

# LEANTEC

## Catalogue

LEANTEC





## Company Introduction

Under the Industry4.0 global trend, the industry sector no longer relies on traditional production methods. What replaced them are diverse, customization centered, and small quantity productions. LEANTEC is able to respond to global industrial changes in providing comprehensive solutions to clients, thereby realizing our vision of achieving smart manufacture and creating smart factories.

In moving toward Industry 4.0, LEANTEC uses its smart manufacture system integration as its core advantage in accumulating experience regarding small quantity & diverse productions, click-and-mortar, and on - site services, complemented by multiple sales channels, and one-stop comprehensive solutions.



## Industrial Applications

### Metal processing

Machine tool and press machining tending applications, as well as plate and pipe welding, compression, and other technical applications, which can be easily achieved.

### Automotive Parts

Leantec help customers face the trend of efficiency and safety in the industry and provide machining, measurement and traceability solutions to improve quality and production efficiency

### Food Packaging

Facing the ever-changing needs, Leantec provides digitalized and intelligent solution to maintain and improve food safety together.

### Electronic

The LEANTEC arms can complete fast, multiplexing automatic production models, including screw fastening, insertion, spot welding, and other high-precision processing applications.

## Automation Applications



### Visual Alignment

For the commonly used positioning applications in automation, LEANTEC can provide total visualization solutions without needing to cooperate with third parties.



### Dispensing

LEANTEC provides excellent simultaneous dispensing, and enables high-speed glue dispensing and high-speed inspection of the glue dispensed with the external sensors.



### Equipment Management

From the hardware for machine data collection and controllers to the cloud-based monitoring software, LEANTEC's intelligent and diversified range of products assist our customers to progress into the era of the Internet of Things.



### Assembly

Enabling complex assembly applications with peripheral sensors, LEANTEC provides integrated solutions, so customers no longer need to worry about labor force shortages.



### Pick&Place

LEANTEC provides a wide range of pick and place handling equipment for right-angle arms, robotic arms or dedicated machinery, assisting our customers in implementing automation quickly and simply.



### Measurement

LEANTEC's product can perform online/offline measurements and inspections for all kinds of workpieces, such as gears, electronics, rubbers and plastics.

# Modular Platform

Building your automation solution as easy as building blocks



## Measurement

Sensor

Tool Compensation

Data Collection



## Traceability

Laser Graving

RF-ID

Barcode-Scanning

## Robot

6-Axis

4-Axis Palletizing Robot

SCARA

Press Tending Robot

## Machine Tending

Tray

Machine Vision

Gripper

## Manufacturing

Grinding

LaserWelding/Cutting

Sculpting/Drilling



**Robot Applications**  
Offering apps for smart factory



**Modular Platform**  
Easy to customization for every applications



**Plug & Play**  
Special design for connecting peripherals

# Leantec Solution



## Smart Factory Solution

Leantec Smart Factory Solution provides Smart Machine Box, WiFi Connection Module, and Smart Factory Software (SynFactory) to digitize the equipment and production information. Customers can use these information to analyse the utilization bottleneck and improve the management method and productivity.

[more info P.7~P.8](#)



## Factory Automation Solution

Leantec provides HC Series Controllers, FC Series Controllers, 4-in-1 Servo Driver, and Machine Vision System. Integrating with highly friendly customization tool, Leantec Factory Automation Solution will help FA makers quickly build their own customized machine to adapt multiple demands of various industries.

[more info P.9~P.10](#)



## Solutions for marking and production history

LEANTEC' s marking system provides a total solution for automatic marking, enabling marking on the assembly, marking on the fly and marking on the tray. Value-added automation creates a more valuable and diverse marking system. LEANTEC' s LeanMarker module provides a complete production history

function. The highly integrated marking machine enables an efficient and convenient solution for product traceability with one code for one product.

[more info P.11~P.12](#)





## Robot Cell

Leantec offers various types of Robot arm to help customers achieve automation production line. In addition, Leantec bundles different modules to meet different field requirements and maximize the production efficiency, solving automation issues in flexible manufacturing cases. °

[more info P.13](#)



## Leantec Modular Products

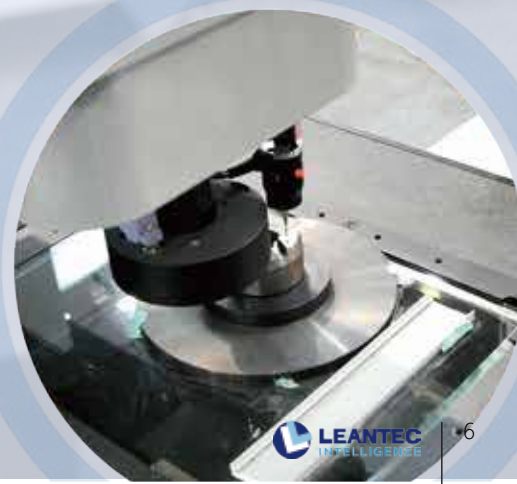
Leantec offers common modular components for typical smart factory applications, assisting customers in assembling automation production line effortless and satisfying various application scenarios, and ultimately realizing Industry 4.0 target.



[more info P.9](#)



[more info P.11](#)



[more info P.17](#)





## Smart Factory Solution



Leantec Smart Factory Solution provides Smart Machine Box, WiFi Connection Module, and Smart Factory Software (SynFactory) to digitize the equipment and production information. Customers can use these information to analyse the utilization bottleneck and improve the management method and productivity.

### Performance



- Successfully introduced Smart Factory Solution into cases in Taiwan and Mainland China
- Applied industries: Metal part machining, wood working, glass grinding, and etc.

## Smart Factory Software: SynFactory



### Introduction

LEANTEC Intelligence offers smart manufacture solutions via digitizing machine information through IoT, providing various APPs to encourage additional values on manufacturing equipment. These APPs, including Equipment Usage Statistics, Operator Management, Production Log, and etc.

### Feature

- Cross-brand CNC and PLC data collection
- Wire/Wireless network solution
- Integrated with Messengers and smart phone notifications
- Realtime monitor dashboard
- Utility statistic dashboard
- CNC file manage system
- Equipment maintenance notification

### Function

- Production arrangement system
- Production statistic report
- Equipment alarm/warning notification
- Factory Inventory manage system
- Cloud backup, service, and remote assistance

### Applied Industry

- CNC Metal working industry
- Wood working industry



# Smart Machine Box



## Specification

Smart Machine Box	
CPU	Intel-Core i3-6100U
RAM	8GB DDR4
HDD	64GB
Port	COM * 2 HDMI * 1 USB * 4 LAN * 1 (expandable)
Power	85W
OS	Win 7 Embedded

## Introduction

Smart Machine Box connects factory equipment onto internet via simple plug-and-play without any configuration. LAN/WiFi/4G are available for data transmission, and the information can be stored in private or public cloud space. Confidential data is highly secured since the public cloud solution is powered by Amazon Web Service (AWS).

## Feature

- LAN/WiFi/4G transmission available.
- Amazon Web Service (AWS) available.
- Capable of 10 machine data collection simultaneously.

## Function

Connect equipment and Smart Machine Box in the same domain through either wire or wireless network, Smart Machine Box will start gathering data from equipment for analysis and further applications.

## Applied Industry

- CNC Metal working industry
- Wood working industry

# WiFi Connection Module



## Specification

WiFi Connection Module	
Input Voltage	24VDC
Input Current	2A
Wireless freq. band	2.4 GHz
Wireless technology	IEEE 802.11 b/ g/n :2.4GHz
Operation Temperature	-10°C~60°C
Misc.	Omni-directional Antenna Magnetic attachment

## Introduction

Physical network wiring is usually costly, and factory faces production shutdown risks when wiring up equipment. By utilizing WiFi Connection Module, factory does not have to do physical wiring layout anymore and can rapidly build up a fast and stable wireless internet environment.

## Feature

- Support IEEE 802.11 b/g/n wireless technology
- Maximum transmission range: 50m

## Function

The most important and fundamental step to connect equipment and internet by using WiFi technology with easy configuration. No need to shutdown production line or do the costly and time-consuming physical wiring construction.

## Applied Industry

- Not limited. Any device with ethernet port can be wired by WiFi Connection Module



# Factory Automation Solution



## HC Series Controller



### Introduction

Support pulse and serial (M2/M3/EtherCAT) communications. One-piece compact design combined with PLC and HMI provides linear and circular interpolation control. Highly integrated with customization developer tool and various of accessories, HC Series Controllers can help FA providers rapidly develop unique automation equipment.

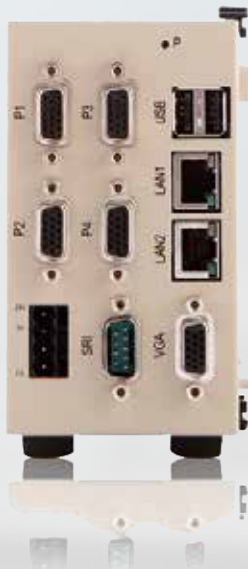
### Feature

- Integrate customization developer tool to establish suitable system based on industry characteristic
- Applicable to automation industry such as labeling, grinding, polishing, pipe-bending, inventory manage, and etc
- Available screen size: 8"/10"/15"
- Great expandability with AD/DA, PWM module, and maximum 4096 I/O
- Wide supportability with diverse communication control (pulse/serial/step) and various driver brands

### Specification

	HC-A系列	HC-B系列	HC-C系列	HC-S系列
Screen Type	with function key / flat plane			
Screen	8"/10"/15"			
Communication	Pulse	M2	M3/ EtherCAT	Pulse (no feedback)
Control Axes number (max.)	4	4 (16)	4 (16)	5
IO (max.)	32/32O	32/32O (96I/96O)	0I/0O (4096I/4096O)	16I/4O (4096I/4096O)
Port	LAN*1, RS485*1, H/K*1, USB*2, DA*2	LAN*2, RS485*1, H/K*1, USB*2, DA*2	LAN*2, RS485*1, USB*2, DA*2, SRI*1	LAN*2, RS485*1, USB*2, DA*2, SRI*1

## FC Series Controller



### Introduction

Separated design and available for expanding or diminishing IO, AD/DA, and PWM modules. Easy for maintenance and installation. Support pulse and serial (M3/EtherCAT) communication. Fulfill diverse field applications.

### Feature

- separated design and available for expanding/diminishing modules
- Equipped with dual LAN port and integrated with other devices easily
- Equipped with RS485, VGA, and USB for other devices input/output
- Great Expandability
- I/O module
- Touch screen
- Support maximum 18-axes simultaneously motion control (-5 series only)
- Inherit the high speed high precision characteristic of CNC. Support path interpolation and smooth speed planning
- Machine vision positioning module
- Cloud-based monitor and analysis system

### Specification

	FC-A	FC-B	FC-B-5
Communication	Pulse	M3 / EtherCAT	M3 / EtherCAT
Control Axes number(max.)	4	4 (16)	4 (18)
IO(max.)	0I / 0O (4096I / 4096O)		
Port	USB * 2, RS485 * 1, SRI * 2, LAN * 2	USB * 2, RS485 * 1, SRI * 2, LAN * 2, MPG * 1	USB * 2, RS485 * 1, SRI * 2, LAN * 2, MPG * 1



## 4-in-1 Servo Driver



### Introduction

4-in-1 Servo Driver offers control solution with great friendliness and realizes high standard and high speed applications particularly for factory automation.

### Feature

- Controller, driver, and IO all-in-one compact design
- Default 4-axis driver and support M3 serial communication to expand maximum 16 axes in total
- Integrate customization developer tool to establish suitable system based on industry characteristic
- Great Expandability
  - I/O module
  - Touch screen
  - Teach pendant
  - Machine vision positioning module
  - Smart Factory Softwares: SynFactory

### Specification

	80GM
Communication	M3
Control Axes number (max.)	4 (16)
IO (max.)	16I / 8O (4096I / 4096O)
Port	USB * 2, RS485 * 1, SRI * 2 LAN * 2
Input Voltage	3P220V
Driver Power	1kW * 4

## Vision Alignment Control System



### Introduction

Widely used in different industries and different Syntec controllers. Provide various alignment technology highly integrate camera setting and graphic interfaces and support wide range of camera brands, making a more convenient operational experience to suit for diverse industrial applications.

### Feature

- Wide range of application scenario and various vision alignment methods
  - Basic configuration to help accomplish vision alignment effortless
  - Advanced configuration to optimize alignment result based on different requirements
- Perfectly integrate Servo Control system and Machine Vision system
  - Provide specific setting interface to combine coordinate system, camera aspect ratio, and some mandatory information
  - Several positioning usages including pick-and-place, glue dispensing, machining, glass cutting, and etc
- High precision, high recognition rate
  - At most 5 $\mu$  Repeatability , fulfilling diverse positioning and alignment applications



# Total solutions for laser marking



LEANTEC's marking system provides a total solution for automatic marking, enabling marking on the assembly, marking on the fly and marking on the tray. Value-added automation creates a more valuable and diverse marking system. LEANTEC's LeanMarker module provides a complete production history function. The highly integrated marking machine enables an efficient and convenient solution for product traceability with one code for one product.

## CAM software for marking



Easy to operate and intuitive PC CAM software is available. Simply generated marking patterns through HMI and convenient parameter adjustments allow users to adjust the marking process more efficiently.

## 70SB integrated controller for marking, driving and controlling

### Product Overview

70SB is a marking solution consisting of a controller and a high-precision galvanometer. Separating the driving from the galvanometer scanner provides the galvanometer with small temperature drift features. Combined with a digital encoder, it creates a high precision galvanometer solution. The integrated driving and controlling industrial controller creates a stable system and convenient industrial communication serial connection solution for plants and production lines.



### Features

- Separating driving and controlling, small temperature drift of galvanometer
- Packaging for industrial usage
- Serial servo package
- A PC is not needed for processing, so it cannot be infected by any virus
- Real-time control system
- Easy connections with external industry equipment

### Functions

- Object marking
- Serial number marking
- Simultaneous marking
- On-the-fly marking
- Vision alignment marking
- PLC and G-code programming available

### Specification

70SB driving and controlling integrated machine	
Model	70SB
Specifications	Laser driving and controlling integrated machine
Voltage input	±15V
Supported laser source interface	Commercially available 25 pin laser source interface
Pulse frequency	Max. 1MHz
Min. pulse width	0.5µs
IO interface	4I/12O (IO expansion via SRI)
Assembly line	Encoder signals and 1 point signals
External control signals	XY2-100
Galvanometer module	SYNTEC 2D
Transfer interfaces	USB, Ethernet, Modbus TCP, Ethernet/IP, OPC UA, Modbus RTU

2D galvanometer module	
Wavelength	1064nm (fiber optics)
Focal length	210mm
Resolution	24bit (digital encoder)
Dimensions	165*166.45*166 (mm)
Marking range on a plane	120X120 (mm)
Marking speed	5m/s
Scanning range	±10 degrees

# 71SA Marking controller



## Product Overview

The 71SA is an extensible controller with high flexibility. The marking controller incorporates an axial control function. It is easy to expand the IO and supports the commercially available galvanometer modules, breaking through the limits of traditional controller cards and PC configurations. The system is both flexible and diverse, extending the laser applications efficiently.

## Features

- Easily expanding IO modules
- Packaging for industrial usage
- Serial servo package
- A PC is not needed for processing, so it cannot be infected by any virus
- Real time control system
- Easily connected with external industry equipment

## Functions

- Object marking
- Serial number marking
- Simultaneous marking
- On-the-fly marking
- Sectional marking
- Vision alignment marking
- PLC and G-code programming available

## Specification

71SA marking controller	
Model	71SA
Specifications	Serial connection
Axial control	Standard with 1 axle, optional with more axles
Voltage input	24V
Galvanometer control interface	XY2-100
Supported laser pin card interface	Commercially available 25 pin interface of laser source
IO board spec.	FC-IO expansion, supported up to 4096 IO
IO expansion	SRI interface
Data transfer interface	USB, Ethernet, Modbus TCP, Ethernet/IP, OPC UA, Modbus RTU



# LeanMarker marking electromechanical module

## Product Overview

The LeanMarker is a highly modular integrated marking machine which provides total marking machine solutions for plants and the industrial environment. The integrated machine consists of the touch screen, galvanometer, controller and non-coaxial vision. Equipped with a 7" touch screen that allows it to operate in an industrial environment independently without the need of a PC for marking.

## Features

- Modular and industrial package
- Dedicated operating interface for an industrial environment
- Standard with a 3-axis control system is extensible
- Laser source kit is available
- Standard vision: alignment, high-precision calibration and autofocus functions
- Production history: integrating cloud and code scanning through the software, providing traceability solution of one

## Functions

- Production history
- Upload data to the cloud
- Fast template
- Upper and lower machine serial connection
- Alignment marking
- On-the-fly marking
- Serial number marking



## Specification

	LeanMarker-2520F	LeanMarker-2020F
Field mirror Specification	f210	f160
Marking Range	150*150 mm	100*100 mm
Working Distance	≈246 mm	≈181 mm
Marking Speed	5 m/s	5 m/s
Repeatability	<1.5 urad	<1.5 urad
Temperature Drift	<8.3 urad/K	<8.3 urad/K
Floated 8 hours of work	15.3 urad	15.3 urad

Specification	
Screen	7 inches touch
Laser source	20W Fiber 1064 nm MOPA
Visual resolution	1.2 million pixels
Field of vision	Max. 400*300 mm
Size/weight	385*140*230 mm/ 11 kg
Communication interface	Modbus TCP, EtherNet/IP, OPC UA, Modbus RTU, Ethernet



# Robot Cell



LEANTEC offers a wide variety of multi-axis robotic arms to suit different applications. These models are easy to care and maintain, and can quickly be integrated for automation to be introduced to the production line quickly.

## Feature

- A graphical, conversational approach to programming allows users to quickly use robots without requiring complex programming languages. Moreover, it offers a convenient hand-teach pendant. In addition to the commonly used physical buttons, the screen is equipped with touch control to reduce operation steps for a quick start.
- A special application module package aims for pick and place, laser welding, drilling processing, dispensing, screw fastening, and other applications. Users do not need to develop complex arm movement paths by themselves; instead they can quickly import application modules into the production line by following simple instructions.
- Standard industrial communication networks [such as] Modbus TCP, RS485, Ethernet, and NetPLC are provided for exchanging information with external devices/sensors in order to achieve Industry 4.0 on the production lines.
- A dedicated and simple development tool is provided to replace the need for high-level programming language. Through MACRO, PLC Ladder, and HMI editing tool, integrators can easily make customization and maintain uniqueness.

## Applied Industry

- Pick&Place
- Visual Alignment
- Metal processing
- Food Packaging
- Dispensing
- Automotive Parts
- Electronic

## Controlling box

### Controlling boxA



### Controlling boxD



	Controlling boxA	Controlling boxD
Corresponding Model	LRA700 · LRA900 · LRP1400 · LRA1468 · LRA1717 · LRA2000	LRA596 · LRA707 · LRA906
Power Supply	單相 200-230VAC, 50Hz/60Hz	單相 200-230VAC, 50Hz/60Hz
Input/Output Signals	16I/16O	16I/16O
Analog Input/Output*	4DA/8AD	4DA/8AD
Size	500mm x 780mm x 350mm	480mm x 500mm x 280mm
Weight (kg)	45	20
Remarks	*選配	*選配

## LRA596 series



	LRA596-4-6A-R	LRA596-4-6H-R
No. Control Axes	6	6
Max. Load Capacity (kg)	4	4
Max. Reach (mm)	596	596
Repeatability (mm)	±0.02	±0.02
Weight (kg)	32	29
Installation	Floor-mount, Ceiling mount, Wall-mount	Floor-mount, Ceiling mount, Wall-mount



## LRA707 series



	LRA707-7-6A-R	LRA707-7-6H-R
No. Control Axes	6	6
Max. Load Capacity (kg)	7	7
Max. Reach (mm)	707	707
Repeatability (mm)	±0.02	±0.02
Weight (kg)	52	50
Installation	Floor-mount, Ceiling mount, Wall-mount	Floor-mount, Ceiling mount, Wall-mount

## LRA906 series



	LRA906-7-6A-R	LRA906-7-6H-R
No. Control Axes	6	6
Max. Load Capacity (kg)	7	7
Max. Reach (mm)	906	906
Repeatability (mm)	±0.03	±0.03
Weight (kg)	52	52
Installation	Floor-mount, Ceiling mount, Wall-mount	Floor-mount, Ceiling mount, Wall-mount

## LRP1400 series



	LRP1400-10-4A-C
No. Control Axes	4
Max. Load Capacity (kg)	10
Max. Reach (mm)	1400
Repeatability (mm)	±0.1
Weight (kg)	175
Installation	Floor-mount



## LRA1468 series



	LRA1468-10-6A-C	LRA1468-10-5A-C	LRA1468-10-4A-C
No. Control Axes	6	5	4
Max. Load Capacity (kg)	10	10	10
Max. Reach (mm)	1468	1468	1468
Repeatability (mm)	±0.08	±0.08	±0.08
Weight (kg)	161	159	158
Installation	Floor-mount, Ceiling mount		

## LRA1717 series



	LRA1717-20-6A-C	LRA1717-20-5A-C	LRA1717-20-4A-C
No. Control Axes	6	5	4
Max. Load Capacity (kg)	20	20	20
Max. Reach (mm)	1717	1717	1717
Repeatability (mm)	±0.08	±0.08	±0.08
Weight (kg)	268	266	265
Installation	Floor-mount, Ceiling mount		

## LRA2000 series



	LRA2000-8-6A-C	LRA2000-8-5A-C	LRA2000-8-4A-C
No. Control Axes	6	5	4
Max. Load Capacity (kg)	8	8	8
Max. Reach (mm)	2000	2000	2000
Repeatability (mm)	±0.08	±0.08	±0.08
Weight (kg)	270	268	267
Installation	Floor-mount, Ceiling mount, Wall-mount		



## LRA2068 series



LRA2068-50-6A-S	
No. Controll Axes	6
Max. Load Capacity (kg)	50
Max. Reach (mm)	2067.8
Repeatability (mm)	±0.08
Weight (kg)	546.5
Installation	Floor-mount

## LRA2650 series(165kg/210kg)



	LRA2650-165-6A-S	LRA2650-210-6A-S
No. Controll Axes	6	6
Max. Load Capacity (kg)	165	210
Max. Reach (mm)	2650	2650
Repeatability (mm)	±0.2	±0.2
Weight (kg)	1266	1266
Installation	Floor-mount	Floor-mount

## LRA3209 series



LRA3209-300-6A-S	
No. Controll Axes	6
Max. Load Capacity (kg)	300
Max. Reach (mm)	3209
Repeatability (mm)	±0.2
Weight (kg)	1866
Installation	Floor-mount



## Leantec Modular Products



Leantec offers common modular components for typical smart factory applications, assisting customers in assembling automation production line effortless and satisfying various application scenarios, and ultimately realizing Industry 4.0 target.



## Measure System Unit



### Introduction

Leantec offers in-line and off-line measurement solution from electrical control, mechanism, sensors, then cloud software applicable to different industrial requirements. In addition to general purpose measurement unit, Leantec will provide an all-in-one machine integrated with measurement and laser marking features to realize production history scenario in production line.

### Feature

- Combine Laser Marking Unit and Measurement Unit to realize automatic production history
- Provide automatic tool offset compensation function.
- Integrate Smart Factory Software. Measure results can be stored in private/public cloud, and data analysis and system monitor function are provided

### Function

- Inner/Outer diameter measurement
- Concentricity measurement
- Thickness Measurement

### Applied Industry

- Metal part machining
- PCB industry
- 3C industry

## Lean Marker



### Introduction

Leantec provides Laser Marking Unit mainly focus on single machine, production line, and production history applications, offering software, servo control, fiber vibrating mirror, and machine.

### Feature

- Provide own CAD/CAM software and vibrating mirror solutions
- Integrate peripheral solutions including vision alignment, 2D barcode scan, distance measurement, and etc
- Suitable for industrial environment. Connect to PC/NB for in-line marking
- Default advanced synchronized marking and tracking marking applications

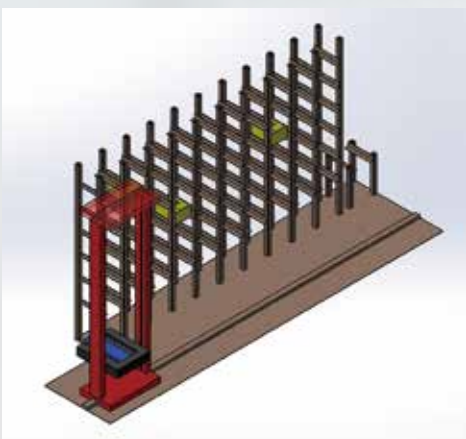
### Function

- Synchronized marking
- Marking on the fly
- Laser derusting
- Production history

### Applied Industry

- Metal part machining
- 3C
- Food process
- Metal tool machining

## Smart Inventory Unit



### Introduction

Combination of Robot pick-and-place, inventory control, and production history systems. Customized dimension and HMI screen collaborating with material handling and inspection machine, Leantec provides a prompt integration service to realize Smart Inventory System.

### Feature

- Smart all-in-one system integrated with robot pick-and-place, inventory management, and production history
- Quickly connect to Leantec's other module products and general sensors to meet the concept of flexible manufacturing
- Intelligent inbound/outbound search, including empty stock auto-search and production auto-log
- Support manual key-in, 1D barcode, 2D barcode, RFID, and etc
- Visualization of inventory status
- Design dimensions, layout, arrangement, and operation interface based on demands

### Function

- Inventory/Warehouse system applicable to various fields
- Metal part production
- Offline measure
- Graphite electrode production

### Applied Industry

- Warehouse industry
- CNC machining industry
- Graphite electrode production industry



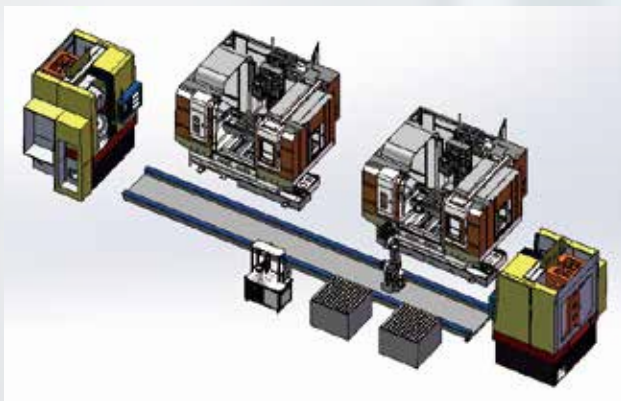
# Application



## Lathe Machine Tending

For lathe machine tending, LEANTEC provides a total solution of robots, measurement, laser marking and fixtures to help costumers integrate automation into production line and improve the quality of products

### System



### Features

- Providing standard gripper and tray which is adjustable to suit different size of workpieces
- External axis control and synchronized movement to enhance the effectiveness of productions
- Communication via ethernet instead of IO
- Implementation productivity prediction and machine status surveillance with Leantec IOT software, Synfactory

### Case



Machine Tending of Auto Parts



Maching Tending of Turbine fan

### Specification

#### Robot

	LJ1717-20-A	LJ1717-10-A
Model	LJ1717-20-A	LJ1717-10-A
No. Axes	6	
Max. Reach	1717mm	1468mm
Payload	20kg	10kg
Repeatability	0.08mm	
Weight	268kg	161kg

#### External Axis

Length	Available for customization
Relatability	1 mm
Communication	Mechatrolink III/EtherCAT

#### Pallet

Type	Pectangular (Available for customization)
Amount	50(Available for customization)

#### IOT

Production Management	OEE
MES	Scheduling/Capacity Predictron
Business Intelligence	Tool lifetime / Process Optimization
Protocol	OPCUA, TCP/IP

### Application

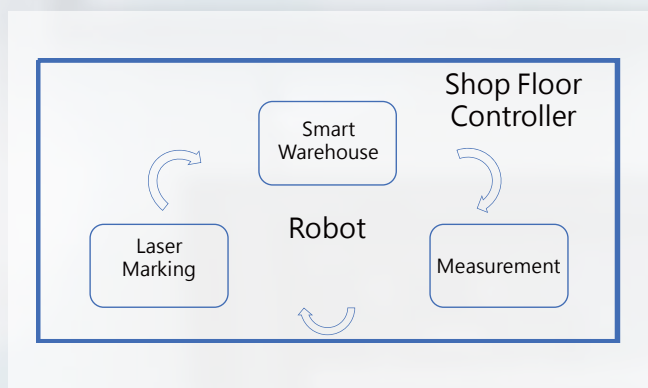
- Automotive parts, Bicycle parts
- Workpiece types : Rod, Disk, Ring



## Measurement & Classification

Facing the customer's requirements for quality, along with traceability and 100% sample measurement being gradually introduced into production systems, LEANTEC offers a product measurement & classification solution for quality control.

### System



### Features

- Modular: All the machines in the solution are modular design which is easy and quick for equipment changeover
- Shop Floor Controller: The information and logic center
- Smart Warehouse: Workpieces inventory status monitoring and integration with robots for picking and placing workpieces
- Traceability: Production and measurement information can be tracked

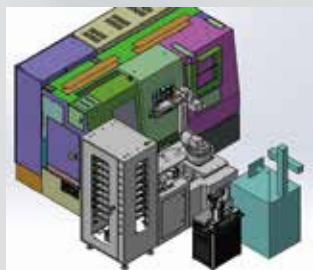
### Case



Electronics Quality Control



Bearing Quality Control



Lathe Machine

### Specification

Hardware	
Size	2150mm*1085mm*1900
Weight	850kg(Warehouse only)/160kg (Robot)
Robot	6 axis/ Payload 10kg/ Reach 1468mm
Tray	
Size	500mm*500mm
Load	50kg (Parts+Tray)
Amount	5-10 (Depends on Workpieces)
Loading Mechanism	
Transmission	Rack and Pinion
Speed	6M/min

#### Measurement

Working Volume	XY300mm/Z150mm
Repeatability	±6 um
Max Speed	500 mm/s
Max. Scanning Speed	100 mm/s
Size	570*500*700 mm
Weight	25kg

#### Laser Marking

Laser	20W Fiber QSwitch
Wavelength	1064±3nm
Range	120*120mm
Size	650*750*1420mm
Opriion	Rotary Table

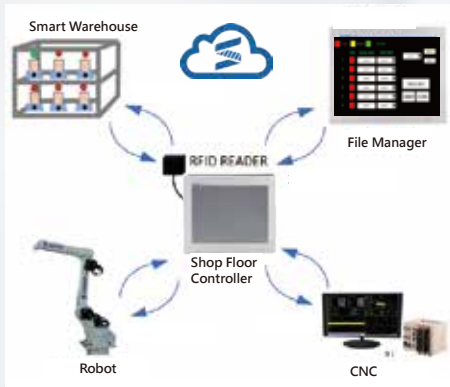
### Applications

- Automotive part, Bearing, Bicycle parts

# Small-Volume Large-Variety Machine Tending with RF-ID

LEANTEC offers solutions for small-volume large variety machine tending and implements Industry 4.0 to industries like graphite electrode production.

## System



## Features

- Stable: Robot directly connect RF-ID reader without any
- Plug&Play: Supporting Balluff, SYCOLE...etc.
- Shop Floor Controller: Being the information center of the cell
- Total Solution: Robot + Shop Floor Controller + IOT Software + CNC
- Synfactory: Work order delivery and machine status surveillance

## Case



Graphite Electrode Pick&Place



EDM Machine Tending

## Specification

### Robot

Model	LJ1717-20-A
No. Axes	6
Max. Reach	1717mm
Payload	20kg
Repeatability	±0.08mm
Weight	268kg
Installation	Ground , Ceiling

### RF-ID

Brand	SYNCOLE / Balluff
Frequency	213.56 MHz
Working Distance	5-30mm
Protection	IP67

### Shop Floor Controller

Model	HC-15C
Display	15"
Communication	Modbus TCP/ Modbus RTU/ RS232
Option	Vision , Synfactory

## Applications

- Graphite electrode pick & place, EDM machine tending

# Smart Factory

LEANTEC provides smart factory solution for machine centers. Unlike typical machine tending applications with insufficient capacity utilization rate, LEANTEC improves uptime by integrating multiple processes and work stations.

## System



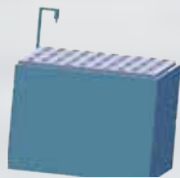
## Features

- Machine tools with dual work stations: picking and placing without stopping the machines
- Vision guided trays: increasing flexibility and minimizing the change-over time
- Scanning probe on the measurement machine
- Communication via ethernet instead of IO
- Synfactory: Work order delivery and machine status surveillance

## Solution



Gripper



Vision-Guided Tray



Laser Marking



Measurement

## Specification

### Robot

	LJ1717-20-A	LJ1717-10-A
Model	LJ1717-20-A	LJ1717-10-A
No. Axes	6	
Max. Reach	1717mm	1468mm
Payload	20kg	10kg
Repeatability	0.08mm	
Weight	268kg	161kg

### Measurement

Working Volume	XY300 mm/Z150 mm
Repeatability	±6 um
Max. Speed	500 mm/s
Max. Scanning Speed	100 mm/s
Size	570*500*700 mm
Weight	25kg

### Laser Marking

Laser	20W Fiber QSwitch
Wavelength	1064±3nm
Range	120*120mm
Size	650*750*1420mm
Option	Rotary Table

## Application

- Automotive parts, Air-conditioner parts
- Agricultural machinery parts





## Synchronous marking

In the past, there were only 2 methods for large area marking: sectional marking or using a large-range galvanometer. The sectional marking requires high precision of mechanism and it is time-consuming to adjust stitching errors. The large-range scanner is costly. Both of them have their disadvantages. LEANTEC has developed simultaneous marking which integrates axial movement control, galvanometer and laser source control, providing a solution for a wide range of applications.



### System structures



### Features

- Marking region is unlimited because of synchronous control axes and scanner. Solve large area marking problem.
- Provide laser energy control function. Solving large laser energy at corner, start point and end point.
- Offer step by step vision correction method. Improve correction precision.
- Offer large area total solution by combining motion, galvanometer and laser control.

### Application



Vehicle Decoration



Measuring Ruler



Conductive Film Metal Cutting



Video section



Product information



Product application

Scan the Qrcodes above for more infomation



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