



Safety on ports mobile equipment

Paco Pruden

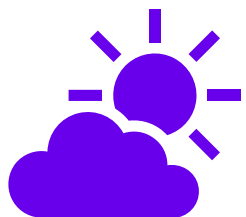
October 2, 2024

KONECRANES

The one place you never want
to cut corners is on safety



Safety risks type



ENVIRONMENT

Darkness, weather conditions, etc...



OPERATIONAL WORKING CONDITIONS

Yard and ground conditions, traffic, container falling, etc...



DRIVER OPERATIONS

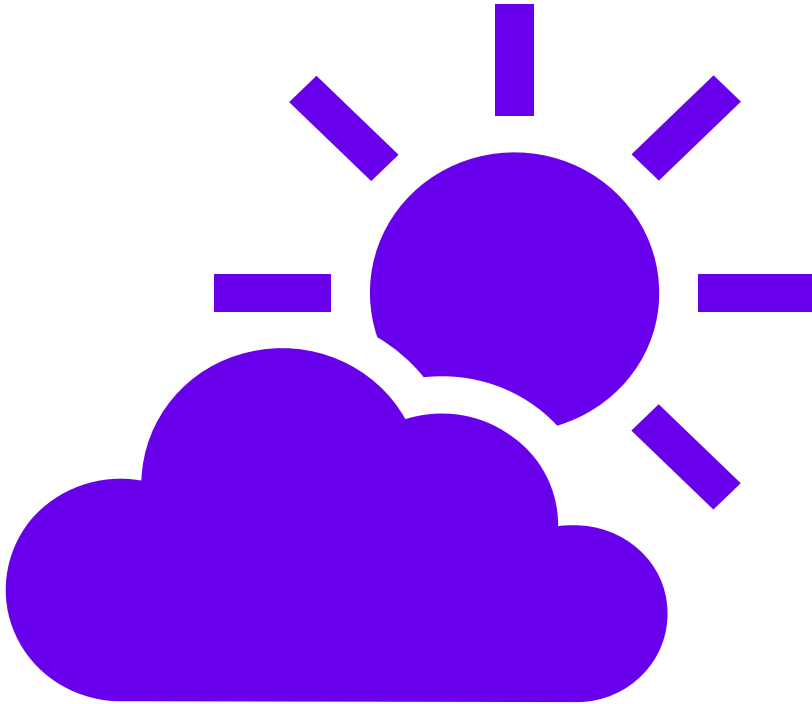
Human mistake, fatigue, etc...

Environmental risks

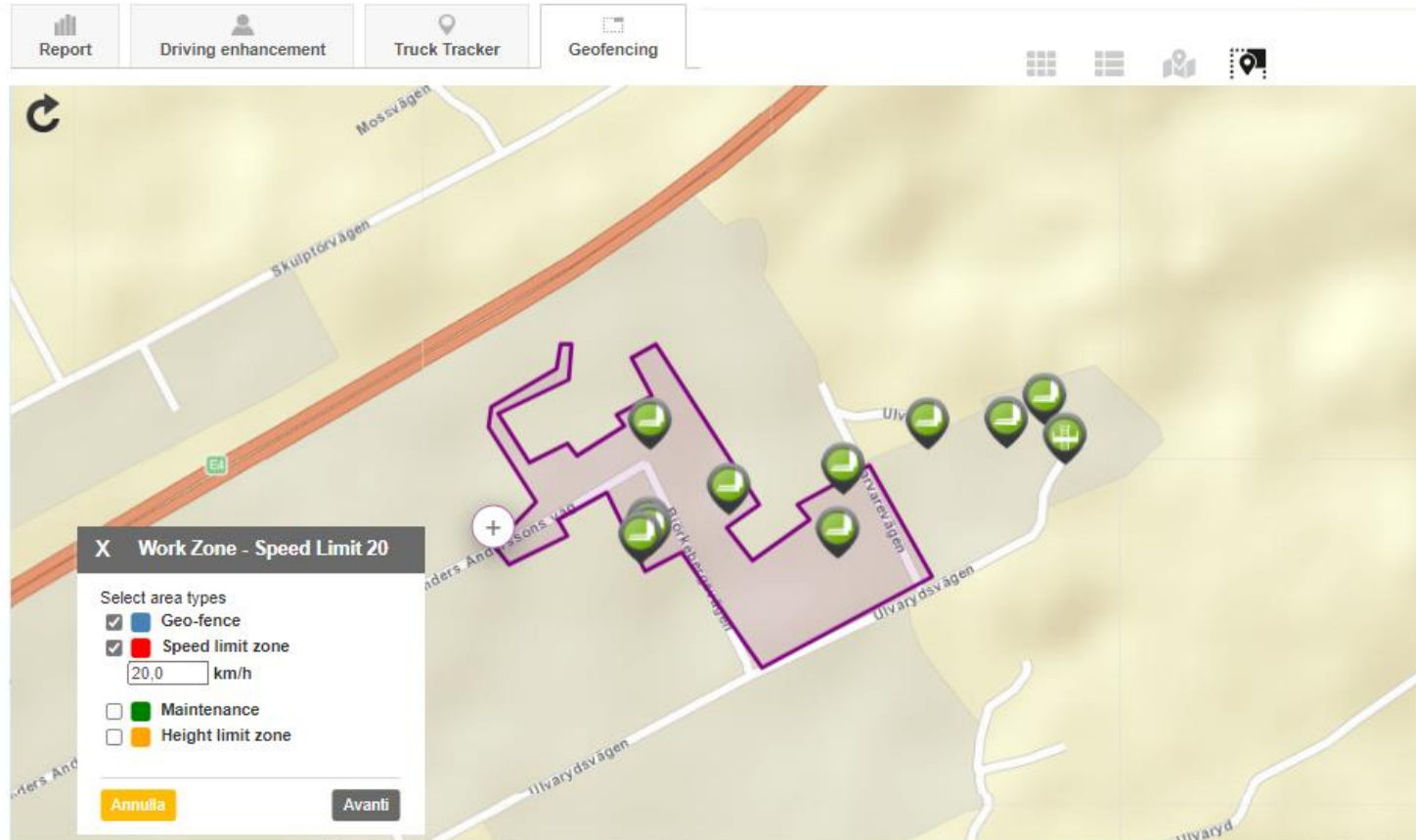
How to reduce risks due to darkness and weather conditions?

Obviously by additional lighting.

LET'S GO THE EXTRA MILE



Automatic speed reduction by time hours



- TRUCONNECT Remote Monitoring technology – standard on all equipment
- Automatic day/night setup
- Setup on your single asset or your entire fleet

Alerts and notifications inform your drivers about the upcoming limit



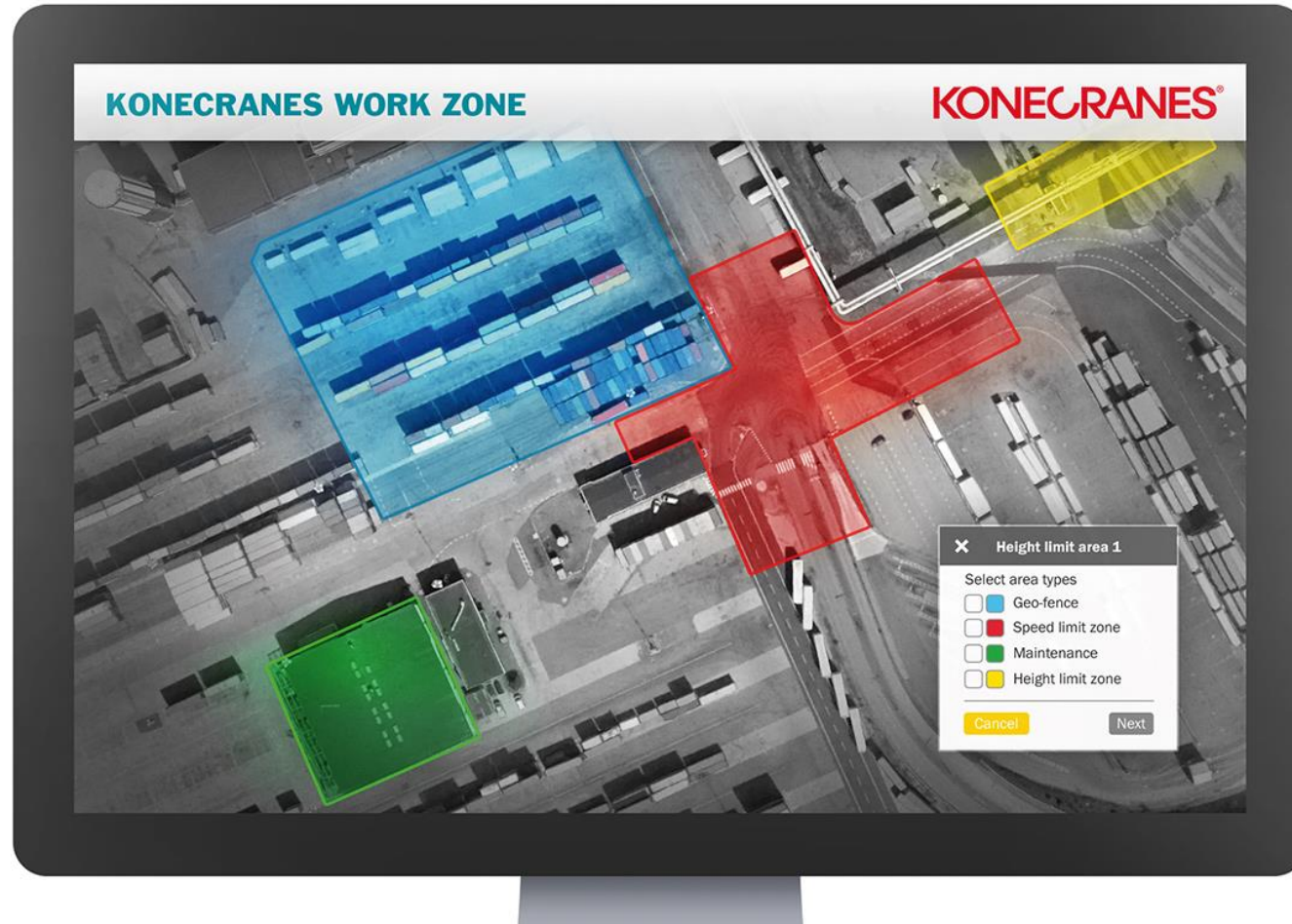
Operational working conditions risks

How to reduce risks due to bad yard and ground conditions?

Obviously by operator training.

LET'S GO THE EXTRA MILE

Automatic speed / height limits by geographic area



- Draw virtual fences all around your terminal
- Set speed or height limits
- Your trucks automatically reduce driving speed or lower the boom/mast

Alerts and notifications inform your drivers about the upcoming limit

Operational working conditions risks

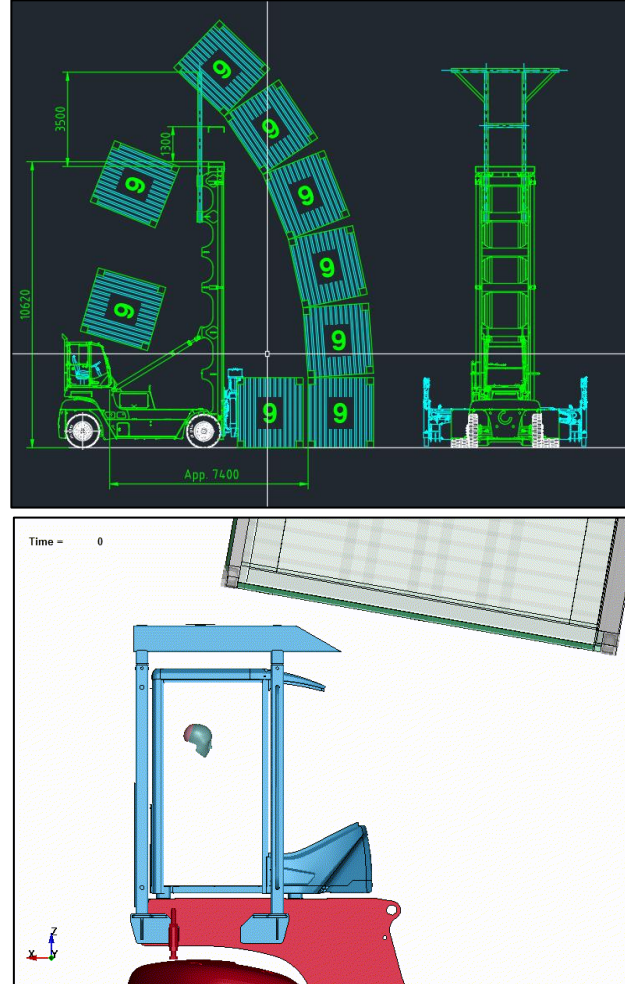
Risks connected with heavy loads handling can be increased by conditions like:

- stress
- urgency
- uneven grounds
- bad weather conditions

If containers or solid metal items fall onto the truck because they are bumped or dropped when they hit an unprotected cabin, the result can be very serious.



Overhead guard – Safety cage



- a cage-like metal construction mounted over the operator cabin.
- sturdy enough to protect from a falling empty container, or other falling objects
- open enough to allow for good visibility in all directions for safe operations of the vehicle.



Driver operations risks

How to reduce operations risks due to human error, stress, fatigue, etc...?

Obviously by additional cameras, sound systems and alarms.

LET'S GO THE EXTRA MILE



ADAS options

Plenty of stand-alone options that can be integrated into the control system to increase people's safety, such:

- Anti-collision system: is much more than reverse camera and alarms. If (integrated onto the machine, it automatically affects driving speed to affect driving speed)
- Anti tipping system (not only overload but also uneven load)
- Height limitation
- Interlocks for risk functions

The image shows two male workers in a construction or industrial setting. They are wearing white hard hats with a red 'C' logo, and high-visibility blue and yellow work jackets with reflective silver stripes. The worker on the left is holding a black tablet, and the worker on the right is pointing at the screen. They are standing in front of a white van with 'KONECRANES' and 'SERVICE' text on its side. In the background, there are stacks of blue and red shipping containers and a yellow crane arm. The overall scene is an outdoor industrial yard.

Digitalize safety

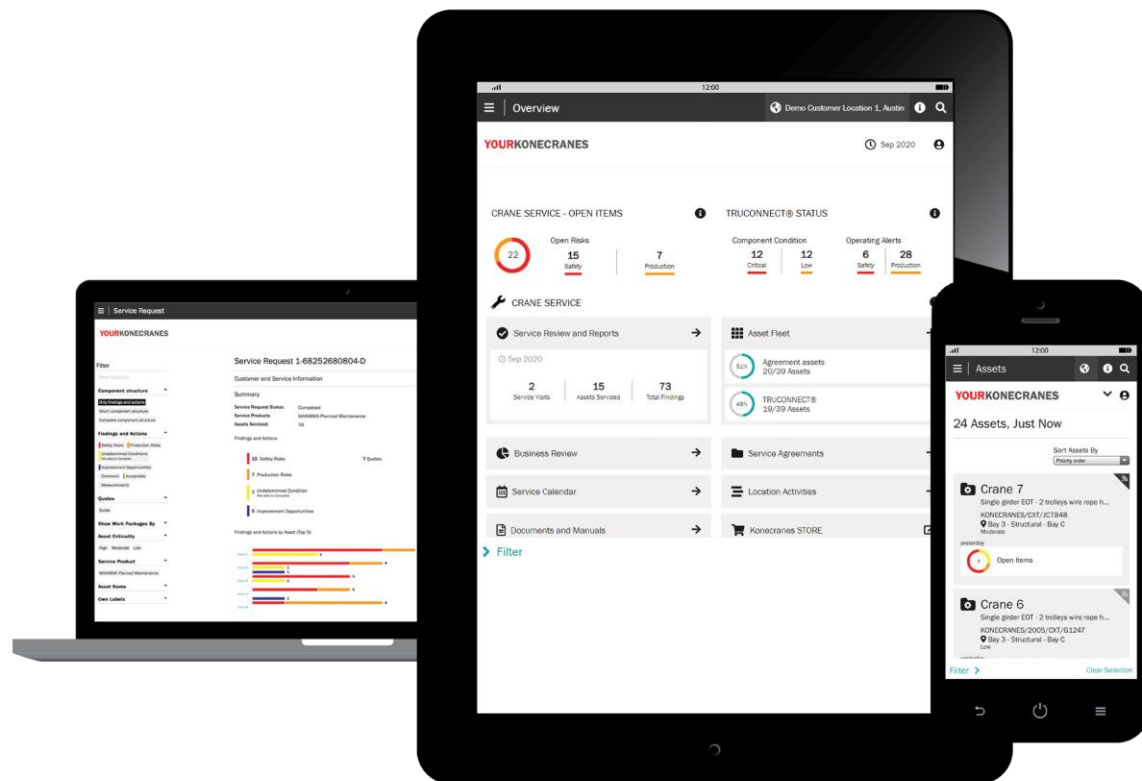
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Your operations can benefit from

ALERTS AND
SHOCKS

Real-time safety alerts

- Fully automated SMS or e-mail notifications in case of faults/alarms, shocks overload or safety override activation.
- Monitor collected data to identify the most frequent faults per asset
- Evaluate safety risks during the usage of the machine (safety override – overloads)
- Reschedule single asset or asset fleet activity according to available information

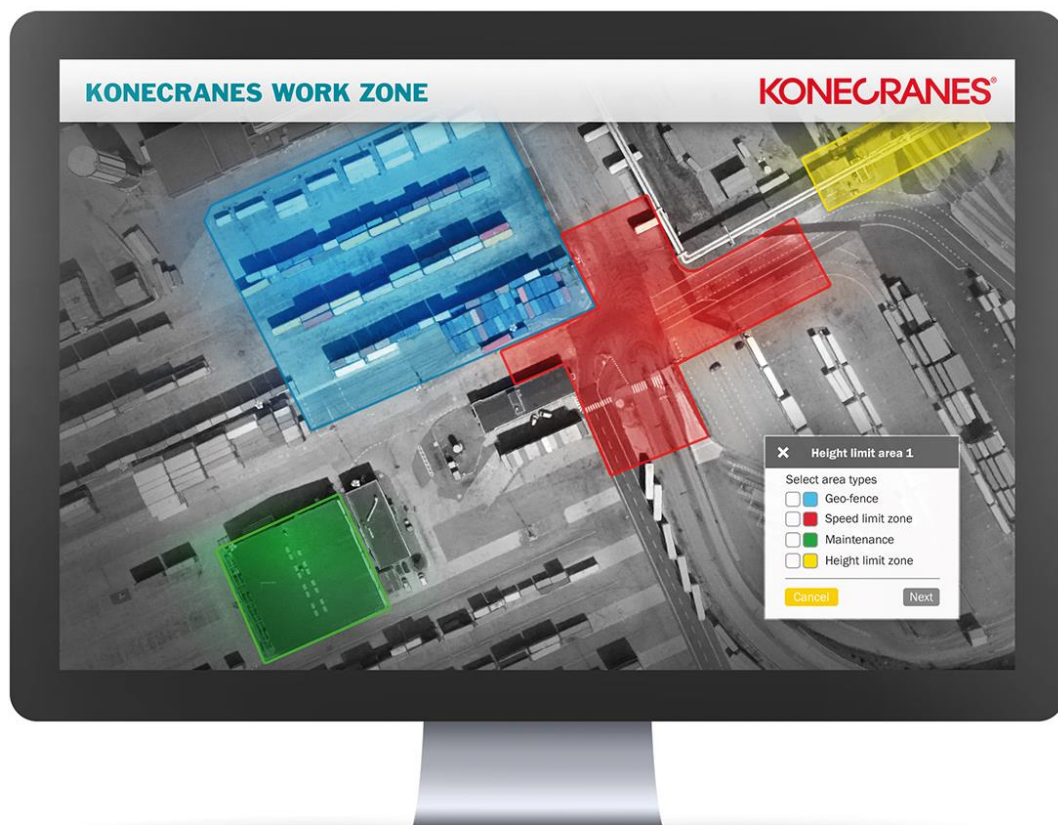


Your operations can benefit from

**ALERTS AND
SHOCKS**

**AUTOMATIC
HEIGHT AND
SPEED LIMITS**

Create your virtual fences



- Using GPS technology, Konecranes Work Zone geofencing allows you to improve your operational safety by remotely controlling your lift trucks. Reduce the maximum speed in certain site locations.
- Prevent a reach stacker from raising its boom too far by sending alerts in places with height limitations, such as underneath an STS crane or inside a storage building.
- Define the work area to keep the truck away from people and sensitive equipment.

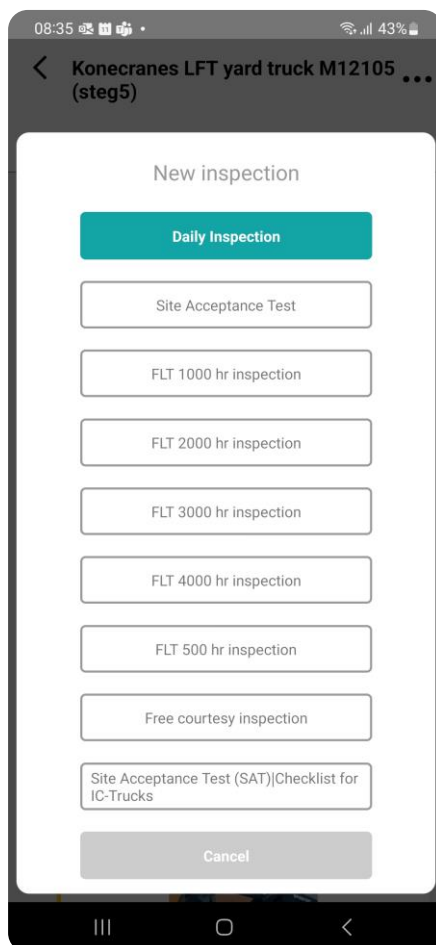
Your operations can benefit from

**ALERTS AND
SHOCKS**

**AUTOMATIC
HEIGHT AND
SPEED LIMITS**

**PERIODIC
INSPECTIONS**

Periodic inspections



CheckApp for

- Site Acceptance Test
- Daily inspections
- Periodic inspections
- Free courtesy inspection as service leads generator

- A mobile tool that guides drivers and service engineers through commissioning, service or daily inspections.
- Add pictures, voice and video to a customized checklist for a more comprehensive report.
- Instant results visible at the customer portal yourKONECRANES to help you plan operations and maintenance with the most up-to-date information on the condition of your lift trucks.

Your operations can benefit from

**ALERTS AND
SHOCKS**

**AUTOMATIC
HEIGHT AND
SPEED LIMITS**

**PERIODIC
INSPECTIONS**

CYBERSECURITY

Strong commitment to information security



**Securing
information in
all its forms**

**Increases
resilience to
cyber attacks**

**Helps respond
to evolving
security
threads**

**Protects the
confidentiality,
availability and
integrity of
information**

**Security by
design**

Externally validated ISO 27001 certification: global trade and trust instrument

Your operations can benefit from

**ALERTS AND
SHOCKS**

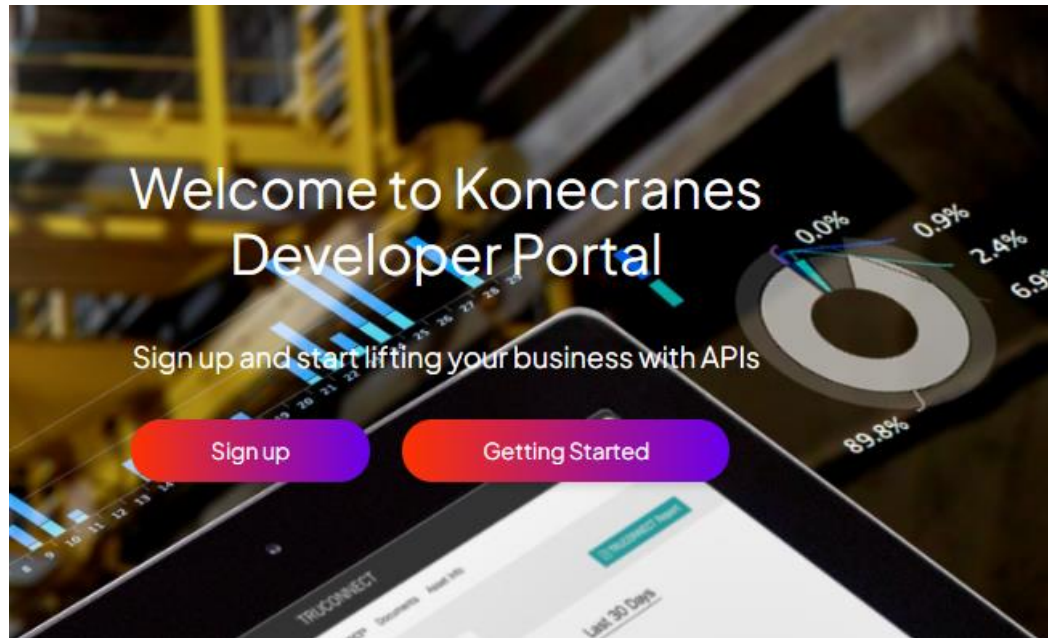
**AUTOMATIC
HEIGHT AND
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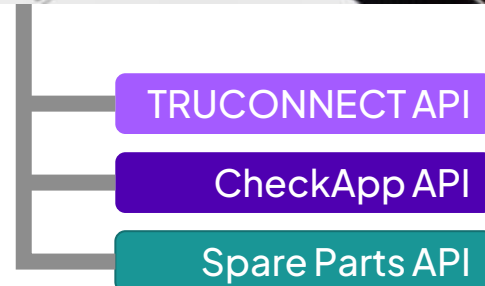
CYBERSECURITY

**SYSTEM
INTEGRATION**

Connect business with assets data in the cloud to support service processes



- Operating hours for maintenance planning
- Condition & alerts monitoring for remote diagnostic
- CheckApp inspection reports for service
- eCatalog and Store integration for parts ordering from own system





Thank you

Meet us at stand #B10 to take your
safety to the extra mile

AGV 558 >

AGV 520 >

STS 12 >

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