

# Container Crane

## ➤ Container weighing



### ➤ Requirements

- Container weighing
- Communication to crane control or TOS (Terminal Operations System)
- Various load sensing methods
- Rough working environments
- Single lift support
- Simple adaption on existing cranes

### ➤ Solution

- Weight measurement and monitoring for ISO-container
  - Measurement of total and balanced weight
  - Weighing application within an accuracy of < 1%
  - Versatile connection to the TOS (CANopen/ Ethernet) others on request
  - Customized data transmission
  - Load measurement with 4 to 8 sensors
  - Utilization of existing measuring points
  - Load monitoring with alarm indication/ advance warning
  - Datalogger for safety and documentation
- Optional: overload protection system to prevent the crane in case of interlocked container, head block or spreader

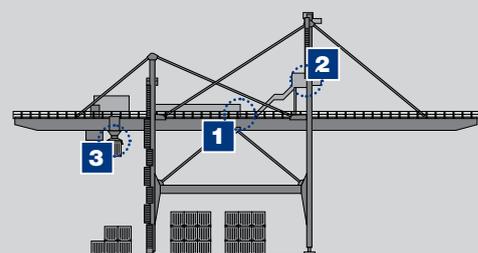
### ➤ Hardware

#### **1 vSCALE: userfriendly HMI**

- Visualization of actual container details and statistics
- Service: calibration and sensor settings, no laptop required

#### **2 cSCALE: controller for harsh environments**

- Flexible mounting options, e.g. head block or cabine
- IP20/IP66 protection rating
- Integrated datalogger
- Interfaces: CANopen/ Ethernet



### 3 fSENS force sensors: precise and safe

- Customized adaption
- TÜV certified force measurement
- Life-cycle of sensor > 5 years
- Weighing application can be realized with various sensor types:
  - fSENS KMD load cell
  - fSENS MA load pin
  - fSENS RDKA compression load cell



• fSENS MA



• fSENS KMD



• fSENS RDKA

## ➤ Software

The customized software solution can be connected with the existing crane control and operating system

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### Hirschmann MCS is the world market leader in safe load indication for telescopic and lattice boom cranes and a specialist for safety solutions in gantry and port cranes.

As one of the leading system suppliers, the company sets standards in innovative automation platforms for mobile applications in harsh environments. Drawing on expertise and experience gained during more than 40 years, the team of Hirschmann MCS enables communication between people and machines. The product and system solutions include software and hardware for sensors, controllers, and consoles for mobile cranes, earthmoving machines,

mining, road construction and port industry applications.

As a reliable, innovative, and flexible provider of leading-edge technology, high-quality products, and first-rate services, Hirschmann MCS is committed to ensuring that today's components and solutions already comply with tomorrow's specific safety requirements and generally valid standards.