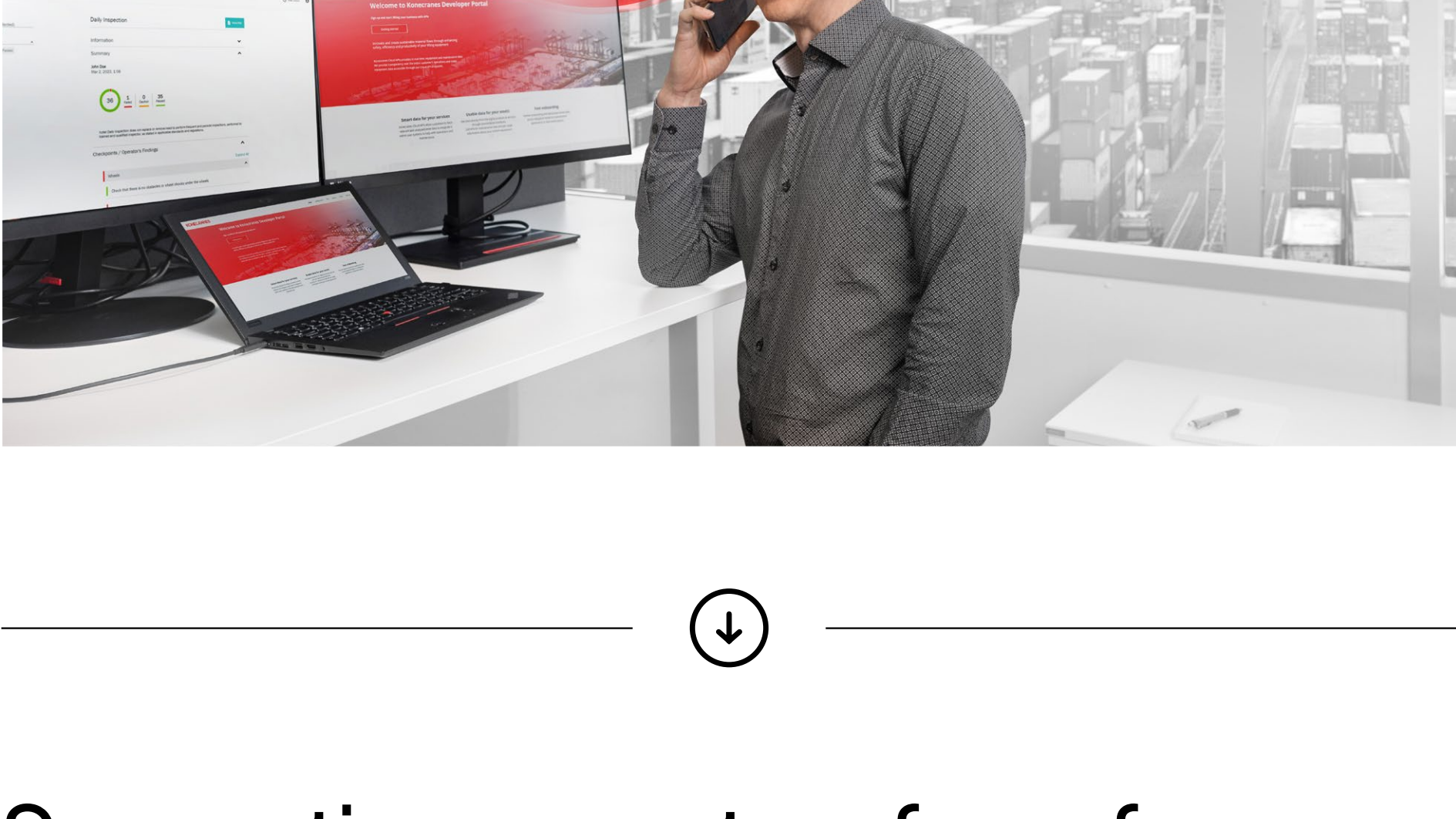


# Auto-Steering Retrofit

Safely lifting, moving and positioning containers or loads is the primary function of an operator. This product steers the crane into position, while the operator focuses on lifting.

## Adapt and thrive

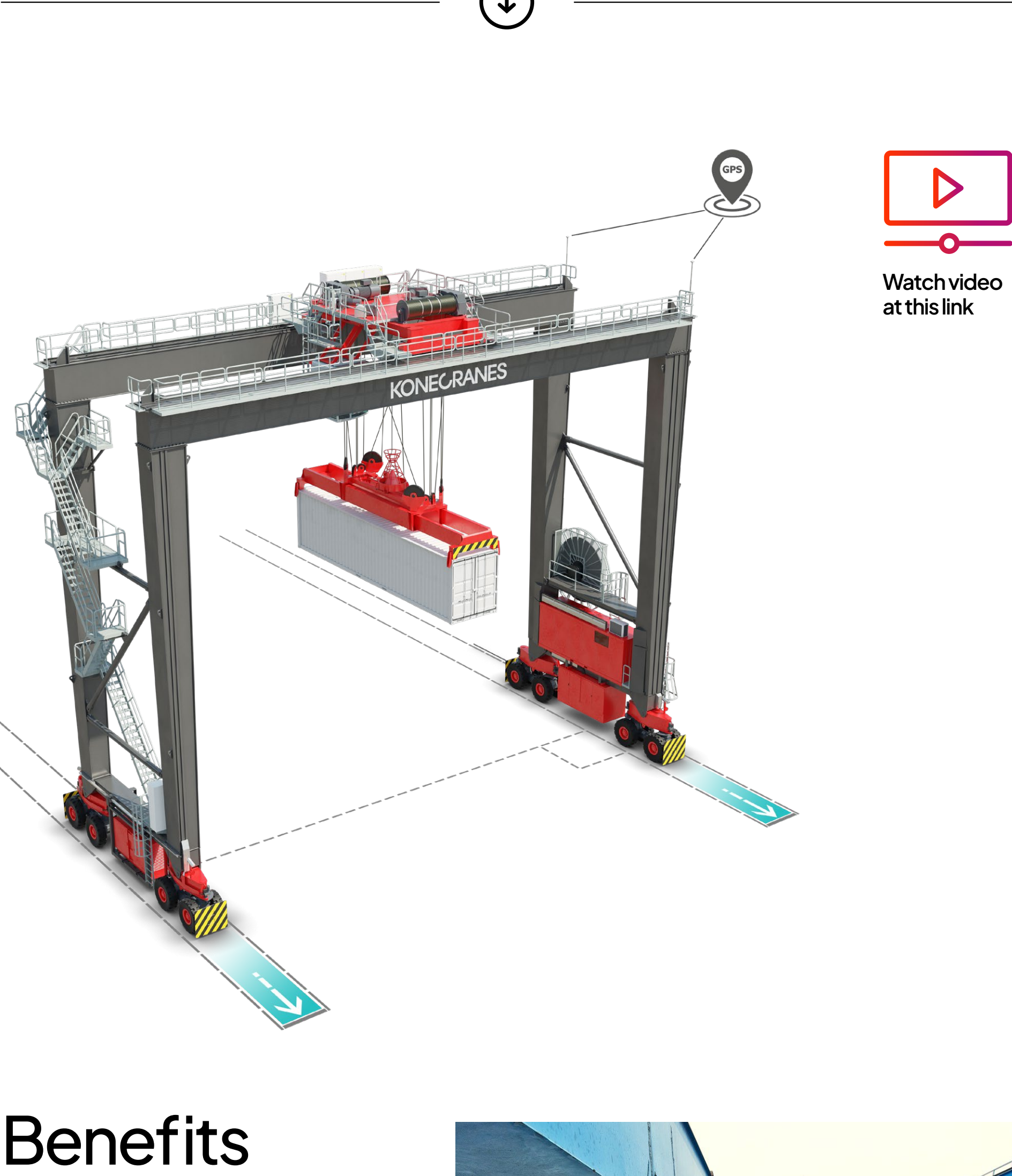
Konecranes is the premier port services provider to brownfield terminal developments. Our range of retrofit products will enable your fleet to adapt to a fast-changing environment. Welcome to your evolution.



## Supporting operators for safer, smoother RTG performance

RTG operators manage a demanding mix of tasks every shift—precise steering, accurate container placement, constant TOS updates, and full awareness of traffic and safety zones. It’s a high-skill job that naturally creates mental fatigue over time.

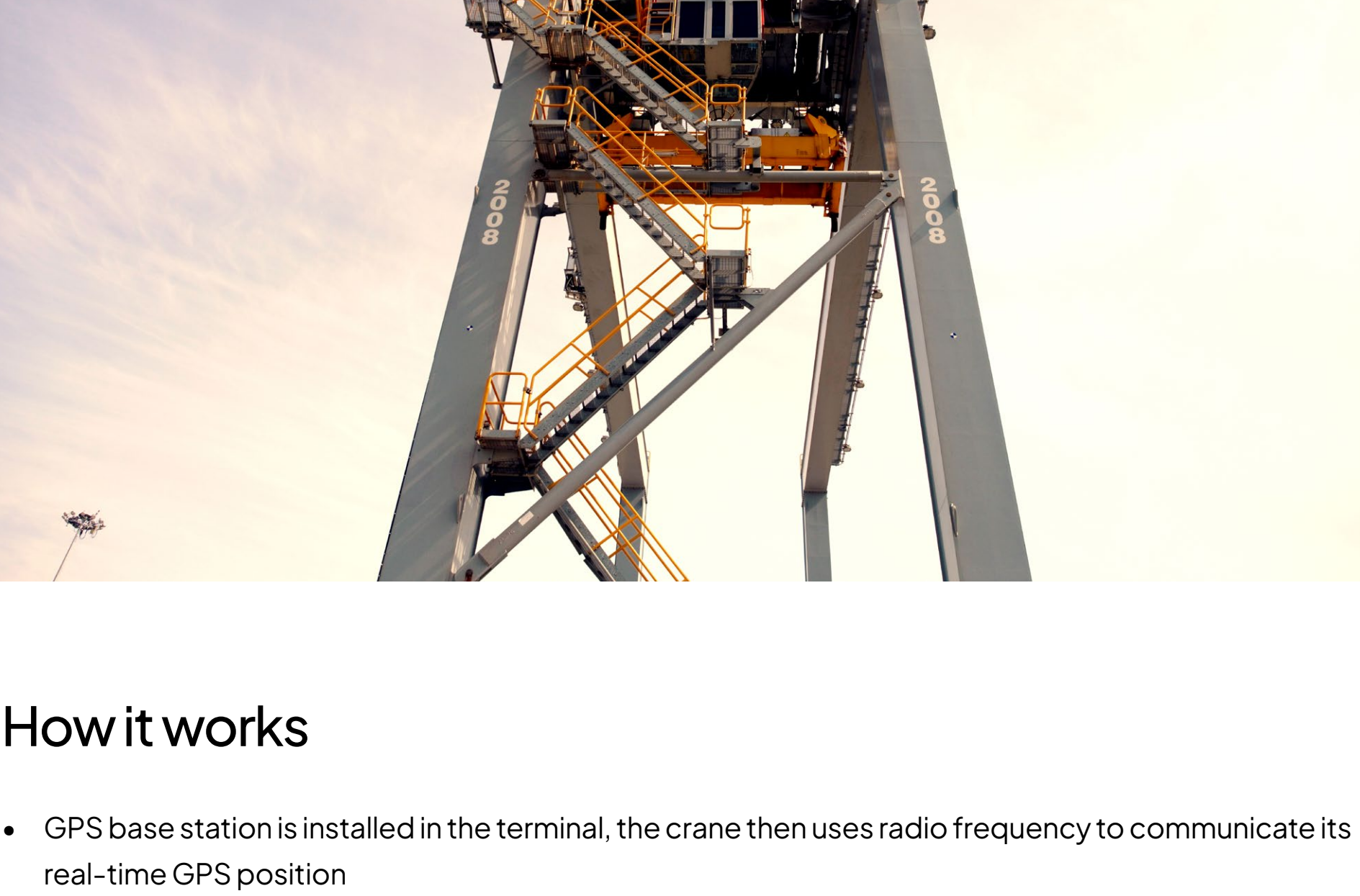
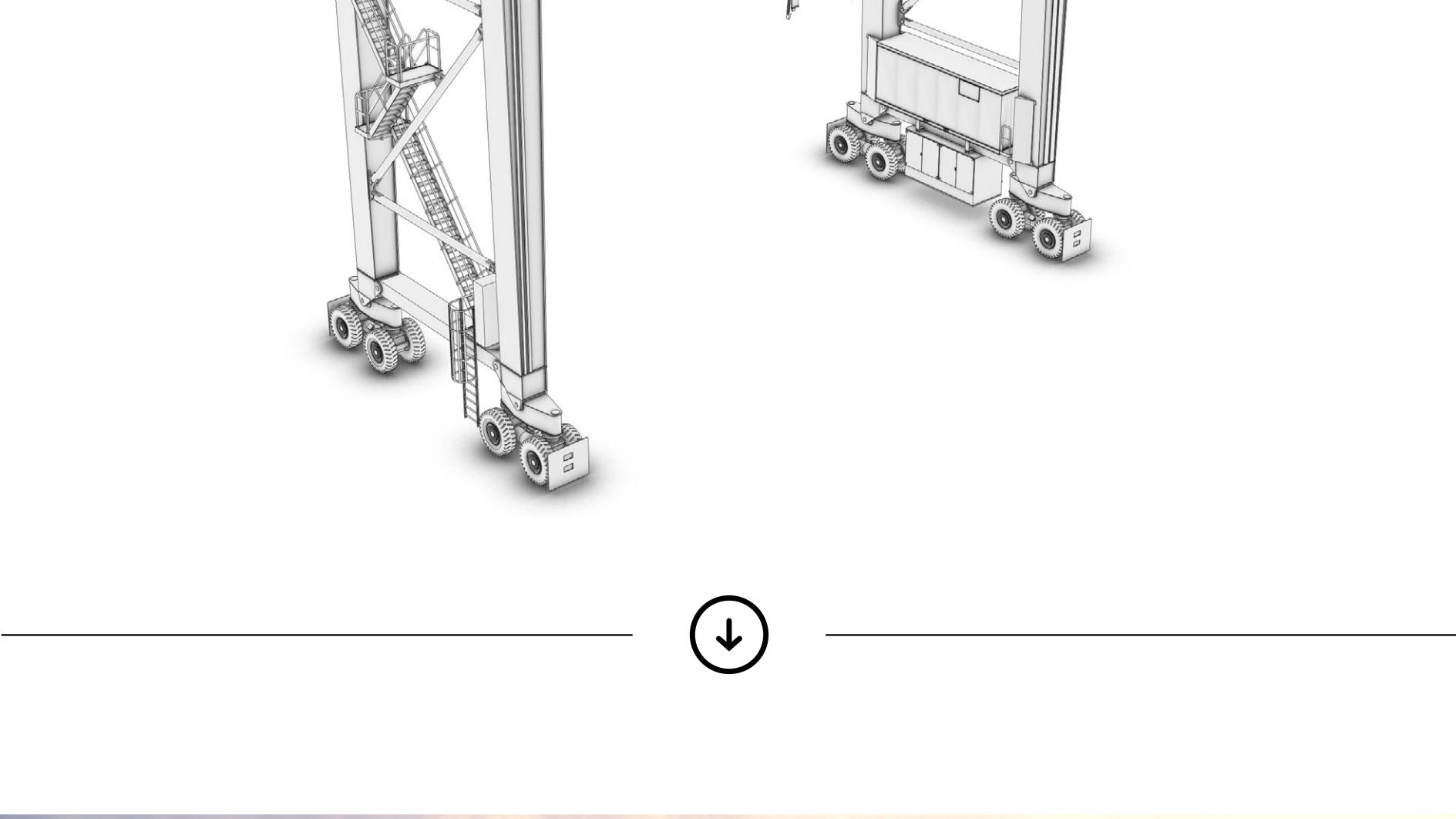
Our Operator-Assisting retrofits lighten that load by taking over the steering work. Operators stay fully in control of every critical decision, while the system handles the repetitive strain—helping them stay focused on what they do best: safe, confident, accurate container handling.



- ## Benefits
- Operator can focus on container handling and crane surroundings
  - Redundant setup with two antennas
  - Possibility to add slow down zones
  - Option for additional reefer collision prevention
  - Enabler for further automation and operator assisting
- 

AB  
Any Brand

This technology can be applied to all Konecranes RTGs as well as to other RTG brands. For older models, an updated Drive and Control System Retrofit (DCSR) is recommended.

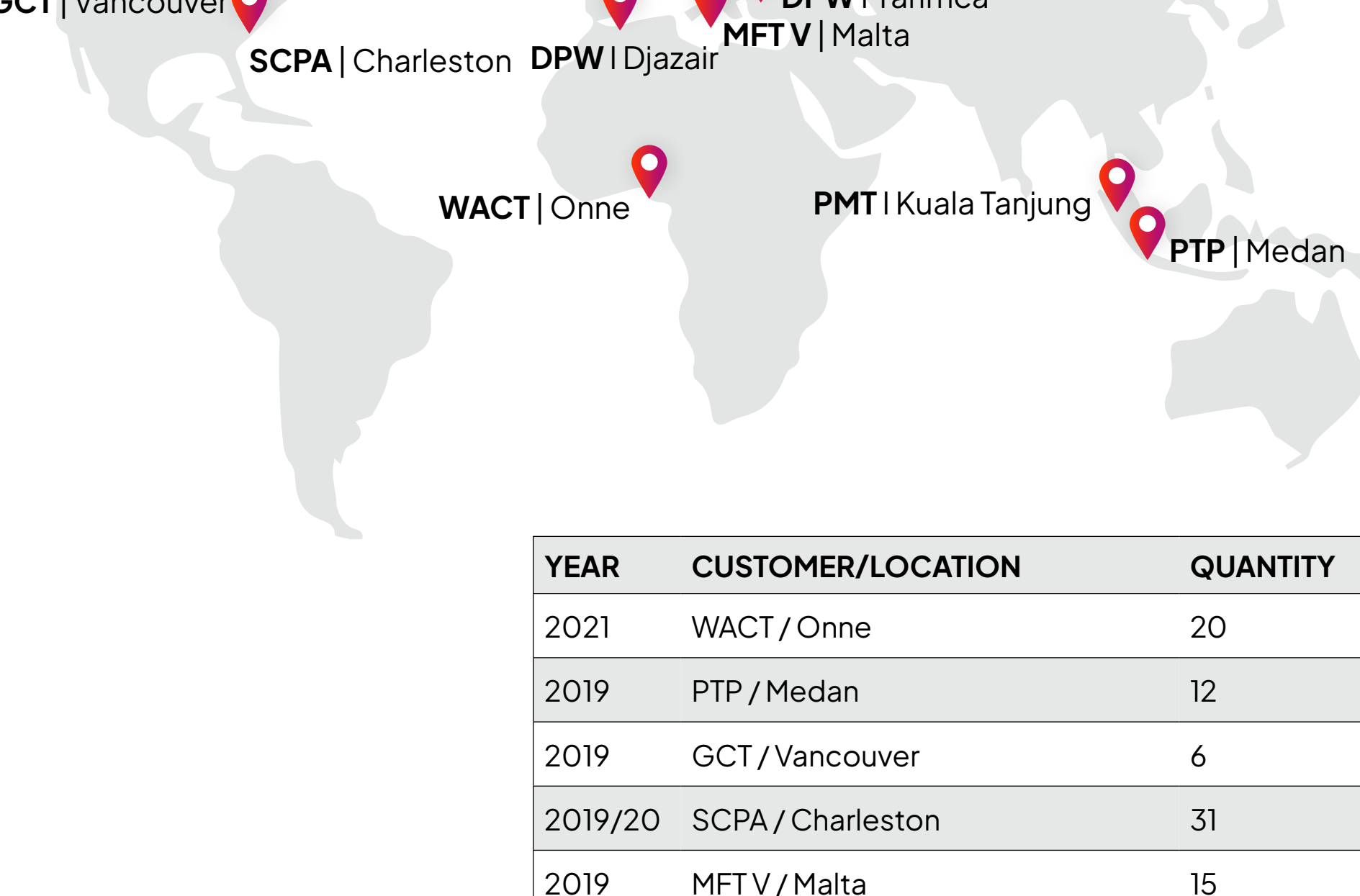


- ## How it works
- GPS base station is installed in the terminal, the crane then uses radio frequency to communicate its real-time GPS position
  - RTG drive lanes are pre-programmed into the memory
  - Slow down and stop areas can also be programmed
  - Automatic slow-down/stop on any path deviation
  - Programmable speed restrictions in areas such as reefer racks
  - If WLAN is available, both radio and WLAN can be combined which boosts communication in places where radio interference is present.

## What you need to know

- Auto-Steering is a prerequisite for TOS Reporting, Stack Positioning, Path Optimization and Truck Guiding
- Customer needs:
  - To apply for necessary radio frequency license that the system needs for the base station communication
  - Site works and commissioning: 5 days for the first crane and 3 days for every crane thereafter
  - To name a location for the base station and install the cubicle, antenna and wiring. Konecranes builds the antenna connection
  - If WLAN is used, to provide a functional WLAN network with strong coverage in the whole area where the RTGs operate (optional)
- Konecranes will assist in providing the necessary information to complete these tasks

## Selected References



| YEAR    | CUSTOMER/LOCATION   | QUANTITY |
|---------|---------------------|----------|
| 2021    | WACT / Onne         | 20       |
| 2019    | PTP / Medan         | 12       |
| 2019    | GCT / Vancouver     | 6        |
| 2019/20 | SCPA / Charleston   | 31       |
| 2019    | MFT V / Malta       | 15       |
| 2019    | DPW / Djazair       | 5        |
| 2018    | APMT / New Jersey   | 20       |
| 2018    | PMT / Kuala Tanjung | 8        |
| 2015    | DPW / Yarmica       | 18       |

