

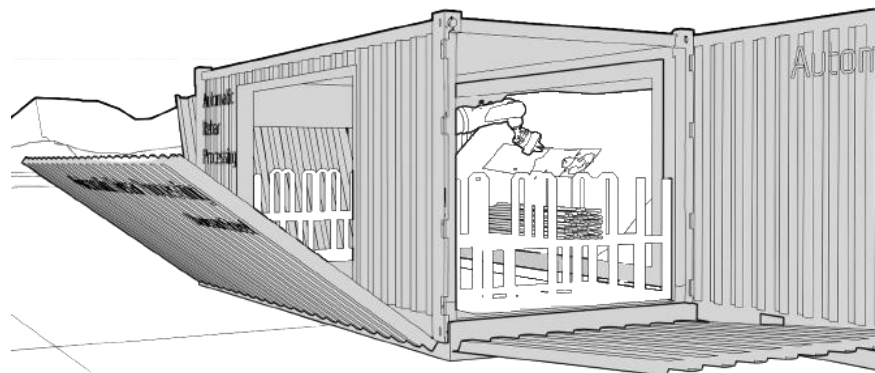
# MOBILE PLANT



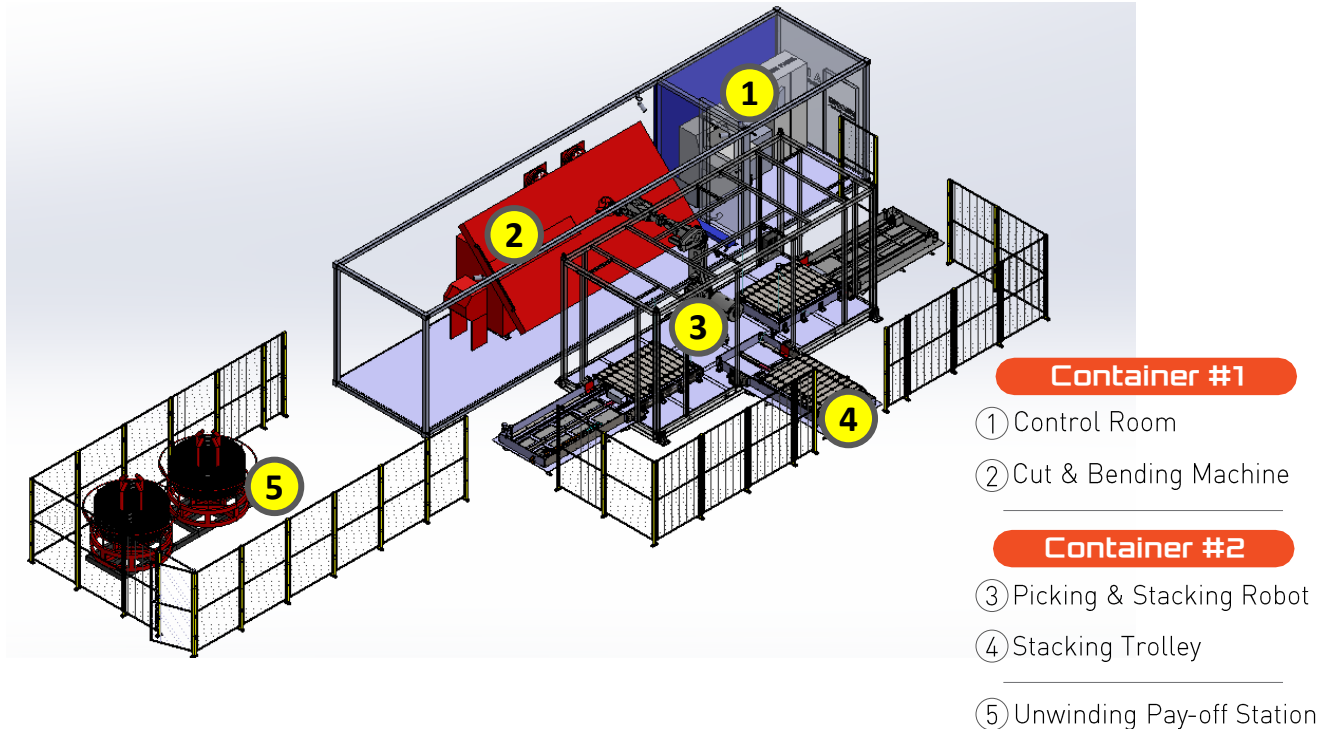
**ARON** solution

# Mobile Plant

Mobile Plant is robot automation solution for on-site rebar processing. As Mobile Plant consists of cut & bending machine and optimized stacking robot, the entire process of rebar processing, from raw material input to stacking of processed rebars, can be automated in any location.



## Components



## Specification

① Control System	Rebar Production Management, Equipment Control & Monitoring (OPC Program with Mitsubishi PLC)
② Cut & Bending Machine	MEP Format 16 (expandable to other models after PLC code access test)
③ Picking & Stacking Robot	ABB Robot Arm & Customized Gripper (Loading Capacity 147 kg)
④ Stacking Trolley	3 Trolleys (Loading Capacity 800 kg)
⑤ Unwinding Pay-off Station	2 Coil Holders

### Footprint

- Container #1 : 32 m<sup>2</sup> (L 12 m / W 3 m / H 3 m)
- Container #2 : 58 m<sup>2</sup> (L 11 m / W 5 m / H 3 m)  
(w/ stacking trolley)
- Unwinding station : 38 m<sup>2</sup> (L 8 m / W 5 m / H 2 m)

### Power Supply

- Cut & Bending Machine : 380V 100A (3-phase 4-Wire)
- Robot & Trolley : 380V 75A (3-phase 4-Wire)

\* Detailed specification varies depending on customer requirements

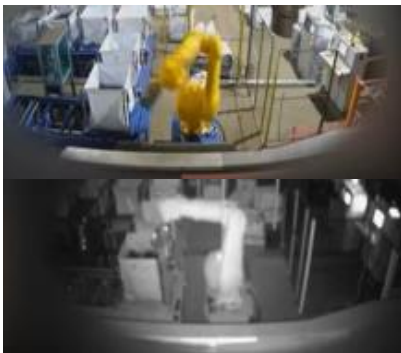
## Advantages



### Install to Any Location

As Mobile Plant is supplied in the form of containers, it can be installed quickly on construction sites. Processing rebar near remote workspaces can minimize logistics time and cost.

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### Rebar Processing at Any Time

Mobile plant responds quickly to urgent demands caused by sudden rescheduling at any time. Automation systems require minimal manpower and can produce at night without an operator.

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### Web-based Support System

New shapes of rebar processing can be added through web-based support system. Maintenance using remote monitoring system can reduce downtime and improve productivity.



## References

### Robocon Project 1

#### Taiwan, Taipei Airport

- Minimized lead time of processed rebar supply (14 days to 2 days)



### Robocon Project 2

#### Singapore, Tuas Port

- Zero safety accidents
- 15% Cost reduction and 170% productivity (continuous operation 18 hours/day)





# ROBOCON

[www.roboccon.ai](http://www.roboccon.ai)

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