

CC-1 Intro-Closed/Cart System



- **CC-1 applies to:**
- Fully automated feeding system for automatic clamping and automatic storage for CNC lathes and CNC mills.
- Work center machine.
- **CC-1 implementation:**
- Automatic exchange of workpieces, automatic workpiece storage space, and production sequencing system management.
- **CC-1 has:**
- Fully automated signal integration and collaborative production capabilities with the work machine to achieve fully automated processing and production planning and setting.

Marlin & Sons
begin.asia/ps
mark@begin.asia
P: 8864-2249-3490
F: 8864-2249-2446
Taichung, Taiwan

CC-1 Intro

(1) Long-term feeding

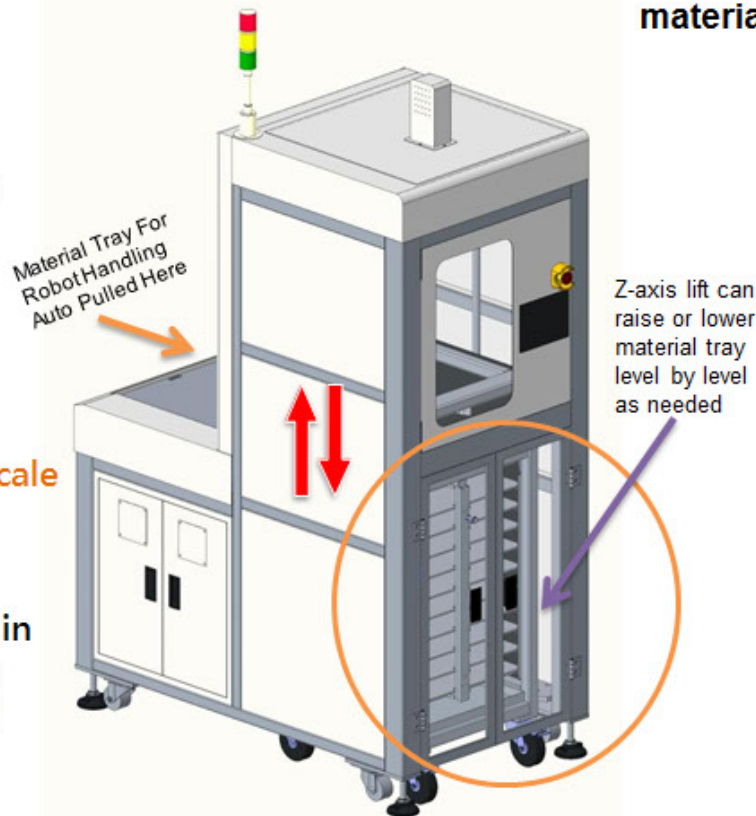
Mechanical Z-axis lifting system, lifts mobile material cart up and down and can stop at each level (10 in total) to allow material tray to be pulled to the front for robotic arm tending.

Interchangeable workpieces save labor and unloading time of the parts.

(2) Warehouse-type large-scale storage of materials

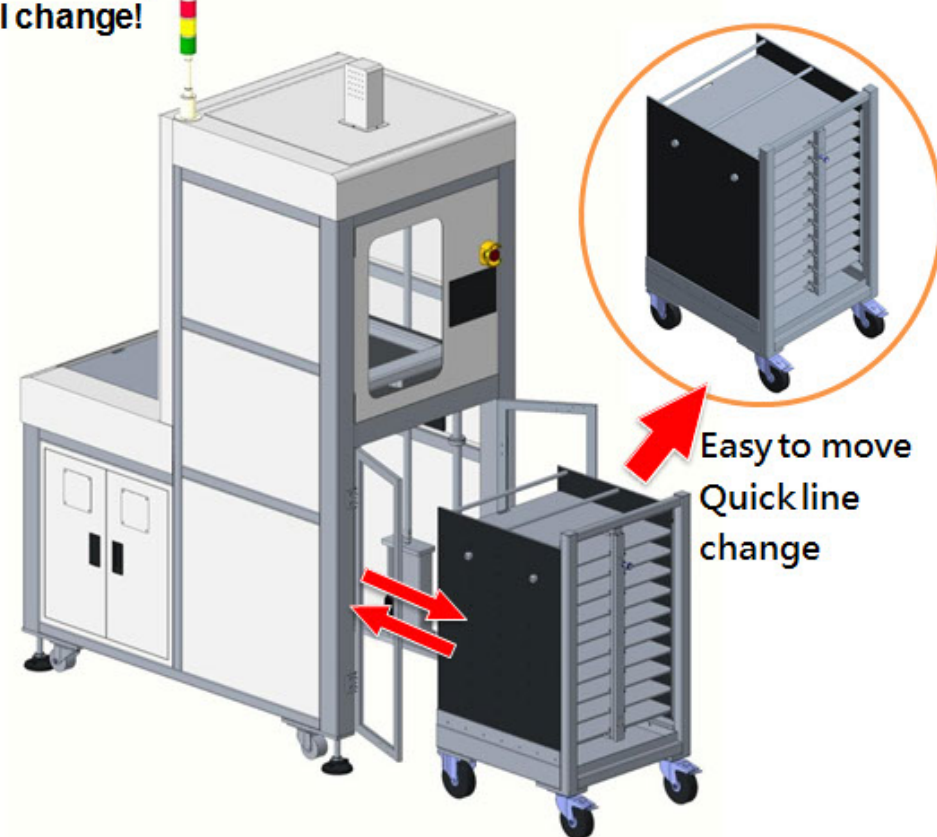
Multi-layer warehousing~

It can store processed parts in large quantities at the same time and provide long-term feeding.

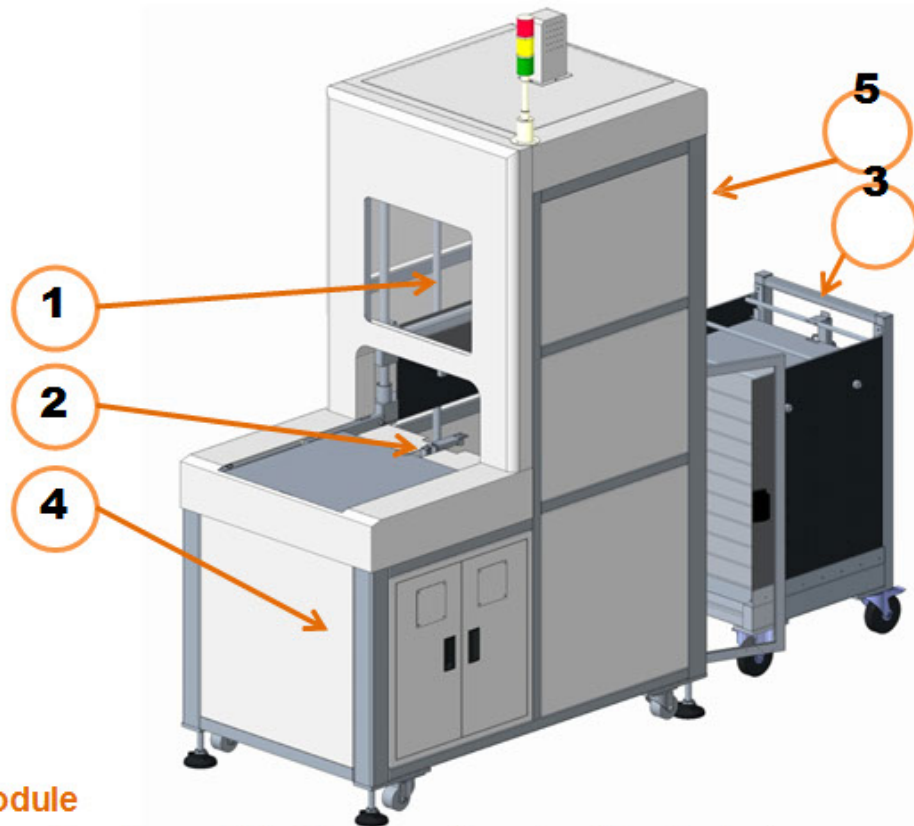


(3) Quick position change

Independent mobile material cart for quick material change!



CC-1 Intro



Module

- | | |
|---------------------------------------|-----------------------------|
| 1. Storage/ lifting/ feeding system | 4. Distribution box system |
| 2. Tray hook plate positioning system | 5. Intuitive control system |
| 3. Mobile Cart system | |

Turned or /Milled Parts



Workpiece size

39 x 39 x 22"100 x 100 x 55mm

Spec

Z-axis lifting mechanism load limit	484LB/ 220KG
-------------------------------------	--------------

Drag load of hook plate mechanism:	44lb/ 20kg
------------------------------------	------------

Plc control system
(standard) PC
control system
(optional)

Machine Weight	1100lb/ 500kg
----------------	---------------

Machine Size	32.4x 61 x97"810*1550*2460 Including Robot
--------------	---

For Use with CNC Mills/Lathes	• Fanuc,DMG Mori, Mazak, Haas,YCM,etc.
-------------------------------	---

CC-1 Intro

➤ Mobile cart system



■ Detailed specifications:

- Specifications for the number of trays loaded by the material rack:
 - a. (Spacing 2" 55mm) allows 10 layers to be carried
 - b. (spacing 4" 110mm) allows 5 layers to be carried

■ Detailed specifications:

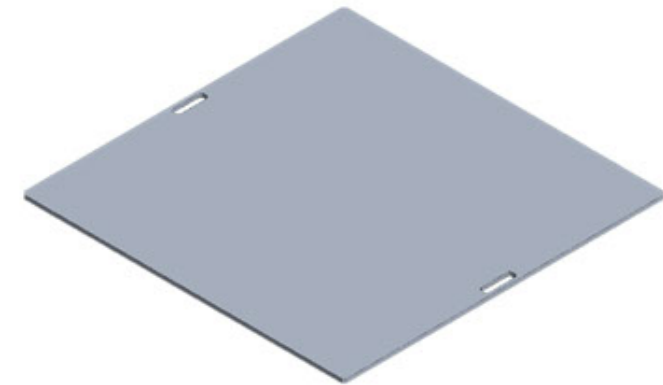
- Mobile push cart (material tray optional)
- Size : 25.2 x 25.25 x 41.15" 640 x 624 x 1045mm
- Allowable load : 484lb/ 220kg

HHO Smart

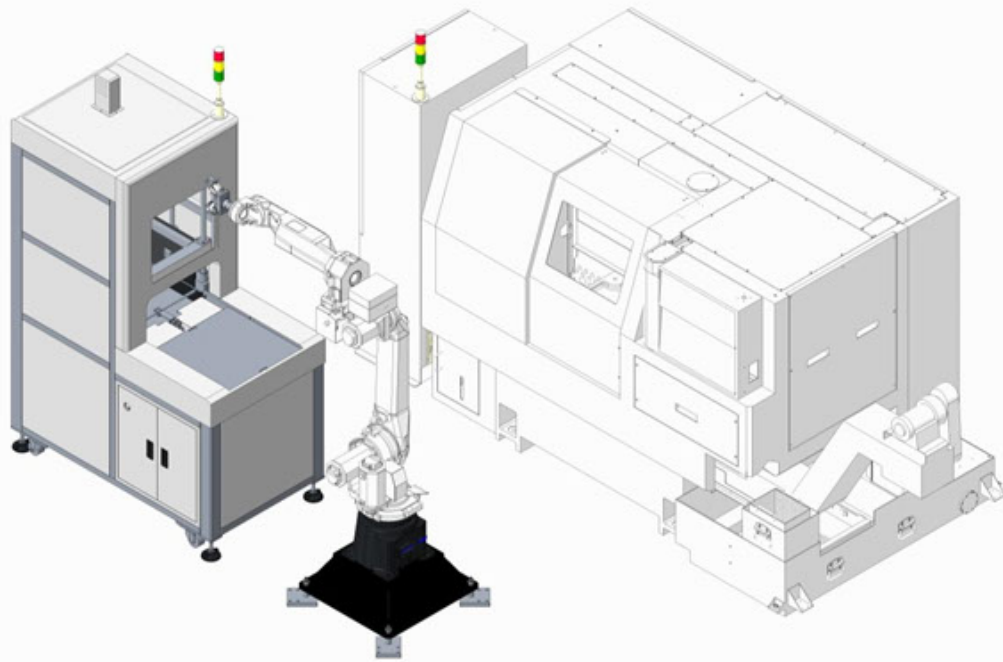
Helping Human Opportunity™

➤ Collection tray (optional):

- Tray size : 20.5x 20.5 x.25" 520*520*6mm

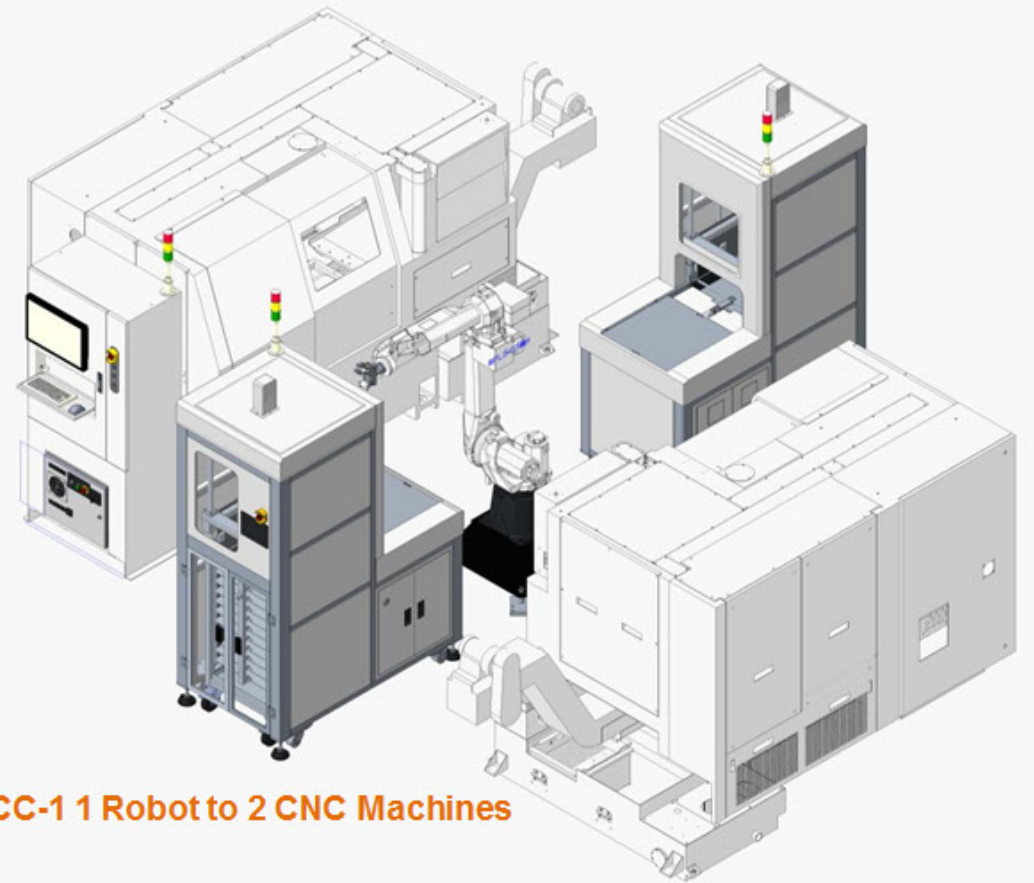


CC-1 Application



CC-1 1 Robot to 1 CNC

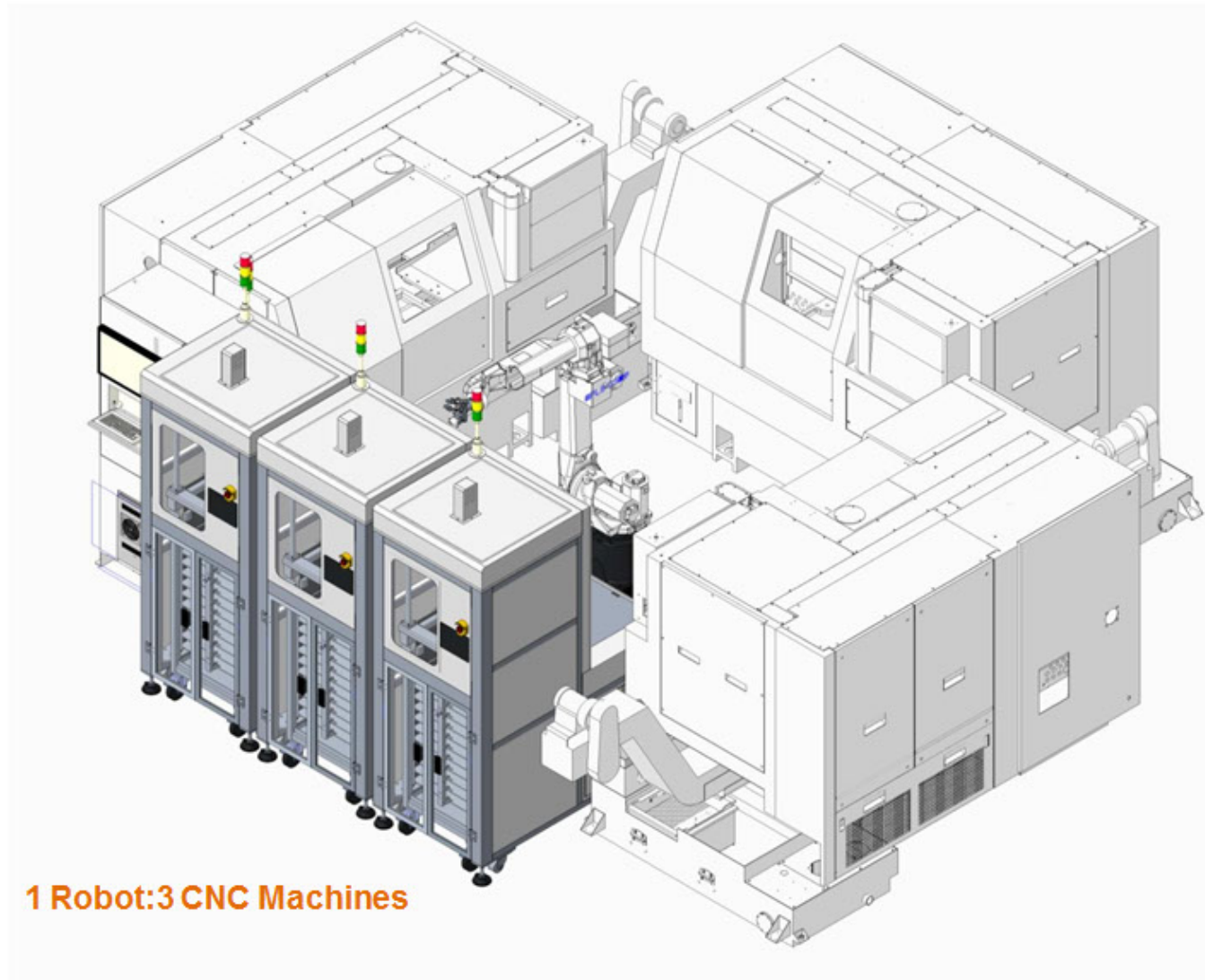
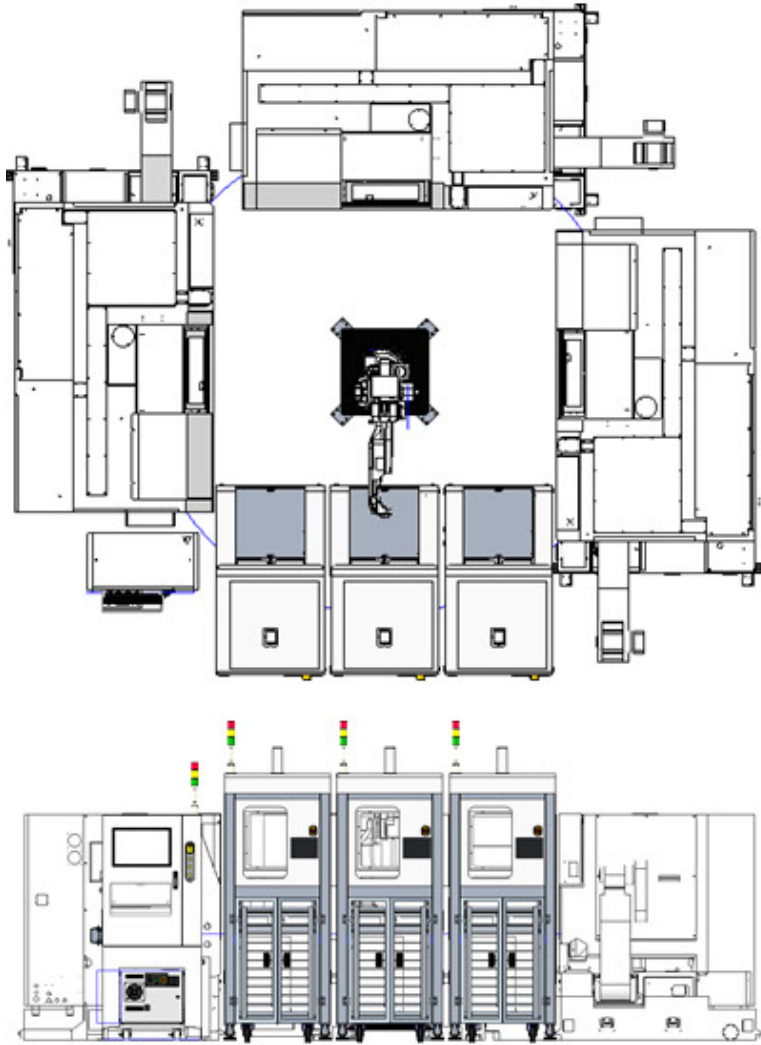
HHO Smart
Helping Human Opportunity™



CC-1 1 Robot to 2 CNC Machines

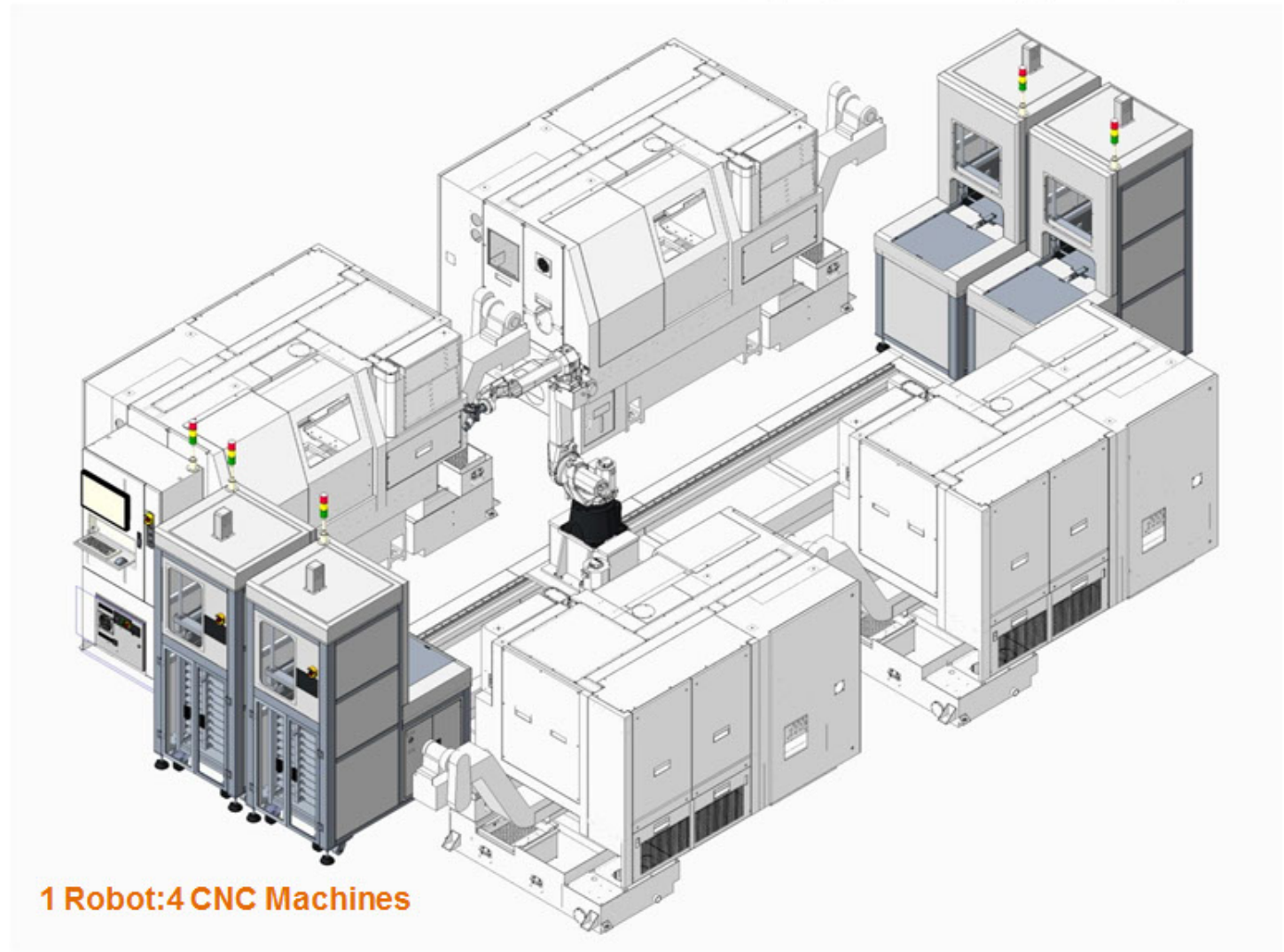
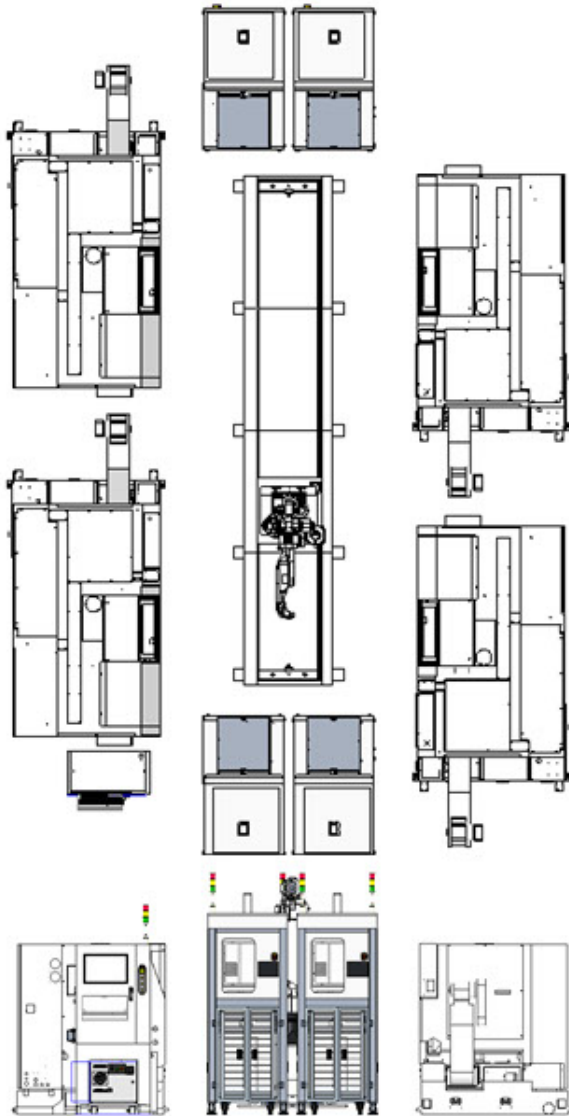
CC-1 Application

HHO Smart
Helping Human Opportunity™



CC-1 Application

HHO Smart
Helping Human Opportunity™

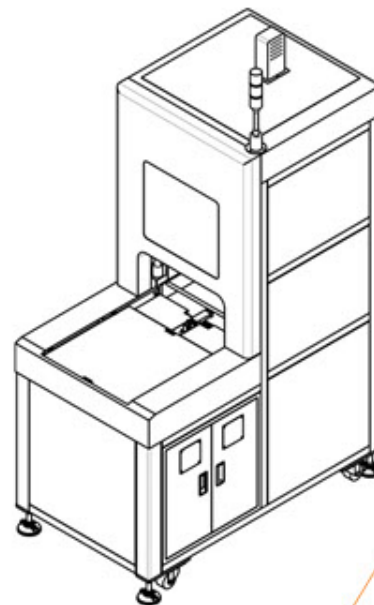
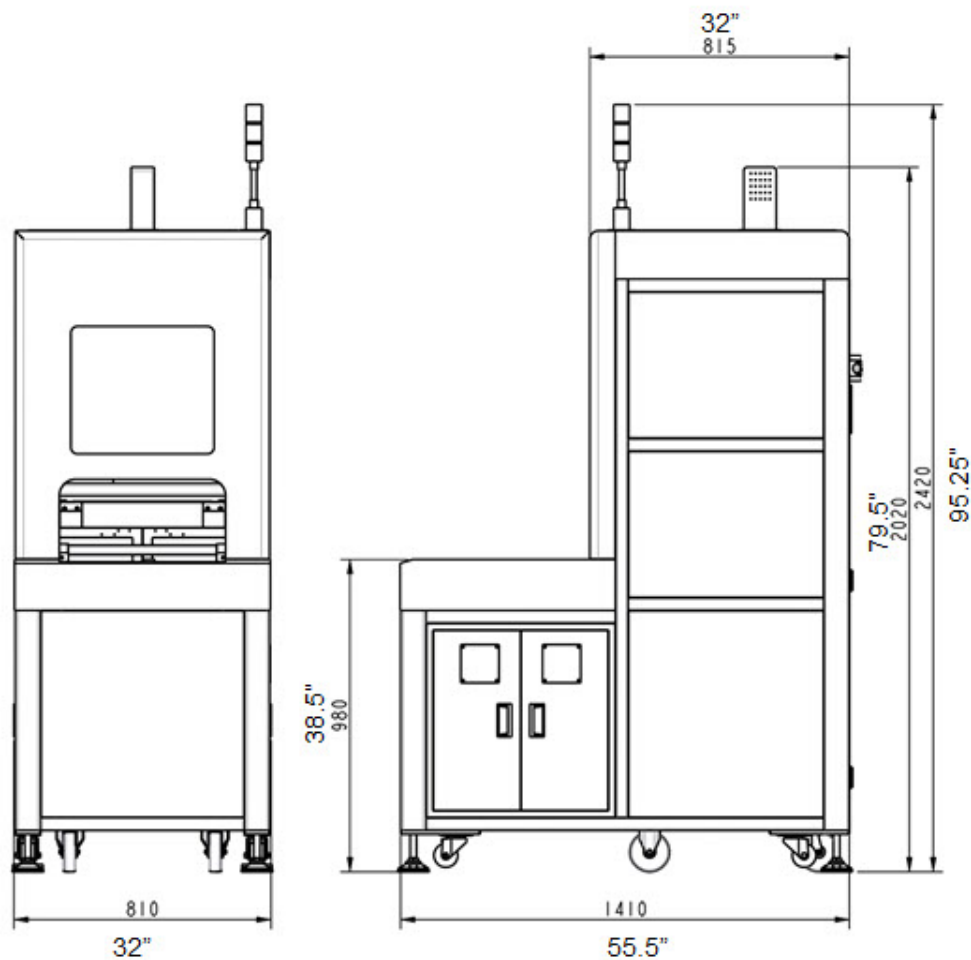


1 Robot:4 CNC Machines

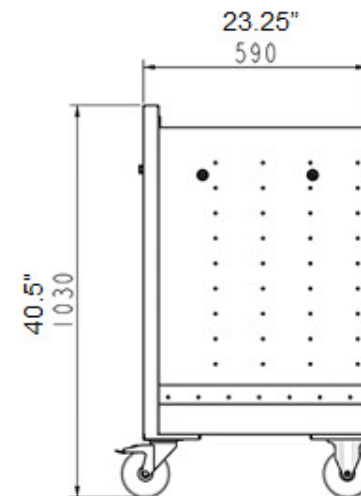
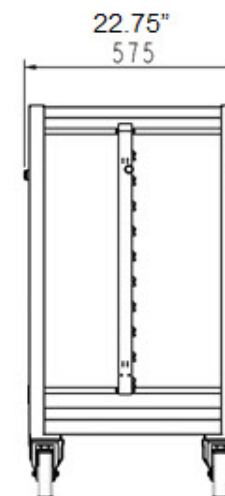
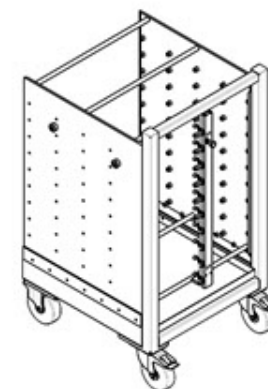
CC-1 Dimensions

HHO Smart
Helping Human Opportunity™

Material Feeding System



Mobile Storage

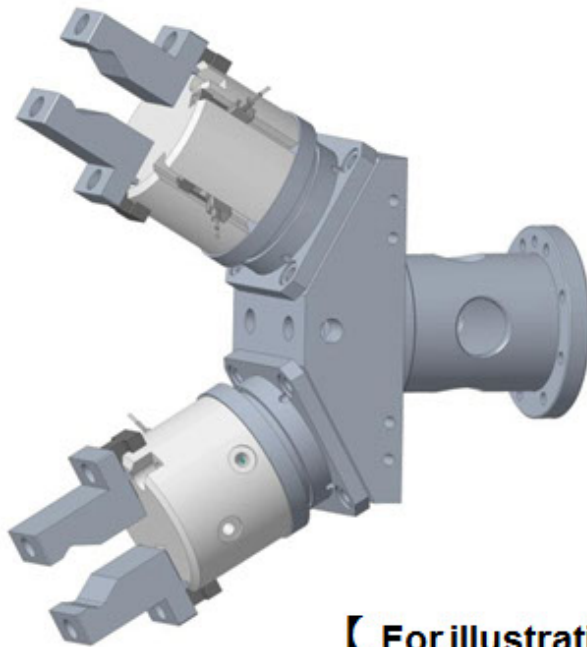


CC-1 EOAT

HHO Smart

Helping Human Opportunity™

➤ EOAT: Grippers



【 For illustration only 】

■ Detailed specifications :

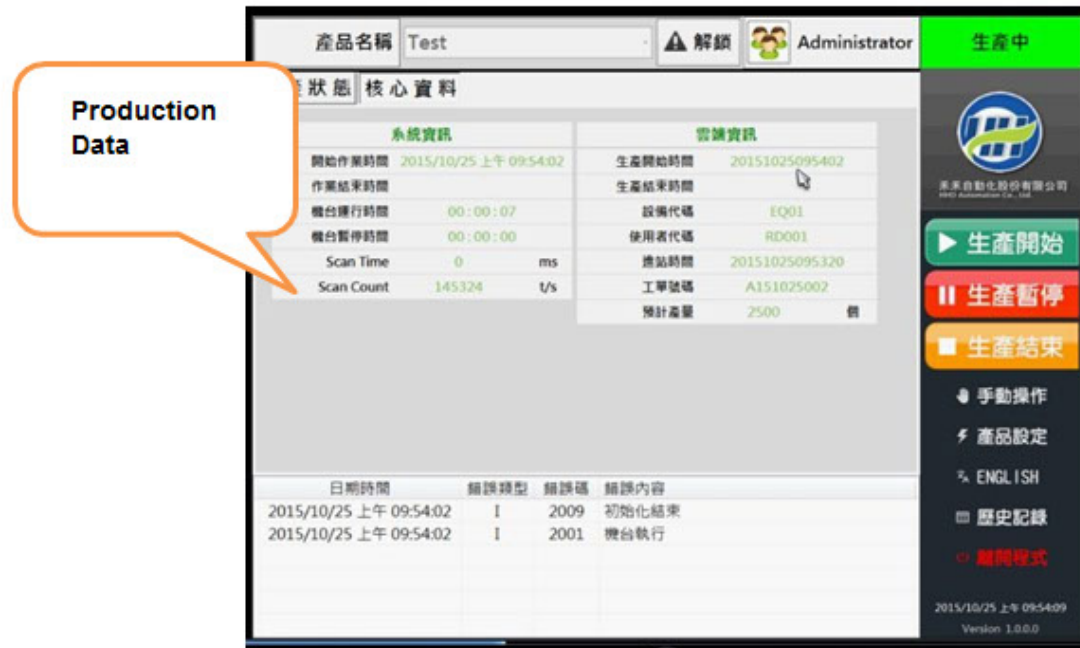
- 1) Gripper cylinder: 2 sets
- 2) Grippers: 2 sets
- 3) Applicable Load: less than 2.2lbs/1kg
- 4) Workpiece size (mm): 100*100*55 or less

【 Matching Taiwan-made or German-made cylinders according to workpiece requirements 】

【 Matching jaw specifications based on production time, weight, and size 】

CC-1 PC Control System Options

HHO Smart
Helping Human Opportunity™



Function:

PC architecture controls the movements and messages of the arm and related modules.

The intuitive screen makes it easy to identify and track progress

Error and message notifications make it easy for operator response.

Data collection allows operator to control utilization rates.

The APP system or Web can be expanded to control factory-related data through full-line management.

Application performance

HHO Smart
Helping Human Opportunity™

