



SYSTEM INTEGRATOR OF MEDICAL AUTOMATION SOLUTION



COMPANY PROFILE

ruhlatamat is a Germany company with almost 60 years of manufacturing experience. It has locations in Germany, China, USA, India and Asia-Pacific areas with a combined total of approximately 1,200 employees. The strategically placed locations and number of employees allow the company (as a whole) to provide professional products and services to customers around the world, therefore resulting in an annual turnover of 120 million euro.

ruhlatamat Automation Technologies (Suzhou) Co., Ltd. was founded in 1998 as the regional headquarters of the ruhlatamat Group in the Asia-Pacific area (Abbreviation: ruhlatamat Asia). With a total of around 700 employees and 7 locations (production workshops and offices), ruhlatamat Asia is able to supply products and services to customers in nearly 20 countries and regions around the world, leading to an annual order intake of CNY 800 million approximately and an annual turnover of over CNY 600 million. This progress has helped ruhlatamat Asia become partners with many top 100 automotive parts suppliers in the industry.

ruhlatamat Asia has three brands – ruhlatamat, Vario and ShopWorx – that provide solutions in different areas such as Customized Automation and Laser Welding, standard products such as Servo Press, Profile and Conveyors, and the Smart Factory IIoT Platform.

ruhlatamat got involved in the medical industry and provided the automatic solution for medical device manufacture. And products include infusion, dialysis, Sprayer, dental tools etc, all ruhlatamat automation solutions are accord with medical device standard.

With a positive attitude and a desire to seek advanced products and technical solutions in the intelligent and digital fields, ruhlatamat Asia is committed to becoming a leader and solution expert in intelligent manufacturing and digital smart factoring by guiding and standardizing the development of the industry.



20 countries
Business
Distribution



07
Global
Branches



1200
Global
Employees



60 years
Industry
experience



Global Branches

- Global branch & partner
- Global Headquarters
- Asia Pacific Office

MAIN CUSTOMER

Medical industry

Baxter

京卫药业
JEWIM PHARMA

FRESENIUS
MEDICAL CARE

B|BRAUN
SHARING EXPERTISE

COVIDIEN

华仁药业
HUAREN PHARMACEUTICAL

Wyeth

NUTRICIA
Advanced Medical Nutrition

KANGDI
Technology for Health

Auto parts industry

Continental

PLASTIC CONTAINER

brose

ZE

AVIC

HELLA

Mercedes-Benz

BorgWarner

SDS

Edscha

ThyssenKrupp

TW

nexteer
AUTOMOTIVE

FLEX|N|GATE

MAGNA

MAGNET MARELLI

KNORR-BREMSE

PIERBURG

华域汽车
HUADE AUTOMOTIVE SYSTEM

Autoliv

BMTS
TECHNOLOGY

faurecia

BOSCH

elringklinger

Valeo
Lighting Systems

Others

ZONGSHEN
宗申摩托

Danfoss

SIEMENS

B/S/H/

JOHNSON
ELECTRIC
Innovating motion

TIANMA

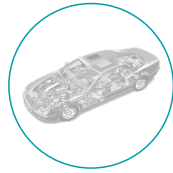
ECO

VIA
we connect

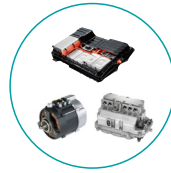
TARGET INDUSTRY



Medical



Auto parts



*NEV
Motor/E-Controller/Battery*



Electronics



Escalators parts-Motor



3C



UAV parts-Motor

SOME PRODUCTS WE HAVE DONE



Infusion joint (Y shape)



Aerosol aluminum can



Infusion tube



Stapler



Dental drill



Peritoneal dialysis bag



Infusion tube



Contact lens cover

PROJECTS

Stapler — Housing Dispensing Equipment

Application Fields: Dispensing and fixing for medical devices

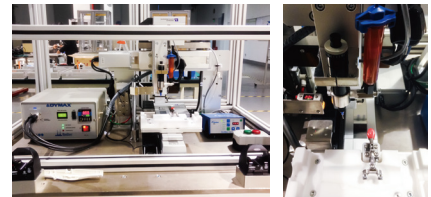
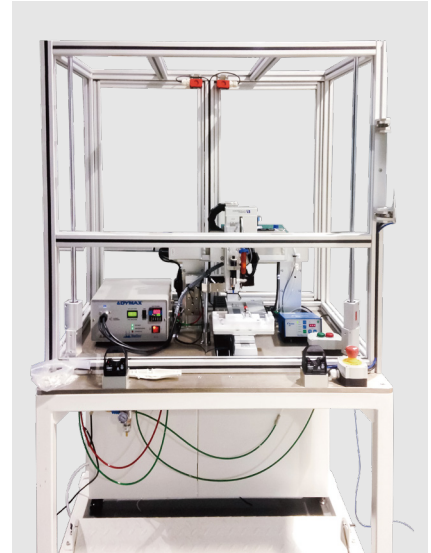
Operation Process:

- Loading housing and gasket manually
- The electric cylinder drives the dispensing valve to dispense on the buckle between the housing and gasket according to the specified path
- After dispensing, the fixture moves below UV lamp holder. After 4 seconds solidification, the fixture was returned back to original position
- Removing the dispensing product manually

Cycle Time: 75 pcs/h

Features:

- Safety protection: operator put 2hands on touch switch, then safety door will close, to ensure operator's safety
- Accurate positioning of electric cylinder, circular interpolation calculation on the surface of the product. EFD glue dispensing valve controlling the amount of glue automatically
- Adopt strong/weak district-dividing electric control cabinet



Stapler — End Blade and Needle Detection Equipment

Application Fields: Anastomotic needle detection, products that difficult identification by human eyes.

Operation Process:

- Adjust position and select the detection mode according to product size manually
- Loading products to fixture slot manually
- Starting photoelectric switch, Vision system checks blades and needles of the end and display the detection results in real-time

Cycle Time: 360pcs/h

Features:

- Clamping and positioning Automatically
- Adopt Machine vision system to display inspection results in real-time



Stapler — End Assembly Equipment

Application Fields: Medical device assembly and pressing

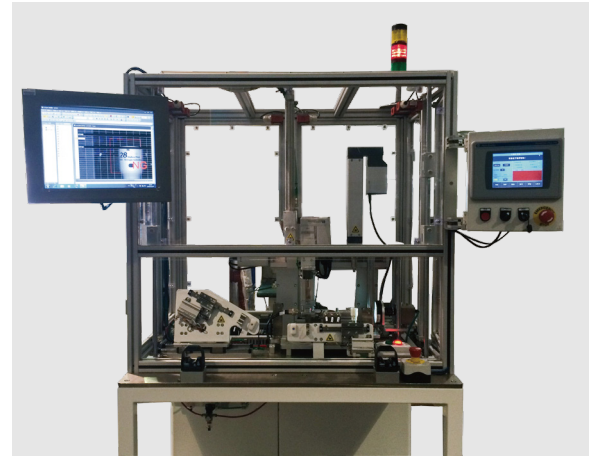
Operation Process:

- Loading parts into the station manually
- Checking if the materials position is right by sensor and Vision system automatically
- Starting two switches simultaneously when operator put 2 hands on, then safety door close, complete the assembly process
- Open safety door to take the product away

Cycle Time: 75 pcs/h

Features:

- Safety protection: operator put 2 hands on touch switch, then safety door will close, to ensure operator's safety
- Monitoring pressure data real-time
- Adopt the intelligent vision checking system
- Applying to variety categories combination assembly process by replacing fixtures
- Double-station: Press the finished and semi-finished products in the mean time



Stapler — Gun Body End Pressing Equipment

Application Fields: Medical device assembly and pressing, press the end into the long gun body, press and assemble

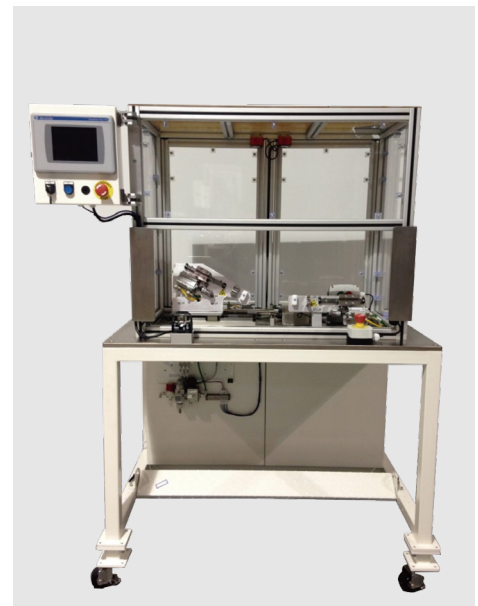
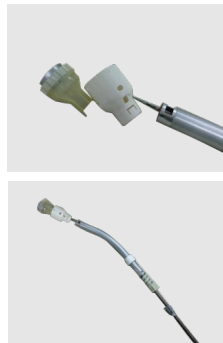
Operation Process:

- Loading gun body end into fixture slot manually, green light means ok
- Starting the photoelectric switch when operator put 2 hands on it, the left cylinder pressing down, and then right pushing in front
- 2 cylinders go back, and assemble process is completed
- Unloading manually

Cycle Time: 180pcs/h

Features:

- Safety protection: operator put 2 hands on touch switch, then safety door will close, to ensure operator's safety
- Design, assembly and debugging are conform to the medical device standard



Stapler — Nail-Bin Assembly Equipment

Operation Process:

- Loading stapler and staple cartridge fixture manually
- Checking if in position by vision system
- Loading the staple cartridge
- Start button
- Feeding the staple cartridge into the stapler by clamping jaw automatically
- Vision system OK/NG inspection
- Remove finished products manually

Cycle Time: 120pcs/h

Features:

- Semi-automatic operation
- Easy to operate, maintain and stable
- Adopts HMI, PLC and touch screen interface



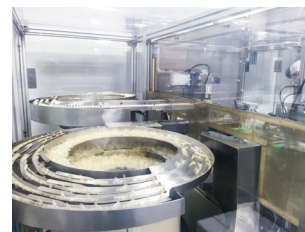
Infusion Tube — Automatic Assemble Equipment for Infusion Tube Connector

Control system: PLC and control module

Cycle Time: 4800 pcs/h

Features:

- Suitable for clean room
- Vibration plate feeding automatically
- Infusion tube connector plug-in mounting automatically by manipulator drove by cylinder
- With high-frequency welding, mechanical parts of drive system using with self-lubrication, no need to maintain
- Automatic assembly to ensure zero defects in production



Infusion Tube — Winding and Welding Equipment

Application Fields: Medical equipment ,hose orienting, hose welding

Operation Process:

- Manual feeding (single)
- Automatic running hose to specific length
- Automatic welding, cutting and unloading
- Two coil hose stocks winding and welding

Cycle Time: 1200pcs/h

Features:

- Suitable for clean room
- Four stations parallel operation : feeding fixed, winding, high-frequency welding, unloading
- One operator handle loading and unloading to reduce labor costs and improve productivity



Infusion Tube — Automatic Winding Production Line

Operation Process:

- Feeding manually
- Running hose to specific length automatic
- Welding, cutting and unloading automatically

Cycle Time: 800pcs/h

Features:

- Suitable for clean room
- Double-station
- Automatic loading and unloading to improve efficiency hardly
- Adpot PLC and touch screen interface



Leak Test Apparatus — Air Port Sealing Leakage Detection Equipment

Operation Process:

- Automatic gas testing machine, 10 independent channels to detect pipeline leakage, 8 channels of positive pressure and 2 channels of negative pressure
- 3 channels of positive pressure (maximum 1.2Mpa) and 2 channels of negative pressure
- Pressure: 1.5Mpa (high pressure) / 0.6Mpa (low pressure)
- Cycle time: set your own

Features:

- Each channel works independently (Can be implemented simultaneously in different channels and pressures)
- Each pressure can be measured independently
- Flexibility testing thanks to 10 channels can be controlled independently
- After the test, the product relevant information, test process and collected data of products are automatically saved in the spreadsheet, which can be directly viewed and printed by user



Infusion Bag — Blasting Test Equipment

Operation Process:

- Connecting intake pipe and infusion bag connector manually
- Feeding into test box
- Automatically inflating infusion bag and qualify product

Efficiency: 30 pcs once

Features:

- The function of test gas is controlled by both single circuit and multi-circuit
- PLC can detect press value from different circuits
- Patented Quick plug joint design



Infusion Drop Tube — Automatic Welding Machine

Process:

- Loading drip chambers by vibration feeder automatically
- Cut and install the filter into the drip chambers automatically
- Sweat soldering
- Inspect welding quality by the vision system
- Unloading automatically

Cycle Time: 1000 pcs/h

Features:

- Automatic operation
- Integrated with vision system, avoiding secondary pollution caused by manual operation to improve efficiency hardly
- Compact and reasonable structure design, easy to operate and maintain



Infusion Drop Tube — Automatic Precision Infusion Filter Welding Equipment

Operation Process:

- Loading aeration flaps by vibration feeder automatically
- Cut and install the filter into the aeration flap automatically
- Sweat Soldering
- Unloading automatically

Features:

- The machine is integrated with automatic feeding, cutting and thermal welding, suitable for single welding of infusion filter
- Reliable, easy to operate and maintain
- Adopt HMI, PLC, touch screen interface



Intubation — Electronic Weighing System

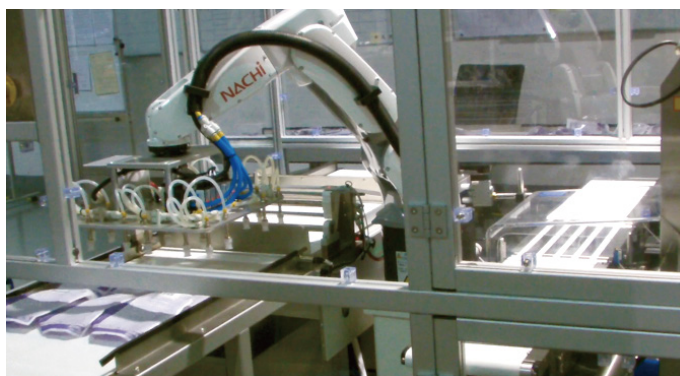
Efficiency: 4800pcs/h

Description:

It ease to miss-checking when heat-sealing, this equipment can solve this problem by auto weighing to check the package weight, mainly focus on whether miss the auxiliary parts or not.

Features:

- Robot collaboration of weighing and transferring, compatible with more than 200 products (different auxiliary parts, different weights)
- Using with XS2 to dynamical weighing, the maximum weighing value is 600g, accuracy is $\pm 0.02g$



Aerosol — Aerosol Aluminum Cans Weighing & leakage Detection Production Line

Cycle time: 4800 pcs/h

Description:

- The machine is used for weighing, recording, uploading data, spraying QR code and eliminating defective products after filling. It is with high-speed feeding of automatic unloading and rotary feeding to ensure the stability of weighing, and save time.



Dentistry — Automatic Dental Drill Spraying Equipment

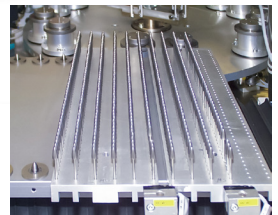
Operation Process:

- Automatic detection (if have work pieces in fixture)
- Automatic feeding
- Vision system inspection of the quality of painting
- Palletizing of the good work pieces

Cycle Time: 1200 pcs/h

Features:

- Automatic unmanned spraying and Vision system inspects, to ensure zero-defects in production
- The machine is with compact mechanism of high-speed turntable and double working station to reduce the space occupied
- Grinding collaboration and drilling with CNC equipment to achieve unmanned operation
- Easy to operate and maintain



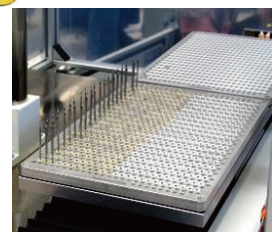
Dentistry — Automatic Dental Bit Stacker Equipment

Description:

- This equipment with vibration plate to feed material, and automatically grabs the drill bit through the gripper and places it vertically in the fixture to complete the preparation work before CNC grinding.

Features:

- Loading by vibration feeder, grab accurately and positioning
- High-speed palletizing automatically
- Easy to operate and maintain



Dentistry — Automatic Dental Drill Bit Welding Equipment

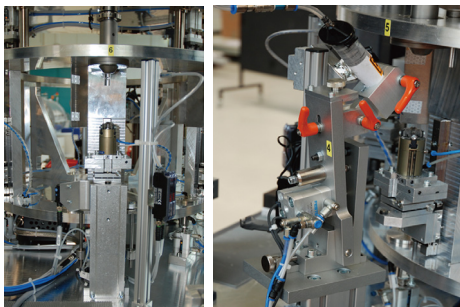
Process:

- Vibration plate feeding the shaft parts automatically
- Vibration plate feeding the shaft ends automatically
- Calibration alignment (to reach exactly the gap of soldering)
- Dispensing of the solder paste
- Automatic induction soldering
- Unloading

Cycle Time: 360 pcs/h

Features:

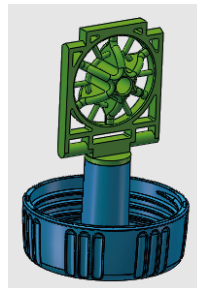
- Integrated with a variety of automatic feeding system
- Rotating table with compact design to reduce space
- Automatic welding to ensure zero defects in production



Others — Manual Assembly Equipment

Description:

- Apply to press plastic cover, adopt automatic press mechanism to replace manual assemble
- Automatic press mechanism replacing of the manual work to press plastic cover
- Loading and unloading manually, fasten positioning and press fitting automatically
- Easy to operate and maintain





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