LEANLOADER

ROBOT EXPERTS WHO UNDERSTAND MACHINE TOOLS

PRODUCT FEATURES

APPLICATION FEATURES

Application Industry

- Power tools industry
- Pneumatic / hydraulic / pipeline components industry
- Motor, high voltage electrical industry
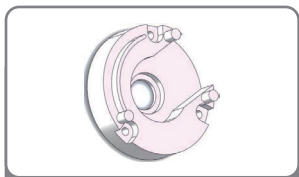
Processing Technology

- Lathe
- CNC Machining Center
- Drilling and tapping
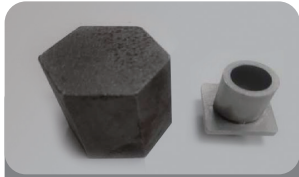- Grinding

Applicable Workpieces

- Small- and medium-sized workpieces, round bars
- Angular workpieces
- Height less than 95mm

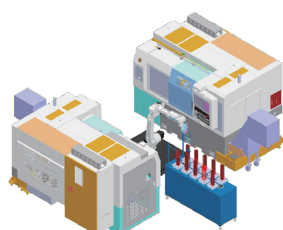Small- and medium-sized workpieces

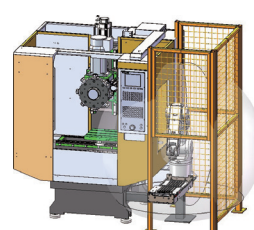Motor encoder casing

Angular workpieces

TYPES OF CNC TENDING

One Robot to One CNC Machine

One Robot to Two CNC Machine

CNC Milling Machine Tending from Front or Side

ELECTRICAL CONTROL SYSTEM

LXC-917Y/1206R

- Integrate robot controller and peripheral devices
- Space saving
- Hardware cost saving
- Simplify electrical design

LXC-1468C

- Independent robot electric control cabinet

Loading tray ready | Feeding tray ready | Tray switch
Emergency stop button
Spare button
Power switch
Power indicator
Integrated electric control (internal)

Loading tray ready | Feeding tray ready | Tray switch
Emergency stop button
Spare button
Electrical box

PRODUCT BENEFITS

- **Easy Installation**
- **Easy Debugging**
- **Easy Connection**
- **Quick Line Change**
- **Non-stop production**

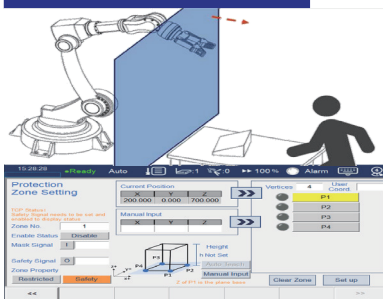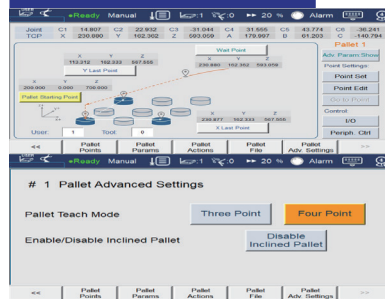| Time Consumption	Model Change	Product Change
LeanLoader	30 min(s)	10 min(s)
Conventional Robots	>24 hours	>24 hours

EXTENSION OF APPLICATION MODULE
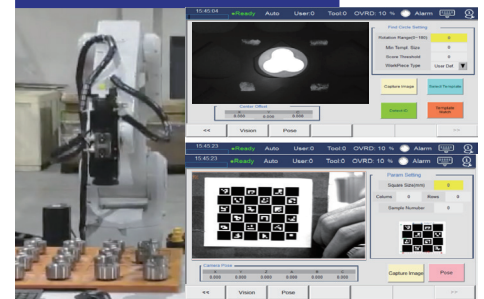
Arm Safety Zone

- Setting a safety protection area can prevent the robot from entering a specific area.

Tray Module

- Parameterizing the matrix tray eliminates the need to repeat teaching points.
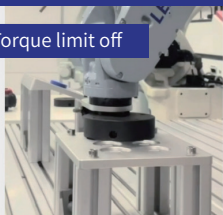- Various teaching modes to meet application requirements.

Vision Alignment Module

- Integration of vision functions
- Compatibility with commercially available cameras
- QR code recognition
- Machine tool/tray position calibration

Collision Detection

Torque limit off

Torque limit on
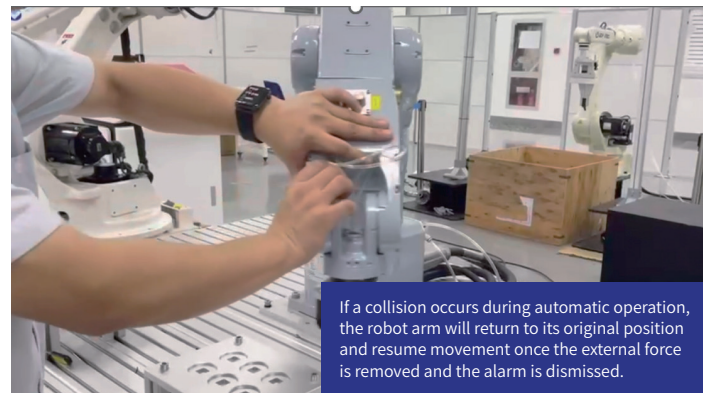
If a collision occurs during automatic operation, the robot arm will return to its original position and resume movement once the external force is removed and the alarm is dismissed.

- Record regular axis loading in learning mode.
- Protect against unexpected impacts during robot movement.

CENTRAL CONTROL

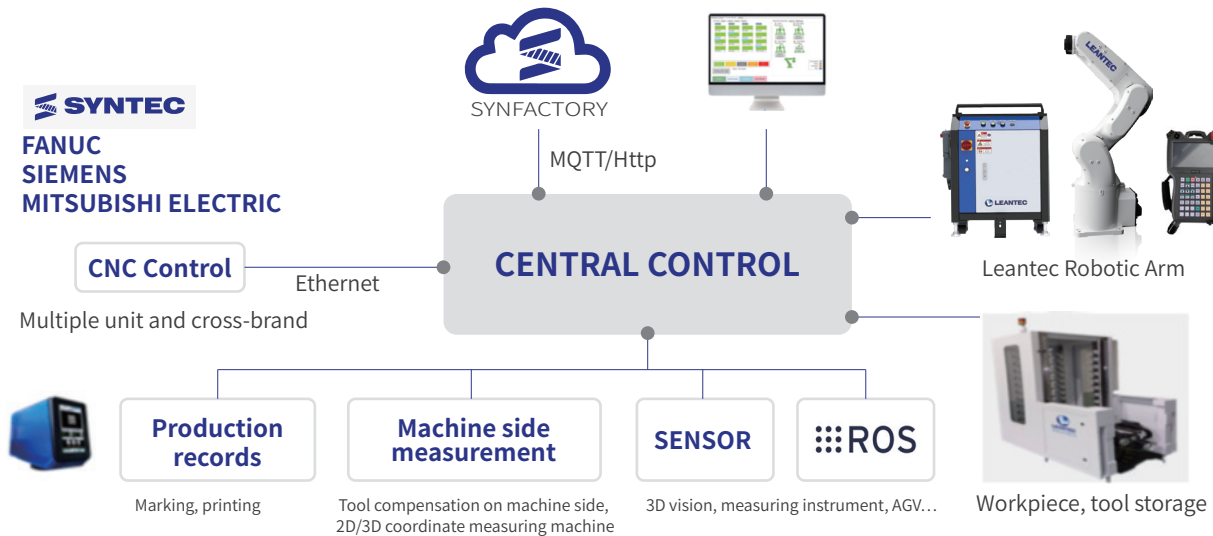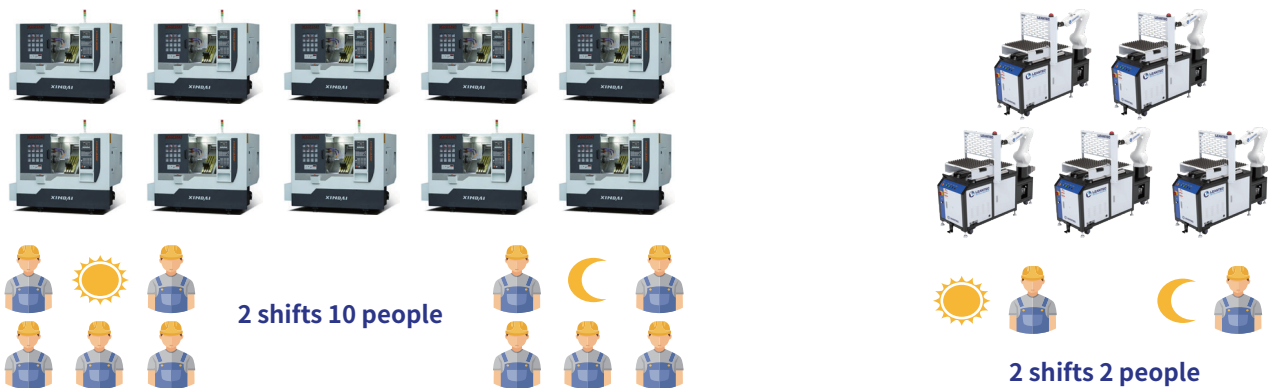- Central control is a platform or software used to manage robotic units in a processing site.
- It allows users to obtain information about the equipment.
- Users can determine how each piece of equipment should be used based on the current situation.
- With this software, users can easily monitor and control the equipment as needed.
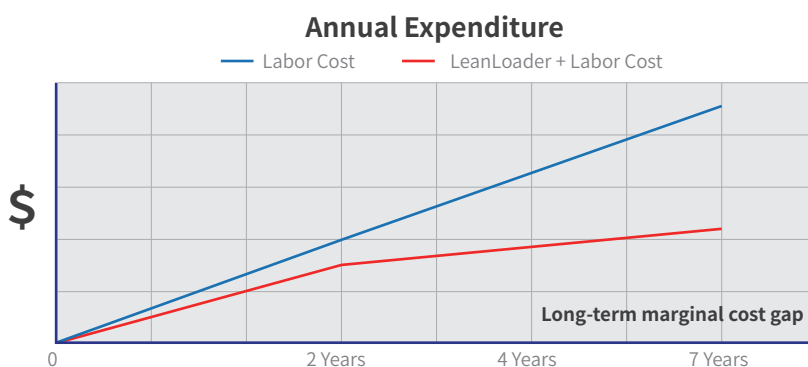

SYNFACTORY

SYNTEC
FANUC
SIEMENS
MITSUBISHI ELECTRIC

MQTT/Http

CENTRAL CONTROL

Leantec Robotic Arm

CNC Control — Ethernet

Multiple unit and cross-brand

Production records	Machine side measurement	SENSOR	ROS
Marking, printing	Tool compensation on machine side, 2D/3D coordinate measuring machine	3D vision, measuring instrument, AGV…	

Workpiece, tool storage

PRODUCT BENEFITS

CONVENTIONAL PRODUCTION VS LEANLOADER

2 shifts 10 people

2 shifts 2 people

CONVENTIONAL PRODUCTION VS LEANLOADER COST EXPENDITURE

Annual Expenditure

— Labor Cost   — LeanLoader + Labor Cost

$

Long-term marginal cost gap

0   2 Years   4 Years   7 Years

Labor cost savings– For example: 10 CNCs

ROI ABOUT 2 YEARS
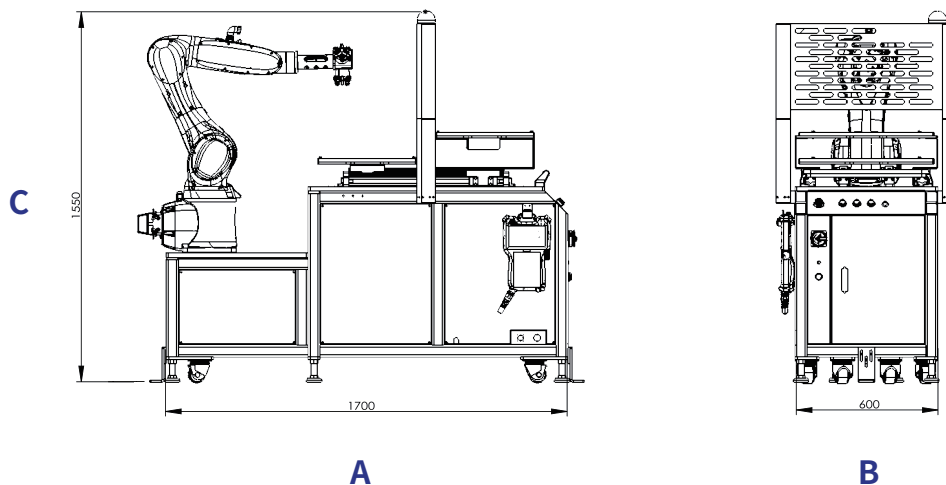
Cost-Saving Labor Efficiency
Boosting output!!!

PRODUCT SPECIFICATIONS

The LeanLoader can be equipped with Leantec Y series 917 arm, R series 1206 arm, C series 1468 arm and other robot products.

SPECIFICATION			
Product Model	LXC100-917Y	LXC100-1206R	LXC100-1468C
Robot Model	LA917-6-Y	LA1206-10-R	LA1468-10-C
Robot Payload (kg)	6	10	10
Robot Arm Reach (mm)	917	1206	1468
Robot Repeatability (mm)	±0.03	±0.05	±0.08
Tray Size (mm)	570x420	570x420	1000x600
Tray Maximum Load (kg)	60	60	60
IP Rating	IP54	IP54	IP54
End-Effector	Optional	Optional	Optional
Product Dimension (mm) A x B x C	1700x600x1550	1700x600x1550	2500x1100x1550

APPLICATION FEATURES

A

B

ROBOT EXPERTS WHO UNDERSTAND MACHINE TOOLS