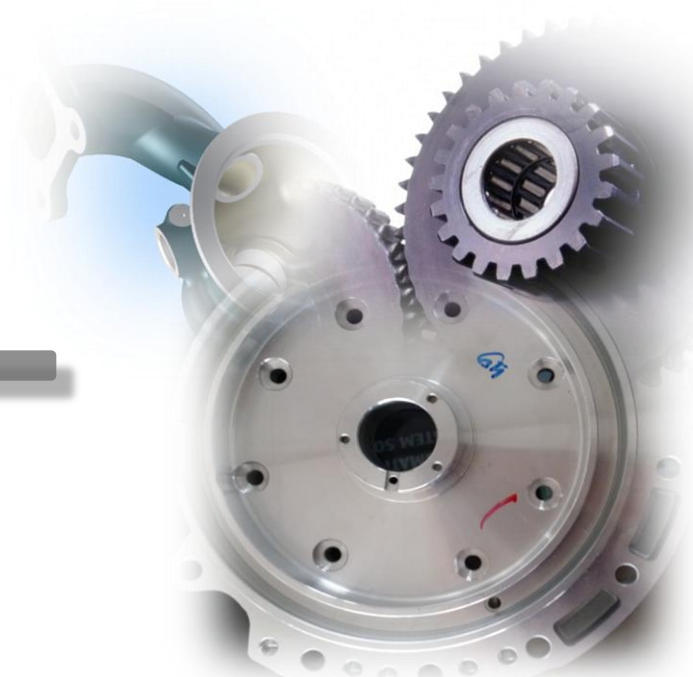


## UniPack System Co.

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- Head Quarter : Tawon TAKRA Building  
knowledge industry center Room No.413,  
645-5Seonggok-dong, Danwon-gu, Ansan-si,  
Gyeonggi-do, Korea
- Office : 031-506-5881
- Fax : 070-7500-7084
- Phone number : 010-9130-5952
- Home : [www.unipacks.co.kr](http://www.unipacks.co.kr)
- E-Mail : [chaelee5880@hanmail.net](mailto:chaelee5880@hanmail.net)

Feb. 2016

# *Contents*

- 1. Company introduction & history
- 2. CEO's greeting
- 3. CEO's Ideology for management
- 4. Unipack System management style
- 5. Our business field
- 6. Mid/long term development plan
- 7. Composition of members and the number of employees
- 8. Present condition of production for test & inspection machine
- 9. Present condition of production for automatic system machine
- 10. View outside & inside of company
- 11. Location

# 1-1. Company introduction



## Summary

- Name of company : **UniPack System**
- CEO : S.B, Chae
- Incorporation date : August,02,2013
- The number of employees : 5 people
- Address : Tawon TAKRA Building  
knowledge industry center Room No.413,  
645-5Seonggok-dong, Danwon-gu, Ansan-si,  
Gyeonggi-do, Korea
- Business field : factory automation line plant & test plant production
- Connection : Yeong Hwa Metal Co.,Ltd. DMS Co.,Ltd.  
Sunjin Powder Metallurgy Co., Ltd. Etc.

# 1-2.History of UniPack production



## Product profile of UniPack System


**2013** August: UNIPACK SYSTEM was founded

**2014** August : Six Oil Pump Cover air leak tester machines, sold to MyunHwa industry  
September: Two model of Turbo Charger component & two of air leak tester machines, sold to (BorgWarner)  
December: Turbo charger component, Air leak tester & assembly tester machines, sold to (BorgWarner)

**2015** July : CNC lathe manufacture autonomous assembly line, sold to(ShinSungCo.,Ltd.  
This machine has a function to produce 1.8million of spark plug housing every year  
August : Turbo Charger part & three Air leak tester machine, sold to (Yeong Hwa Metal Co.,Ltd.)  
September : Air tester machine for leaking, which has air brake valve assembly function, sold to(HanKuk Air brake Co.,Ltd.)  
October: MR-18 PIPE Air leak tester machine, sold to(AL-Tech Korea Co., Ltd.)

**UniPack System**

## 2. CEO's greeting



Welcome to Unipack System! I am SeungByung Chae from Unipack System. My Pride is always in this field that I am going to introduce! Unipack System has been one of professional companies, specializing in manufacture of factory autonomous machine and test & inspection machine field. Ever since I had the strongest pride in the field, Unipack System has taken professional human resources to fulfill reducing costs of manufacturing process, high quality and high precision automatic machine, efficient production control with ICT(Information & Communication technology) grafted onto automatic manufacturing system as well as has mainly produced factory automatic systems and test & inspection machine. In order to become "growing enterprise based on reliability for customers", we are doing our best to improve technical skills, reliability for customers and international competitiveness by continued research and development. I strongly promise that Unipack system will be growing to become the best and representative enterprise of ICT graft automatic system and test & inspection machine based on reliability for customers and innovative technology in Republic of S.Korea.

*CEO S.B.Chae*

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**UniPack System**

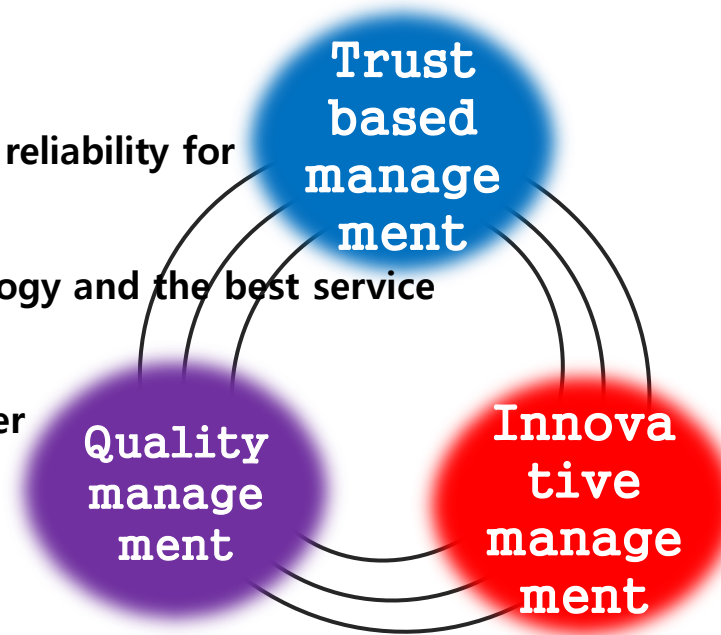
### 3. Unipack Ideology

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## ***TRUST, QUALITY, INNOVATION***

***Unipack system*** is the best partner for customer's success

- **Unipack system** is always successful partner with reliability for customers with the best technology.
- **Unipack system** always provides the best technology and the best service for customers
- **Unipack system** always does the best for customer satisfaction and company development by technology innovation



## 4. Management style

---

***Building successful partnership  
honest management and innovative technology***

### **Honest business**

To do honest business based on reliability for customers, We are always working hard in a sweat to figure out the way for every customer to be satisfied with our products.

### **Partnership**

Our goal is to become successful partner by lower costs, convenience and exactitude based on technology innovation, R&D and Human Resources.

### **Technology innovation**

We are always doing our best to improve product competitiveness, with ,the lowest cost and the best quality, by innovative technology, continued research & development and rigid control.



# 5. Business field

Building Automation system, Test & Inspection plant  
(Our goal is to reach 201 thousand dollars  
of the sales in 2017)

We are very professional in factory automation system and test & inspection plant field.

## Factory automated system plant

- CNC Lathe processing automated line  
(engine spark plug housing )

## Automated test & inspection plant

- Assembly air flow tester & Laser marking M/C
- Air leak tester & Dot marking M/C
- Air flow tester

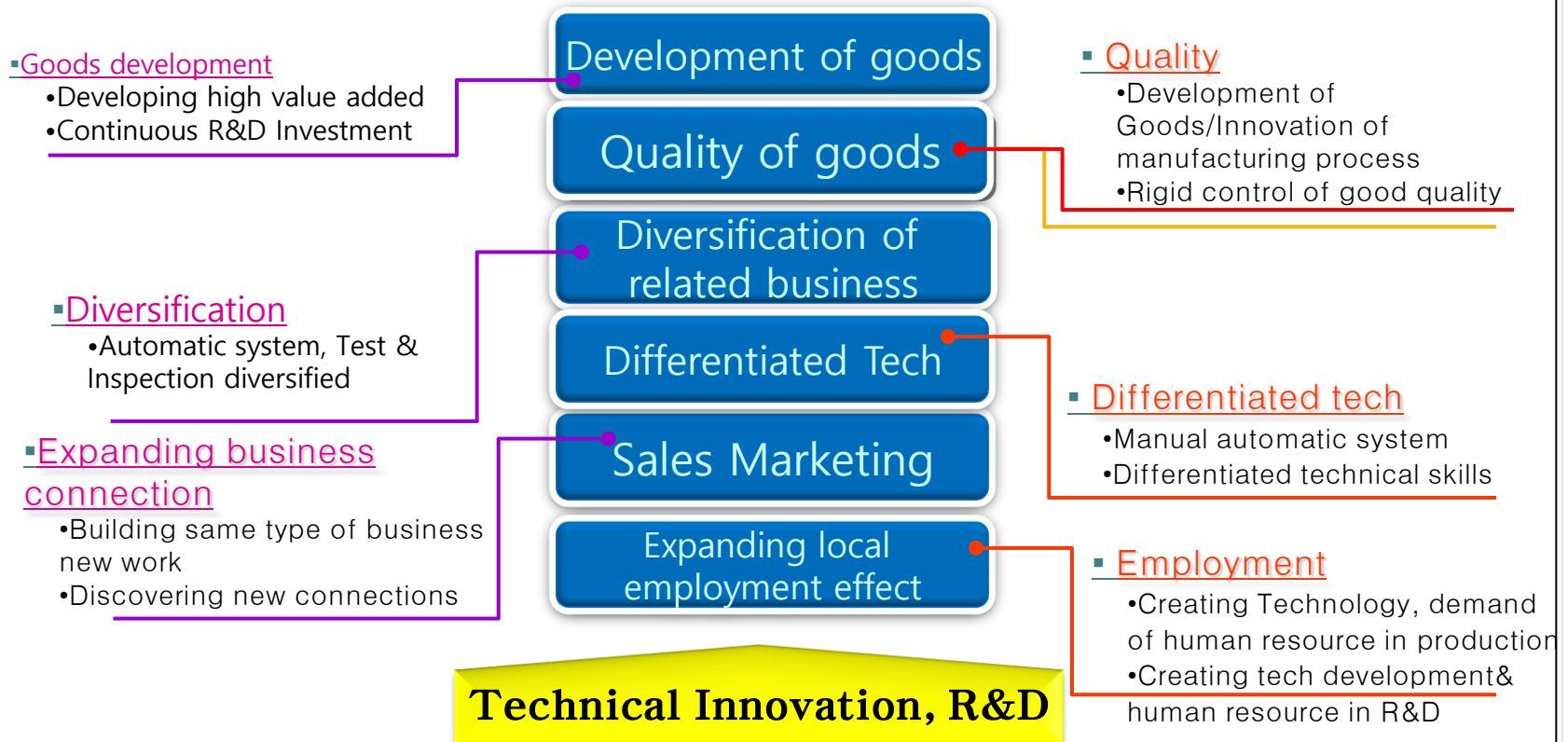
## 2axis NC Rotary Table (KyungKi exclusive distributor)

- DST
  - ✓ 1S
  - ✓ 2S
  - ✓ 3S
- JIG & FIXTURE



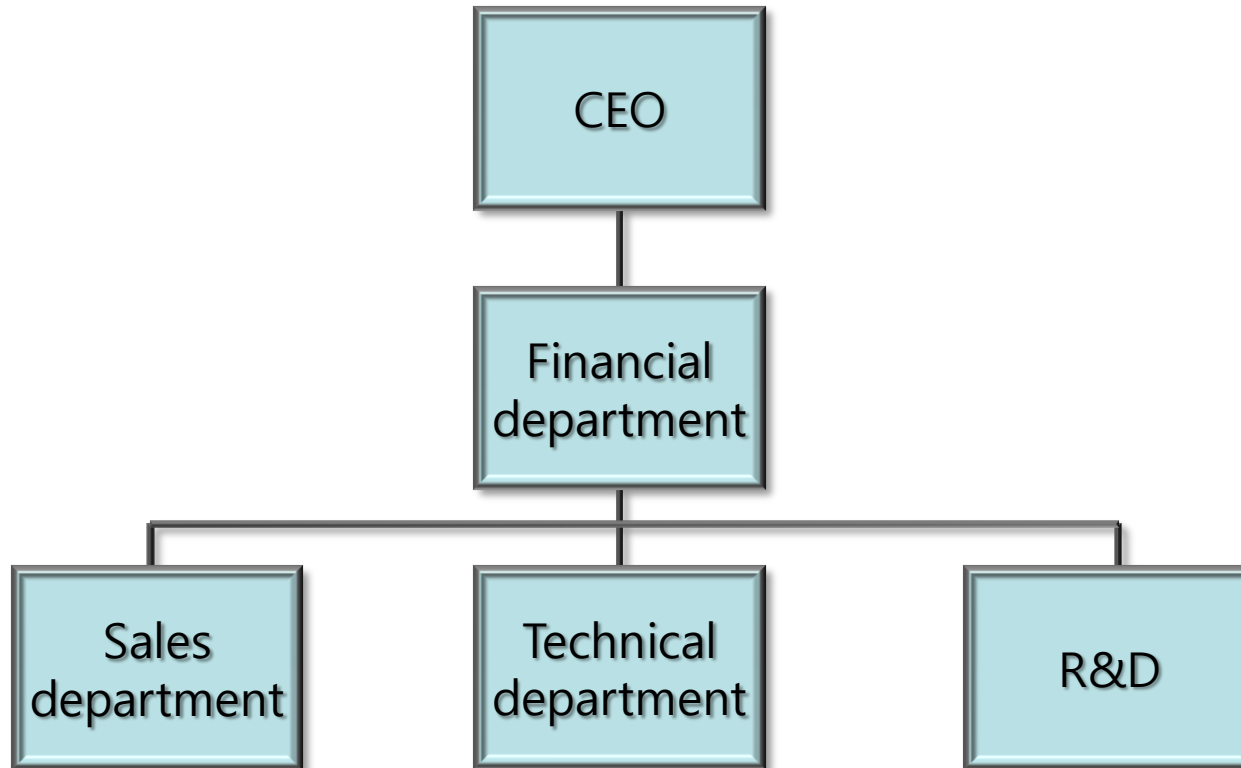
# 6. Mid/Long term plan

## ICT technology applied with Automatic System and Test & Inspection plant business field

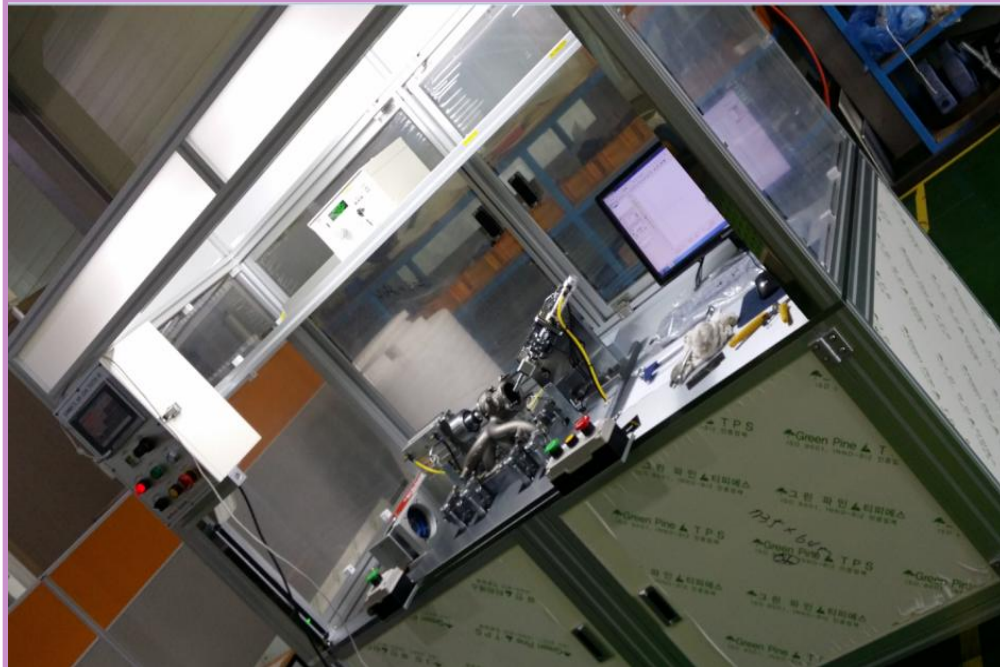


## 7. Members & Organization structure

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# 8-1. Instruction for the machine



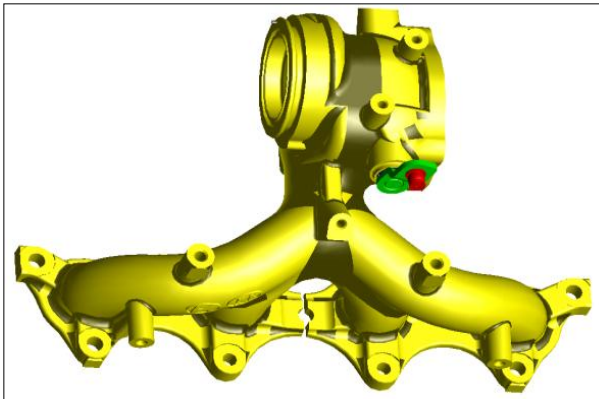
## Assembly air flow & Laser marking M/C

(Gamma TL Turbine housing assembly)

### □ Properties

1. After checking if leak or not, function to mark passed product's QR code by laser
2. Function to save data of flow test result.

► Production  
good



Name : AIR FLOW TESTER
Applied car model : Hyundai Car GAMMA TL
Customer : HyoMyung → BorgWarner
<u>Production good</u> : Turbo charger part
Production rate : 0.3million/per year

## 8-2. Instruction for the machine



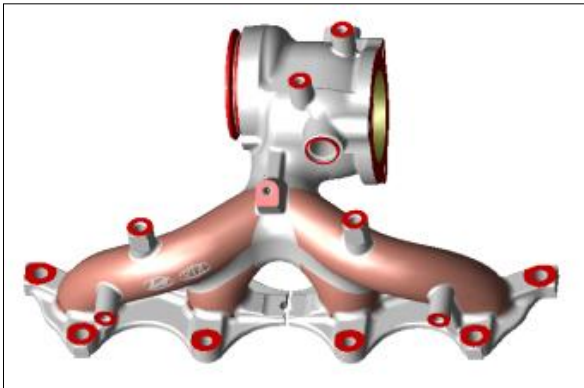
### Air leak tester

(Gamma TL Turbine housing M/C)

### □ Properties

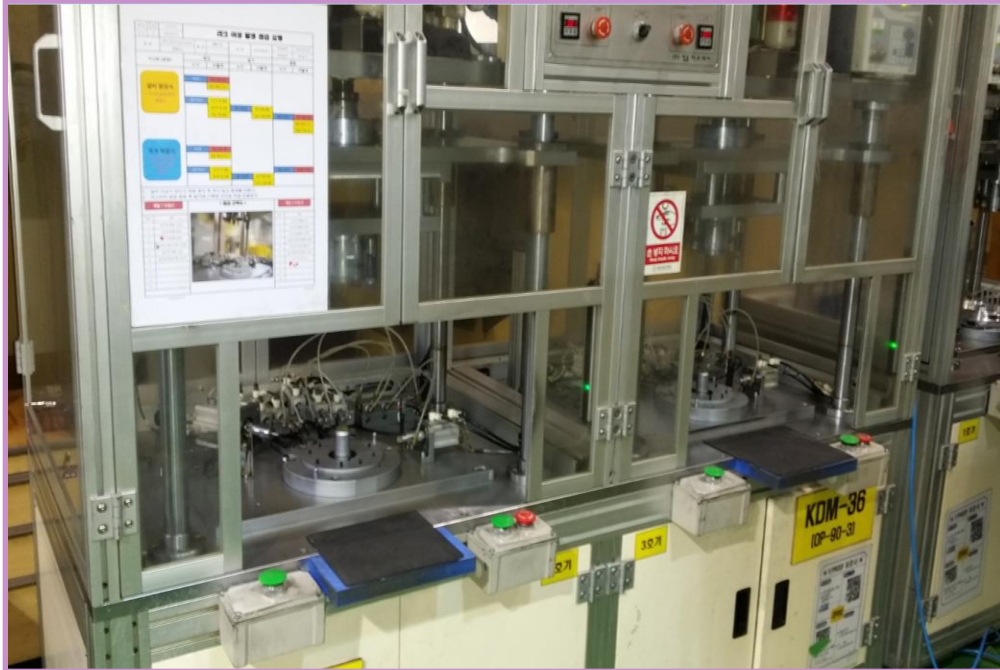
1. Function to save leak test result's data.

▶  
Production  
good



Name : AIR LEAK TESTER
Applied car model : HyunDai GAMMA TL
Customer : HyoMyung → BorgWarner
Production good : Turbo charger part
Production rate: 0.25million/per year

## 8-3. Instruction for the machine



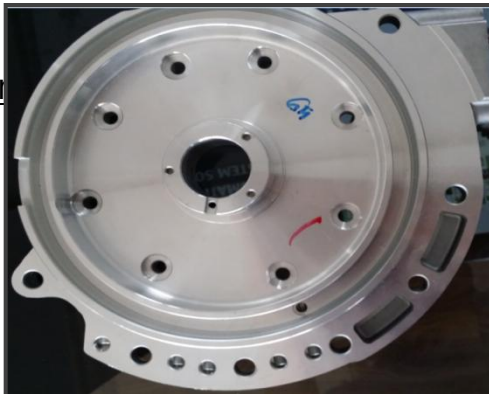
### Air leak tester

(Six-speed Oil pump cover M/C)

### □ Properties

1. Function to save leak test result's data.
2. Long Drill Hole penetration Test function.

► Production good



Name : AIR LEAK TESTER
Applied model :Hyundai power tech six-speed MISSION
Customer : KyungDong P.O.A→MyungHwa
Production good : six - speed TRANS MISSION part
Production rate :0.3million /per year x 6=1.8 million/per year



## 8-4. Instruction for the machine



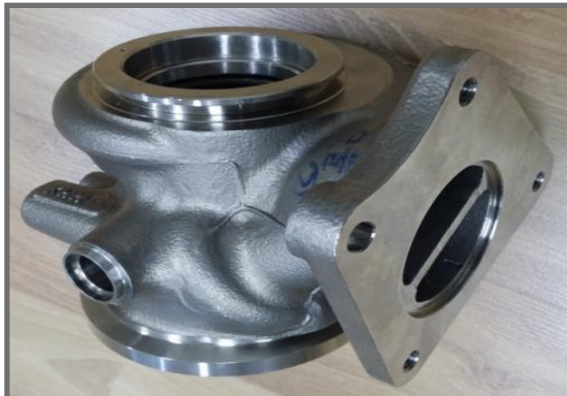
### Air leak tester & Laser marking M/C

(MR-18 Turbine housing M/C)

#### □ Properties

1. After checking if leak or not, Function to Mark QR code by laser.
2. Function to Change different product by changing a jig
3. Function to save leak test result's data.

► Production  
good



Name : AIR LEAK TESTER

Applied car model : RanultSamsung MR-18

Customer: Yeong Hwa Metal →BorgWarner

Production good : Turbo Charger assembly part

Production rate: 0.3million/per year

## 8-5. Instruction for the machine



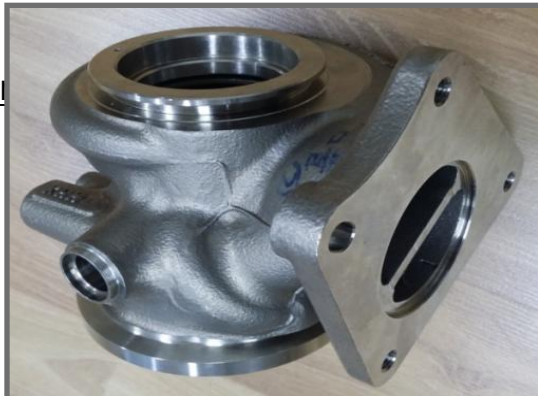
### Air flow tester

(MR-18 Turbine housing M/C)

#### **□ Properties**

1. After reading QR code, function to save data.
2. Function to save data of amount of Air Flow SPC.
3. Function to change different product by changing a jig.

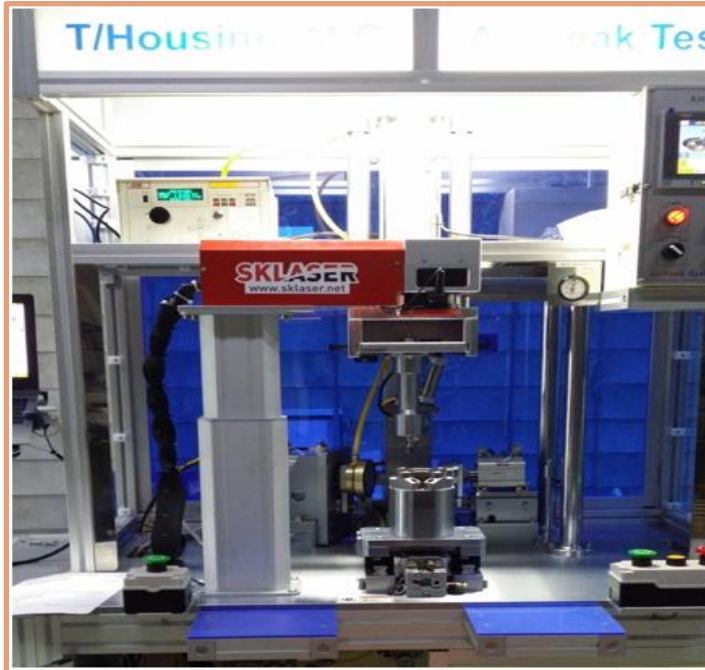
► Production good



Name : AIR FLOW TESTER
Applied model car : RanultSamsung MR-18
Customer : Yeong Hwa Metal →BorgWarner
Production good: Turbo Charger assembly part
Production rate: 0.3million /per year



## 8-6. Instruction for the machine



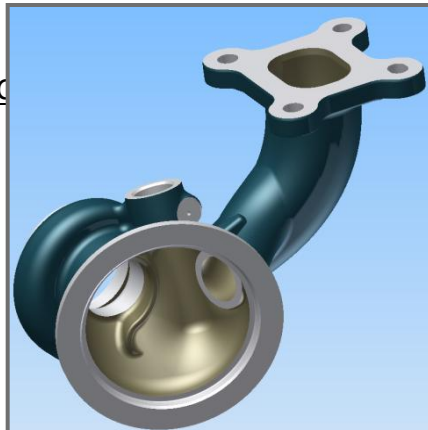
### Air leak tester & Laser marking M/C

(L3V Turbine housing M/C)

#### □ Properties

1. Function to mark  
passed product's QR code by laser  
after checking if leak or not.
2. Function to save SPC data
3. Function to change different product  
by changing a jig.

► Production good



Name : AIR LEAK TESTER
Applied car model : MMI(Japan)
Customer : YeongHwa Metal→MHI(Japan)
Production good : Turbo Charger assembly part
Production rate: 0.3million/per year

# 8-7. Instruction for the machine



## Air leak tester & Laser making M/C

(L3V Turbine housing M/C)

### □ Properties

1. Function to mark passed production's QR code by laser.
2. Function to save leak test result's data.
3. Function to change different product by changing a jig.

► Production  
good



Name : AIR LEAK TESTER
Applied car model : Ranult Samsung MR-18
Customer : AL Tech Korea --> Continental contitech
Production good : Vehicle engine assembly part
Production rate : 0.3million / per year

## 8-8. Instruction for the machine



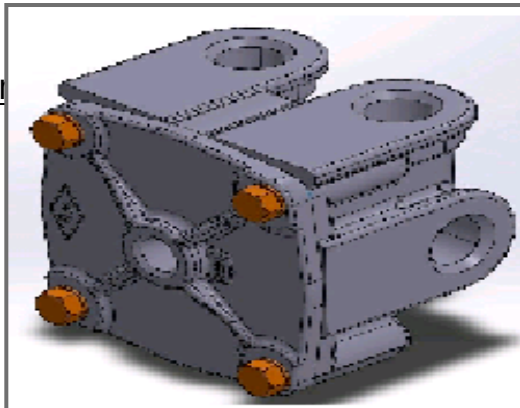
### Air leak tester

(R-12/14 Valve Final Tester)

#### □ Properties

1. Function to check assembly part production's performance.
2. Function to check air pressure 8.5bar.
3. Function to save data

► Production good



Name : AIR LEAK TESTER
Applied car model : TATA-DAEWOO (medium, large size truck)
Customer : HanKuk Air Brake --> TATA-DAEWOO
Production good : Commercial vehicle Air brake valve assembly
Production rate : 0.18 million / per year

# 8-9. Instruction for the machine



## Air leak test & Automatic tester

(D22DTR/DTF Bearing housing ass'y)

### □ Properties

1. Five type of autonomous assembly part & autonomous complexer.
2. Function to mark passed production's QR code. after checking if leak or not.
3. Function to save date of leak test result

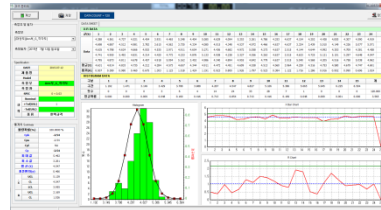
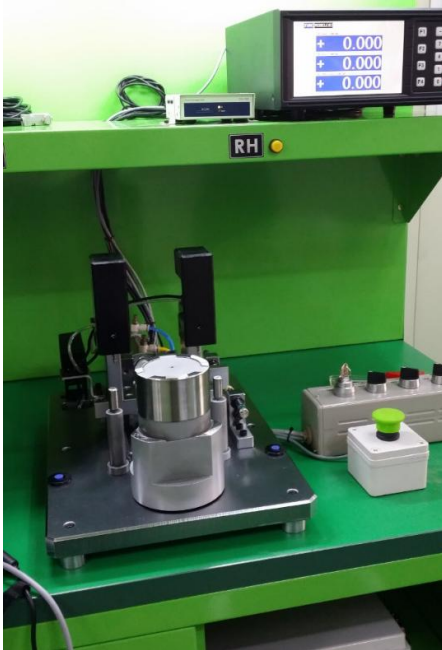
► Production good



Name : AIR LEAK TESTER & Automatic/tester
Applied car model : SsangYong D22DTR/F
Customer : HyoMyung →BorgWarner
Production good : Turbo Charger assembly part
Production capacity : 0.1million / per year



# 8-10. Instruction for the plant

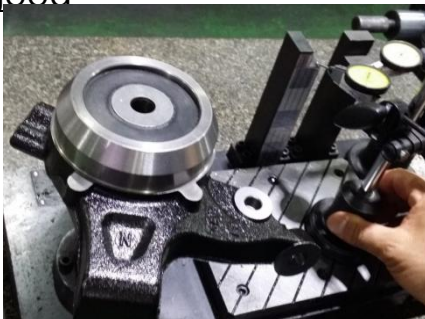


## Step pulley autonomous tester (Knuckle )

### □ Properties

1. Automatic testing function to separate if LH or RH.
2. Function to send test result's data to personal computer, SPC data is automatically generated.

### ► Production good



Name : Knuckle automatic tester

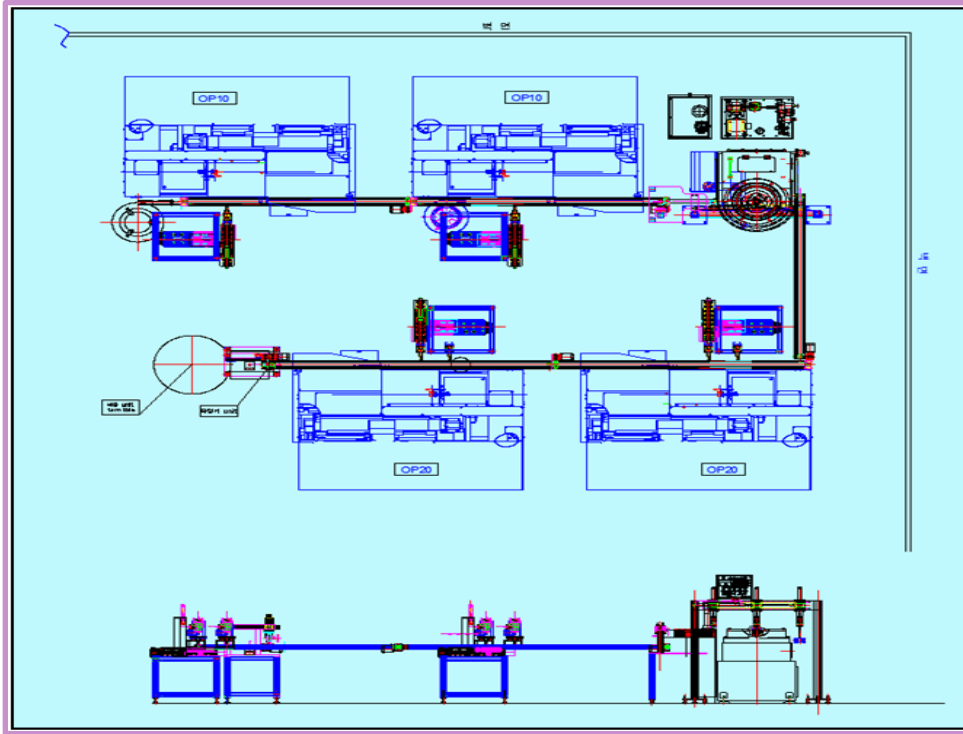
Applied model : 0 0 0

Customer : U-Run Hightech co., Ltd.

Production good : Front knuckle assembly component

Production capacity : 0.5million/per year

# 9. Instruction for autonomous system



## CNC lathe manufacturing autonomous line

(Design manufacturing autonomous line)

### □ Properties

1. Fully automatic manufacturing & testing line.
2. 15"/EA production.

► Production good



Name of equipment : CNC lathe manufacturing
Applied model : Engine spark plug housing
customer : SinSung Co., Ltd.
Production good : Spark plug housing
Production capacity : 1.8million/per year

# 1&2 Axis control Index exclusive business distributor in Gyeonggi-do

1axis control INDEX



2axis control INDEX

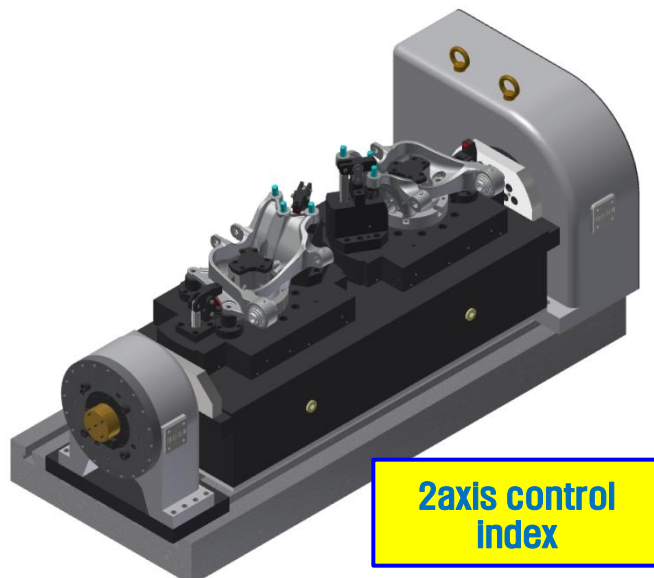


※ By distribution angle way of face gear, when cutting, it is enough possible to very accurately cut without any rocking— Patent No. 20-0456169

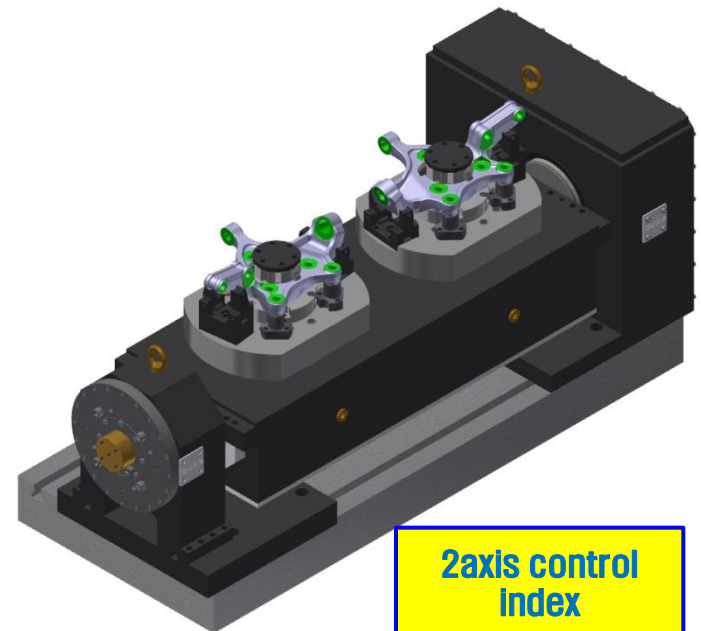
## ● Properties

1. Index table' s holding device to locate position made from rival company:
  - 1) when working by ratchet type or plate clutch type, Index gear' s subtle rocking occurs
  - 2) It is not proper to use this for work requiring high strength or high accuracy.
2. Index table' s holding device to locate position made from our company:
  - 1) Face gear are additionally installed on rolling gear and holding device so that it makes the face gear perfectly cling by hydraulic pressure.
  - 2) By the perfect clinging, it perfectly holds rolling gear and perfectly removes minute cracks on holding gear.
  - 3) As it perfectly removes the minute cracks, not only it removes the rocking on index table but also it is proper to use this for the work requiring high accuracy and high strength.

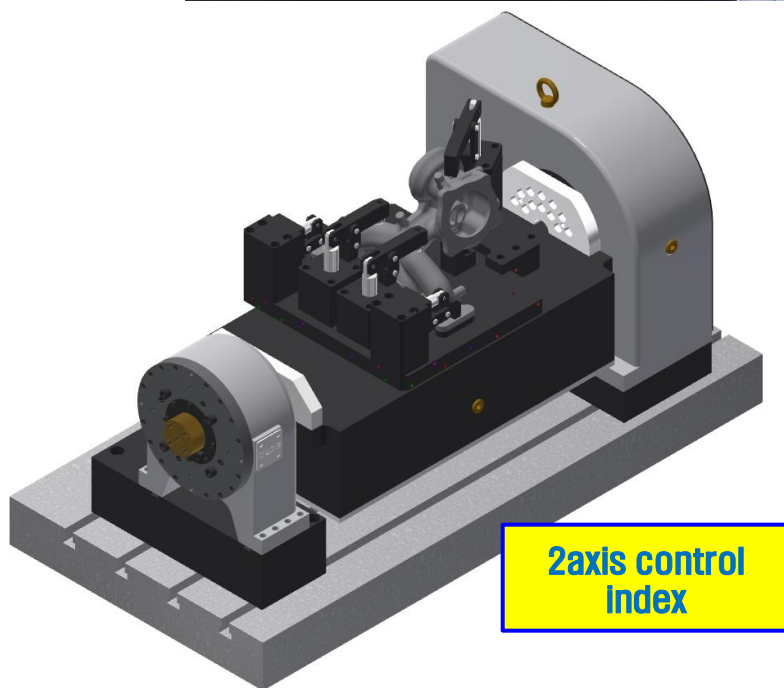
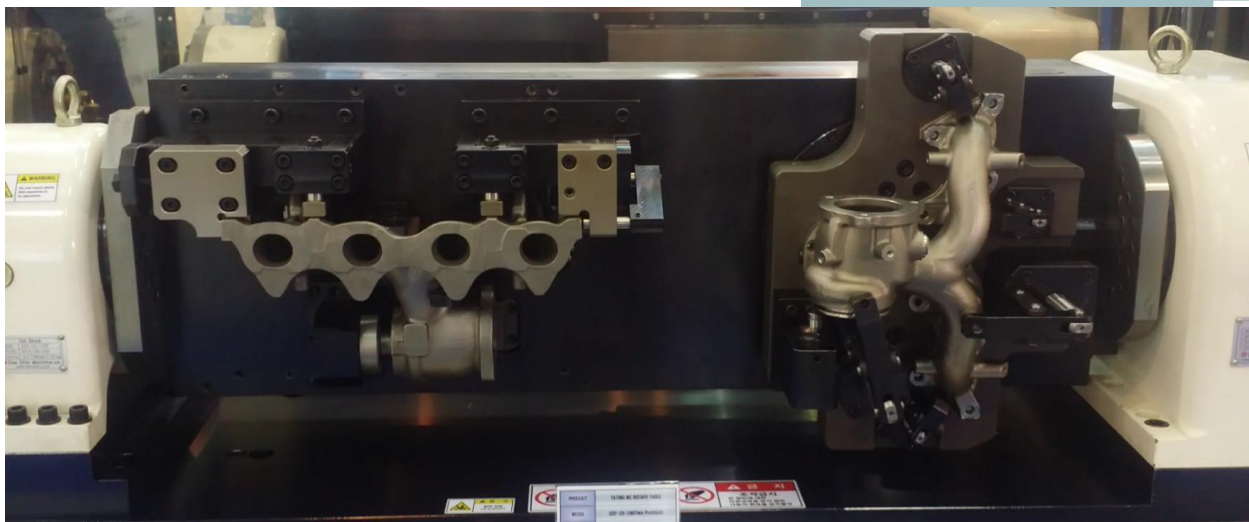




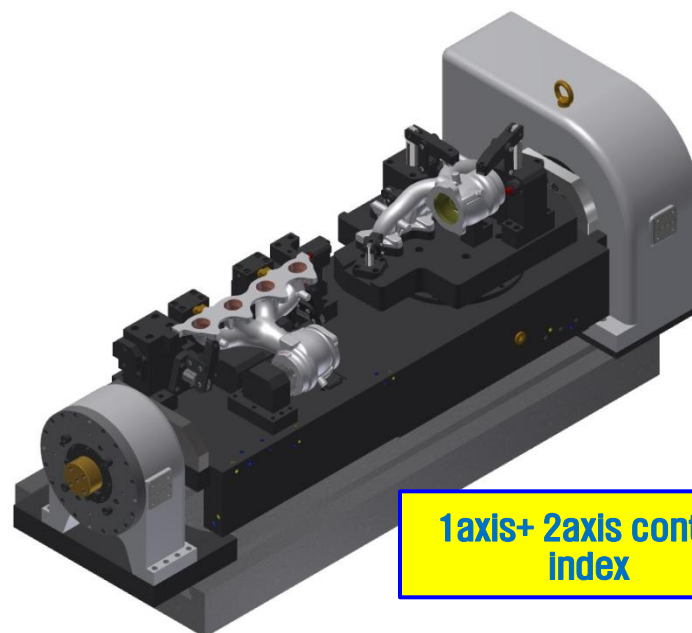
2axis control  
Index



2axis control  
Index



2axis control  
index



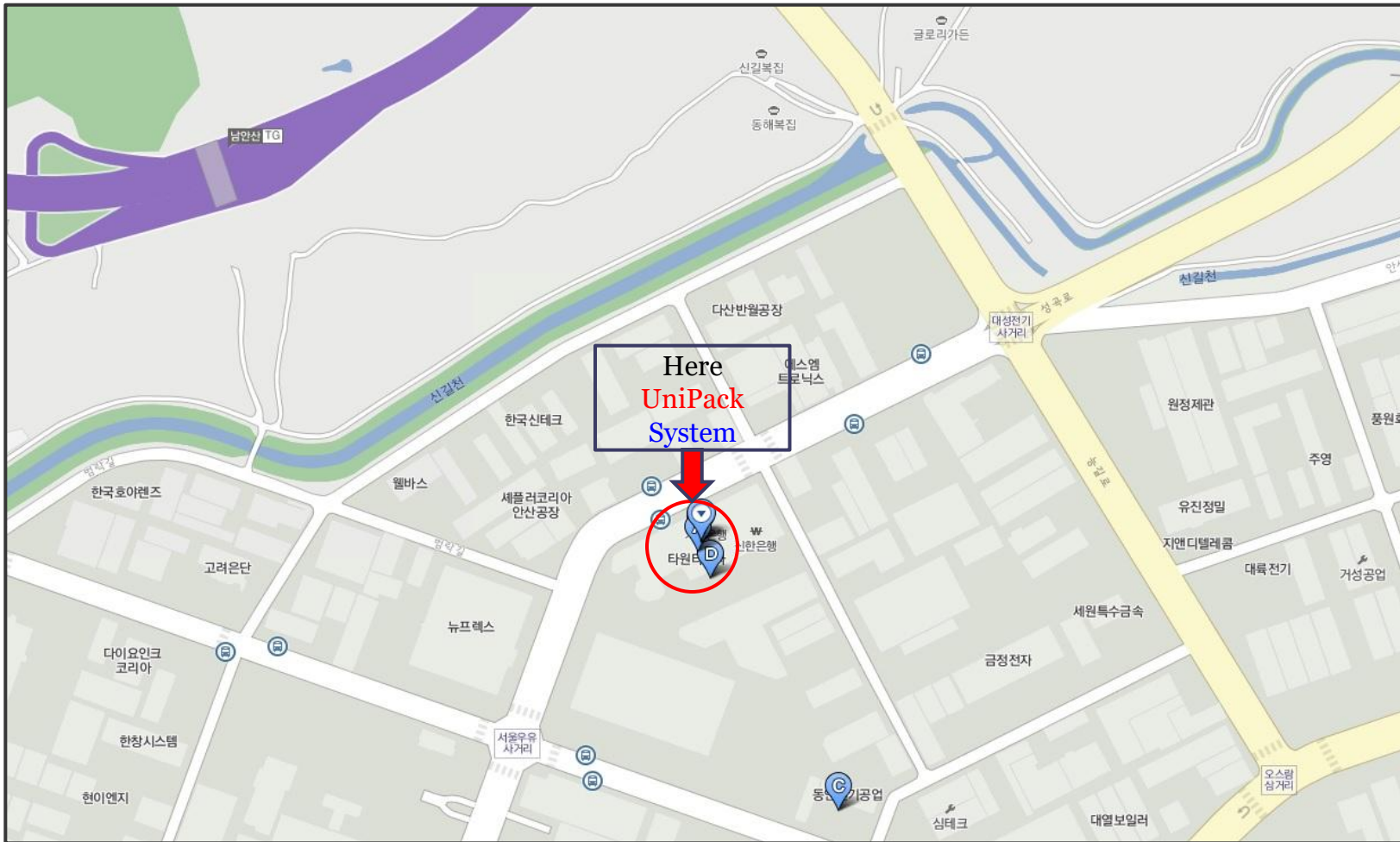
1axis+ 2axis control  
index

# 10-1. Inside view of Unipack system





# 11. Location



☞ Tawon TAKRA Building knowledge industry center Room No.413, 645-5Seonggok-dong, Danwon-gu, Ansan-si, Gyeonggi-do, Korea

**UniPack System**

## 10-2. Outside view of Unipack system





**Thank you very much!**