



FREERIDER ***New way of aRTG***

Terminal Automation for Next-Gen Ports



Industry trends to stack with...

- ...more Safety***
- ...higher productivity***
- ...less equipment***
- ...less OPEX***
- ...high degree of automation***
- ...less manual intervention***

FREERIDER combines advantages of both systems

- RTG: Flexibility from rubber tired gantry cranes
- ASC: Full automation and safety package, gantry with load, independent housekeeping

FREERIDER is an ASC/aRMG on rubber tired

Performance Spider Hoist



Hoist speed without load
52-60m/min

+50%



83m/min

Hoist speed with full load
26-30m/min

+60%

45m/min

Gantry drive without load
130m/min

+23%

160m/min

Gantry drive with load depending on container weight
0m/min

NEW

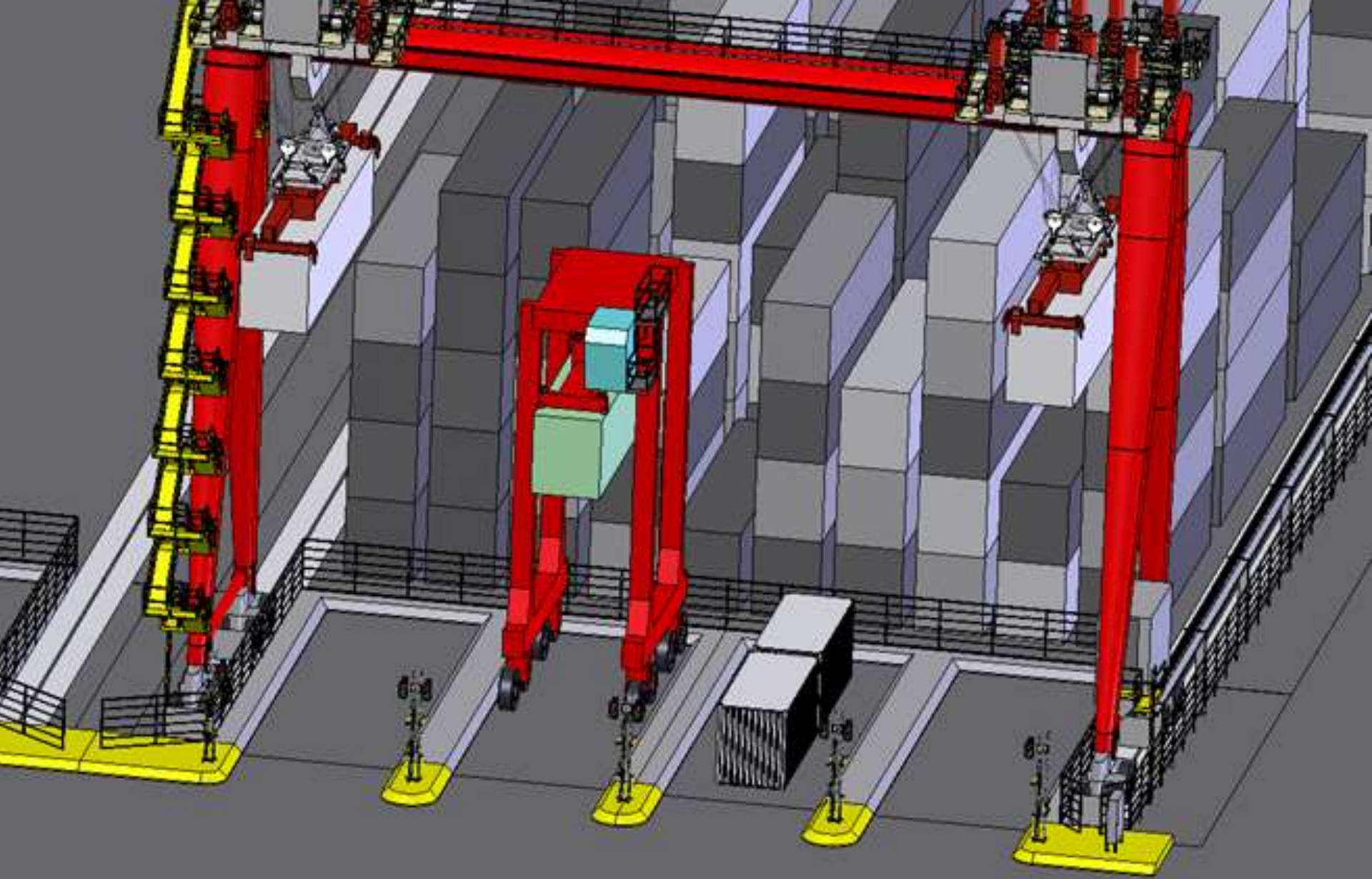
130-160m/min

Reduced positioning time in operation per move

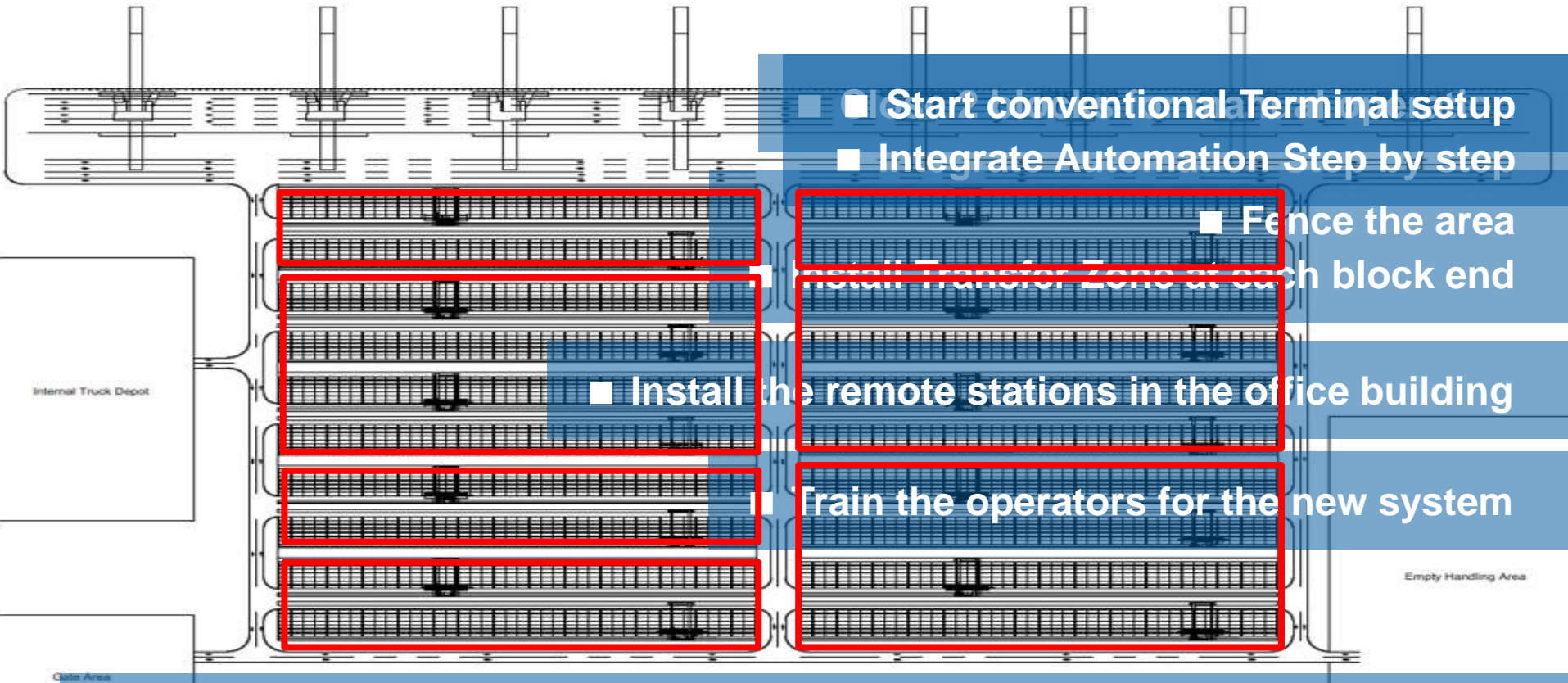
App. 5-15 sec

FREERIDER – Endloaded





Step 4 How can you do that?



- Start conventional Terminal setup
- Integrate Automation Step by step

- Fence the area
- Install Transfer Zone at each block end

- Install the remote stations in the office building

- Train the operators for the new system

When the system and the operators are ready start live operation



Kuenz FREERIDER

Thanks