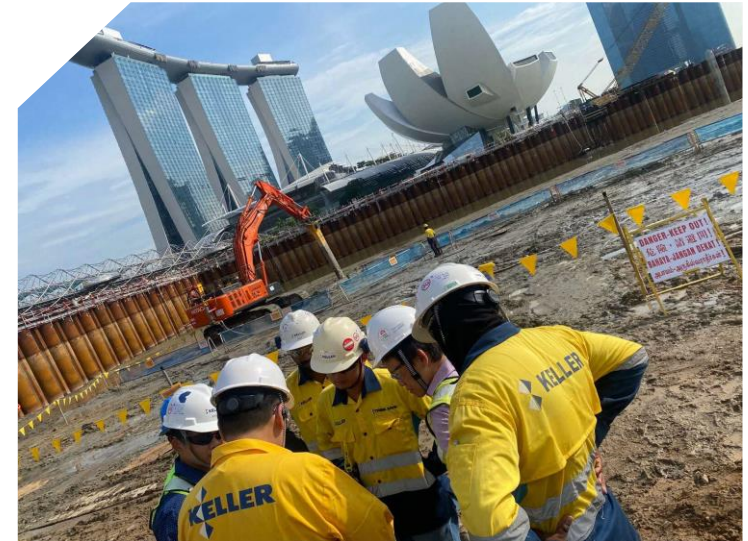
**Management Visibility**



**Nurturing Safety Leaders**



**Active Engagement**



**Review Processes**





# Programs

## Address Key Safety Concerns & Reinforce Culture



### Enforce Stop Work Authority



### Line of Fire Safety Campaign



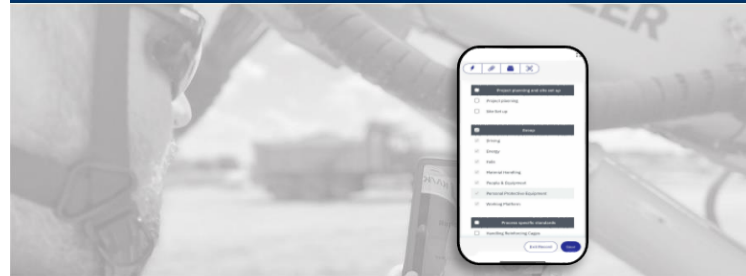
## S.T.A.R.T REPORTING



Help us understand and tackle potential hazards and unsafe behaviours before an incident happens.



Recognise one of your teams positive contributions to safety.



You don't need a Keller device or email address.

Just scan this QR code and complete the simple form.



**SEEK** - hazards and unsafe behaviours.



**TALK** - to those involved, find a safer way.



**ACT** - make the situation safe.



**REPORT** - using the QR code.



**THANK** - everyone involved for caring enough to intervene.

Never use your cell phone in an active work area. Always retreat to a safe zone before reporting.



### Hazard Reporting system



## Mandatory WORKSAFE Practices



**PTT**

Mandatory to conduct **Pre-Task Talk** for individual work activity carried out.



**NWP & OSA**

Individual must undergo **New Worker Protocol (NWP)** on job training and **Operational Safety Assessment (OSA)**.



**KEEP SAFE DISTANCE**

Mandatory to keep **Exclusion/ Crush Zone** at crane/drilling rigs. Assign banksman for moving machineries. Abide to Traffic Management Plan.



**BBSO**

*Behavior Based Safety Observations*

All supervisory level staffs to conduct **BBSO** regularly to identify at-risk behaviors. Intervent immediately if necessary.



**REPORT HAZARD & PRACTICE STOP WORK**

Participate actively in **Hazard Reporting** and practice **Stop Work Authority** when needed.



**DO NOT "ACT" ON YOUR OWN**

All works are clearly assigned, **Instructed By Supervisor** and signed off in PTT records.

Contact Keller HSEQ Department if you have any doubt or clarification on above practices!

HSEQ Poster - 01 (Rev 00) July 2022

### Mandatory Safety Practices



# Competency Building Training & Assessment

- Observe on-going activities & feedback
- Dedicated trainer & assessor
- Learning from past experiences



**Prominent Display of Risks**



**Behavioral Based Safety Observation**



**Dedicated Trainer & Assessor**



**Compilations of Learnings**





# Adopting Technology

Reduce Human Exposure to Hazards (Line of Fire)



**Remote operation and Use of mechanical aid to carry and handle casings and rods**





# Adopting Technology

Reduce Human Exposure to Hazards (Pressurized Air/ Water)



Remote Controlling  
Air Valves



Remote Controlling  
Water Valves





# Adopting Technology

Reduce Human Exposure to Hazards (through Automation)



Integrated Control Panel for managing water, cement & grout batching and discharging at Grout Plant

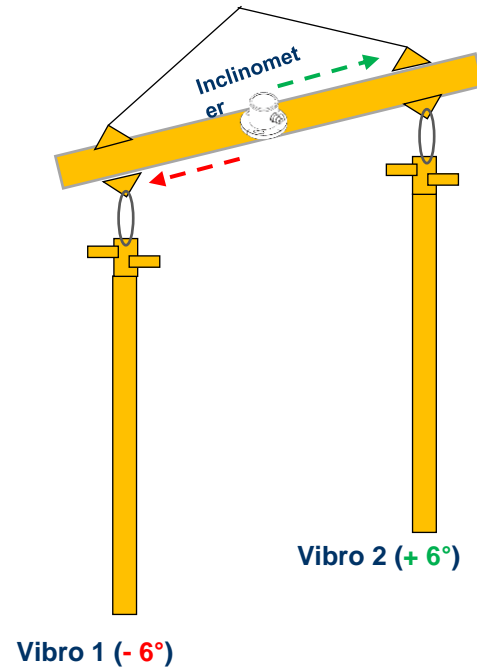
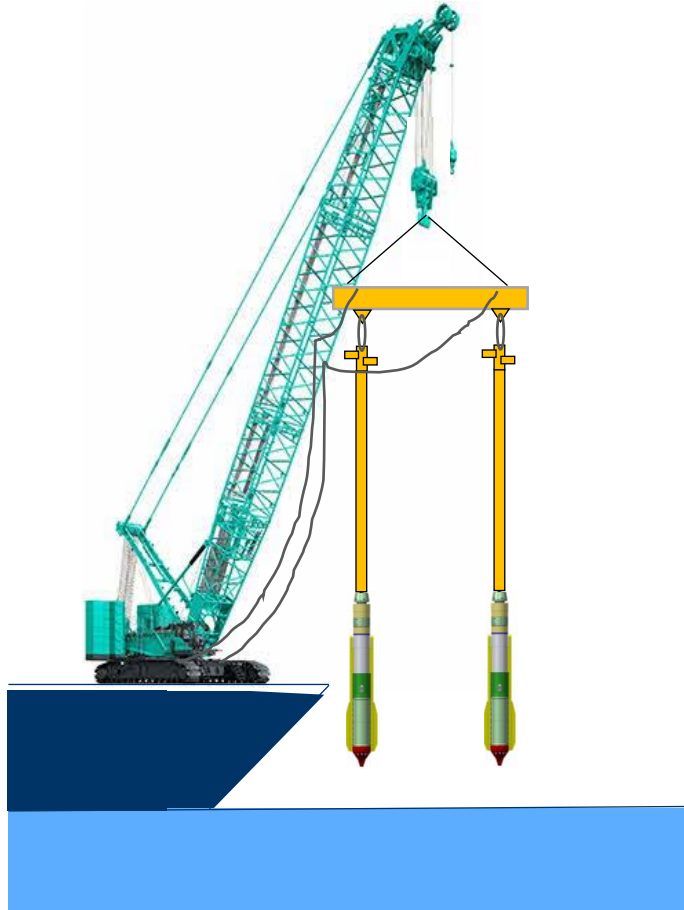






# Adopting Technology

Application of sensors, cameras & instruments







# Adopting Technology

## Mechanization of Processes (Ergonomics)



**360° Rotation Mechanical Handler to Carry and Install  
Ground Anchors**



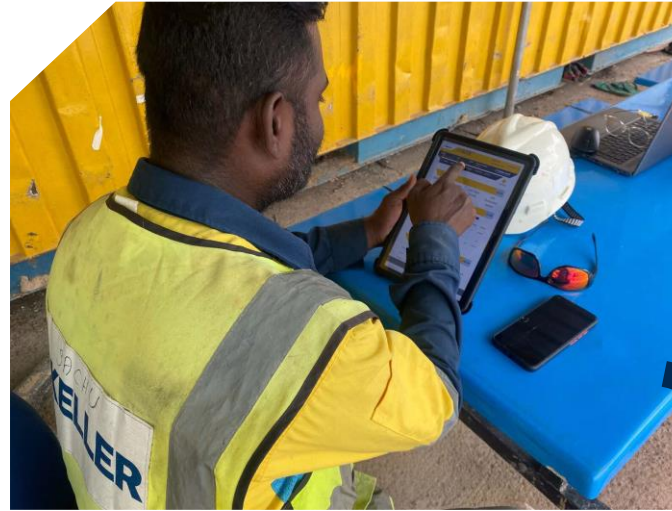
**Mechanical Lifting of Cement Bags**



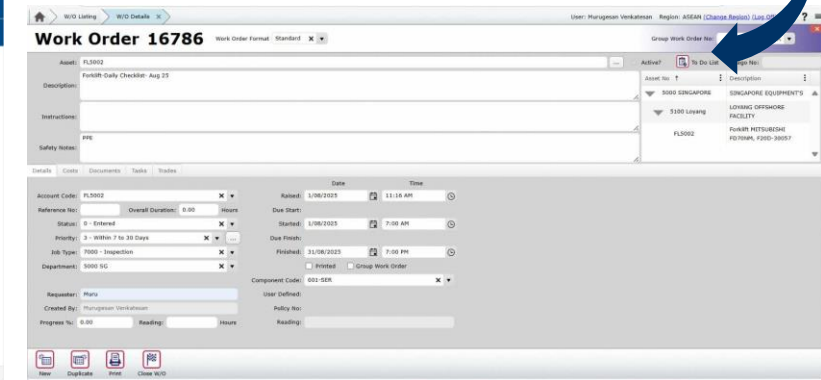
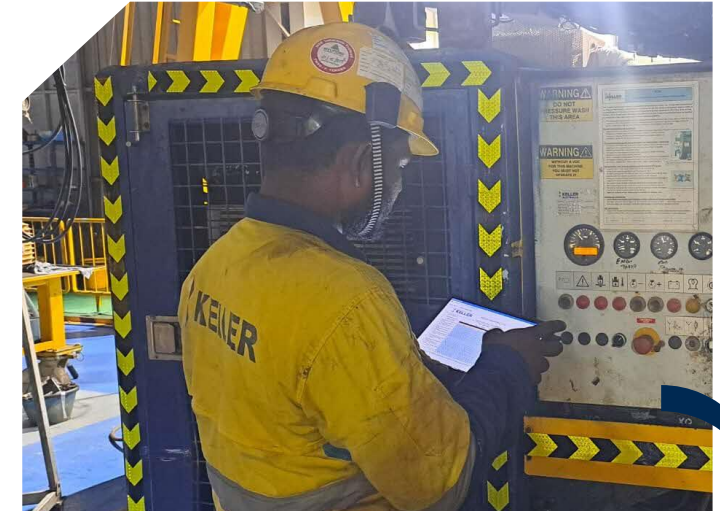
# **GROWTH** Data Management for Better Productivity, Safety



**Cloud-based, Real-time Data Recording**



**Inhouse Program for HSE & Operations Data Management**



**Rig Service & Maintenance Management System**





# GROWTH Process Optimization Tools for Better Efficiency



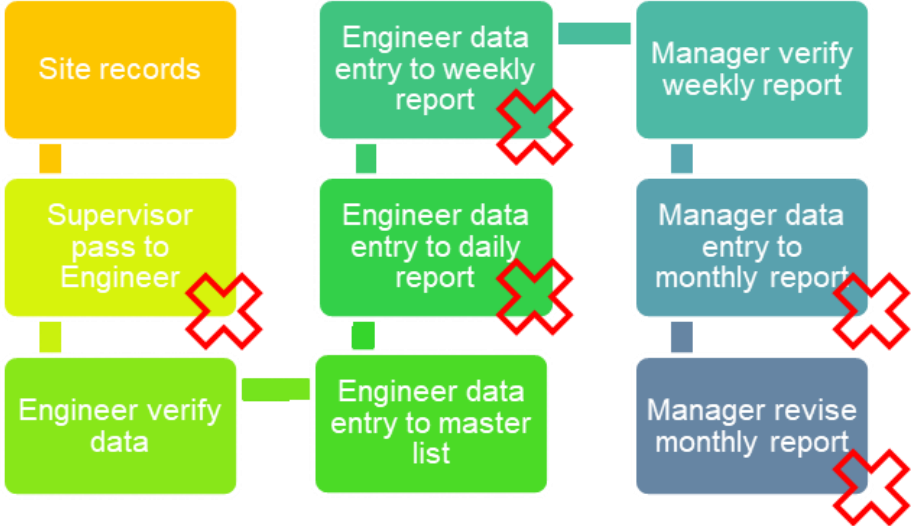
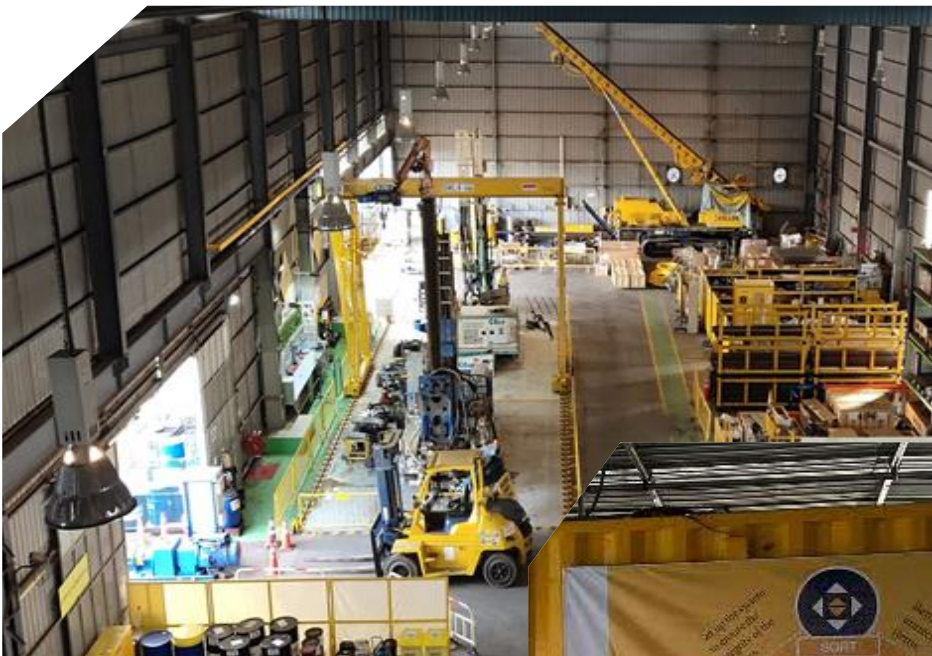
The workshop yields tangible results and tracking of implementation and results will continue

Workshop KPIs

Key Performance Indicators (KPIs)	Before 03.08.2022	Target	Potential	Actual	%
To integrate the existing paperwork/process <sup>1)</sup>	39 nos	26 nos	-13 nos	12 nos	-31%
To digitalize the existing paperwork <sup>2)</sup>	38 nos	24 nos	- 14 nos	6 nos	-16%
Potential time saving per month <sup>3)</sup>	-	78 hours	- 78 hours	64 hours	-82%

5 months of a headcount time saving per year!

1, 2 & 3 Furnished by the core team members. Post by respective team members (from) 19th April 2024



LEAN : Streamline Internal Reporting Process

5S : For Sites, Yard



# **MIND** Mental Health & Resilience

- HR Outreach for awareness & acceptance
- Training to identify distress signs
- Accessible support  
(Employee Assistance Program)



**Employee Appreciation Day**



**iLight at MBS**



**HR Outreach**



**Mental Awareness Workshop**



**Building Friendship**





# COMMUNITY Shared Positive Experiences



## Volunteering with Local Non-Profit Organizations



## Outing with Community Families



## Mentorship



## Blood Donation Drives



# **COMMUNITY** Reducing Carbon Footprint



## Carbon Calculation Training



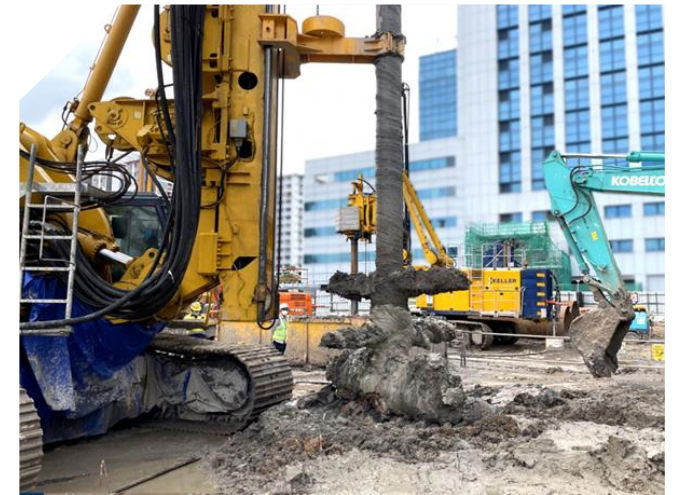
## Alternative Foundation Solutions with Low Carbon Footprint



## Sharing in Conferences



## Carbon Tracking for Projects



## Material – low carbon



# **COMMUNITY** Recognitions



**Healthserve Award 2025  
(Support for Migrant workers)**



**Sustainability Award 2025**



**SCAL WSH Award GOLD 2024**



**Supporting Work-Life Harmony  
Forward Singapore Report 2023**



**WSHCare Award 2023**



**SCAL Productivity & Innovation  
Award 2022**







Thank You !

