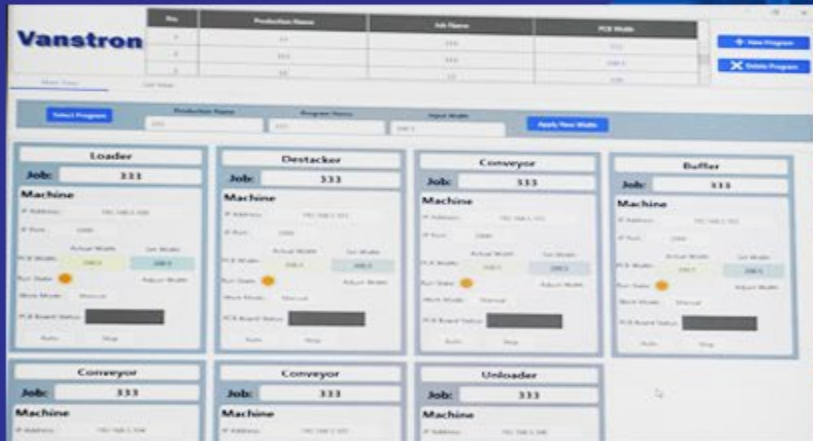


# SMART BOARDS HANDLING MACHINE



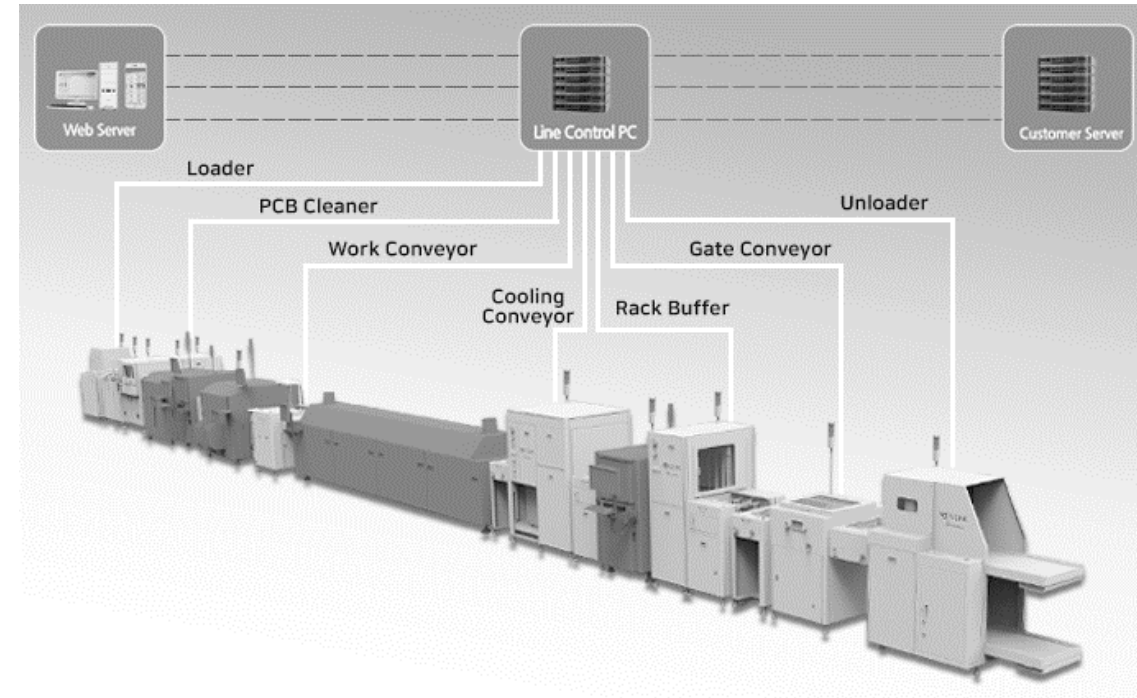
**Center master software**

*available to link with MES system*

*and remotely control the equipment stop /start /parameters setting.*

Vanstron's Smart Conveyor System can build Smart SMT Line. This is a solution that enables an enterprise-wide integrated management and automated production line.

The Vanstron equipment constituting the smart SMT line is connected to the line control PC (A separate computer for central control of the Vanstron facilities) through LAN communication. The customer transfers the PCB information to each Vanstron facility through the line control PC, so that the operator can change the width easily. In addition, it is attracting attention as a next-generation SMT solution that improves the productivity and competitiveness of customers by enabling real-time monitoring of facility status.



What the standard features that the customer will benefit:

<b>1) Automatic width adjustment</b>	When applying the data of the production model, each transport device of Vanstron carries out automatic width control.
<b>2) Real-time status monitoring</b>	Real-time monitoring possible with PC
<b>3) Maintenance Alarm Function (Optional)</b>	If the maintenance period is set to a certain cycle for each equipment, an alarm will ring.
<b>4) 'LogFile' Creation</b>	Production history management and infinite data processing
<b>5) Set access permissions</b>	The user can edit accessibility to the system

## The optional features :

- 1.Interface between the Line Control PC and Customer's server
    - The Customer SERVER reads the result value of each transport device of Vanstron's stored in Line Control PC.
  - 1.In case of NG Buffer or Unloader, it is possible to trace the board of a specific slot during production
    - Serial # required, the factory's main server has to be connected
  - 1.Conveyor speed can be set by model
    - The machine must be equipped with an electronic speed control controller in advance.
- Ex) Cooling Link in front of/ at rear of reflow oven



## APPLICATION EXAMPLES

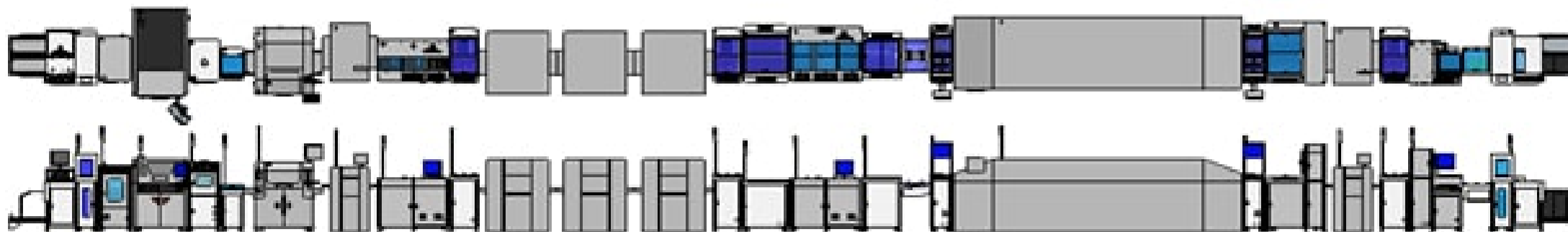
All equipment of Vanstron's simultaneous width adjustment \_ Applied in 'C' company



Automatic width control type for next B model production after completion of the work on the model A  
(After ejecting the magazine rack from the unloader)

## Vanstron equipment sequential width control by production model (Cascade) \_ Applied in 'M' Company

Mounter Previous Vanstron Device width is 'B' Model | Mounter Next Vanstron Device width is 'A' Model



- When new B model is inserted during A model production, automatic width control is performed sequentially each time new B model enters
- This is the general recommendation since the model change time is shortened

# Software review

The screenshot displays the Vanstron DeviceManager software interface. At the top left, the Vanstron logo is visible. The main area features a table with the following data:

No.	Production Name	Job Name	PCB Width
1	22	333	111
2	333	333	222

Below the table are two buttons: '+ New Program' and 'X Delete Program'. The interface also includes a 'Main View' / 'List View' toggle and a control bar with 'Select Program', 'Production Name' (333), 'Program Name' (333), 'Input Width' (222), 'Apply New Width', '+ Add Device', and 'X Delete Device' buttons.

The bottom section contains three machine control panels, each for Job 333:

- Machine 4:** IP Address: 127.0.0.1, IP Port: 2000, PCB Width: Actual 0, Set 0.
- Machine 5:** IP Address: 192.168.1.2, IP Port: 2000, PCB Width: Actual 0, Set 0.
- Machine 6:** IP Address: 192.168.1.4, IP Port: 2000, PCB Width: Actual 0, Set 0.

Each machine panel includes fields for 'Run State', 'Work Mode', and 'PCB Board Status', along with 'Auto', 'Stop', and 'Config' buttons.

# Software review

The screenshot displays the Vanstron DeviceManager software interface. At the top, a window titled 'DeviceManager' contains a table with the following data:

No.	Production Name	Job Name	PCB Width
1	22	333	132
2	333	333	200.5
3	55	22	300

Below the table are buttons for '+ New Program' and 'X Delete Program'. The main interface features a 'Main View' tab and a 'List View' tab. A control panel at the top includes a 'Select Program' button, input fields for 'Production Name' (333), 'Program Name' (333), and 'Input Width' (200.5), and an 'Apply New Width' button. The interface is divided into several machine control panels: 'Loader', 'Destacker', 'Conveyor1', 'Buffer', and 'Conveyor2'. Each panel shows 'Job', 'Machine', 'IP Address', 'IP Port', 'PCB Width' (with 'Actual Width' and 'Set Width' fields), 'Run State', 'Work Mode', and 'PCB Board Status'. An 'Add New Program' dialog box is open in the center, with fields for 'Production Name', 'Job Name', and 'PCB Width' (set to 0), and 'Add' and 'Cancel' buttons.