



科 技 妆 点 美 When Technology Meets Beauty



# LEROUGE

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## 企业使命 MISSION

# 提供一站式美妆智造解决方案

Provider of Turnkey Solutions For Cosmetics Manufacturing

### 企业愿景 VISION

# 成为中国美妆智造领域的创新先锋

Become A Pioneer In Innovation In China's Beauty And Intelligent Manufacturing Field

### 价值观 VALUES

# 热爱、坚韧、共赢

Passion, Resilience, Synergy

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# 公司介绍 COMPANY INTRODUCTION



# 创立 FOUNDED

始创于2014年,位于南太湖之滨湖州南浔,乐虹源于法语Lerouge的音译。

Lerouge, transliteration from a french phrase "Le Rouge", was founded in 2014, and located in Nanxun, Huzhou. 02

# 范围 SCOPE

美妆通用机型&非标定制 机型。

Standard and customized machines and molds for cosmetics manufaturing.

03

# 能力 ABILITY

为客户提供一站式美妆制 造智能化系统解决方案。

Provide turnkey solutions for cosmetics manufacturing intelligence.

04

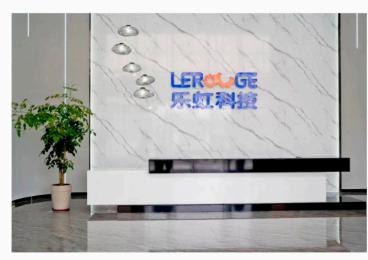
# 优势 ADVANTAGE

聚焦于美妆传统生产工艺和自动化技术的融合。

Focus on the integration of classical cosmetics production process and automation intelligence.



公司总投资7000万 Total investment of 70 million 公司占地面积约19000平方米 Total land area of 19,000 m<sup>2</sup> 研发和生产设备投入1200万 Total investment of 12 million in R&D and equipment











# 公司荣誉与专利 **COMPANY HONORS AND PATENTS**

# 2020

入选湖州市"南太湖精英计划"领军型创新创业团队

入选湖州市第四批全市工业"大好高"项目

智能化DIY定制口红机荣获第八届上交会"最佳人气科技产品"

Selected as a leading innovation and entrepreneurship team in Huzhou City's "South Taihu Elite Plan" Selected into the fourth batch of Huzhou City's industrial "big, good, high" projects
Intelligent DIY customized lipstick machine awraded the "Best Popular Technology Product" at the 8th Shanghai International Trade Fair

# 2021

管理人荣获南浔经济开发区"科技创新人才奖" The founder was awraded the "Technology Innovation Talent Award" of Nanxun Economic Development Zone

# 2022

管理人被湖州市委授予"青年人才新锐"称号

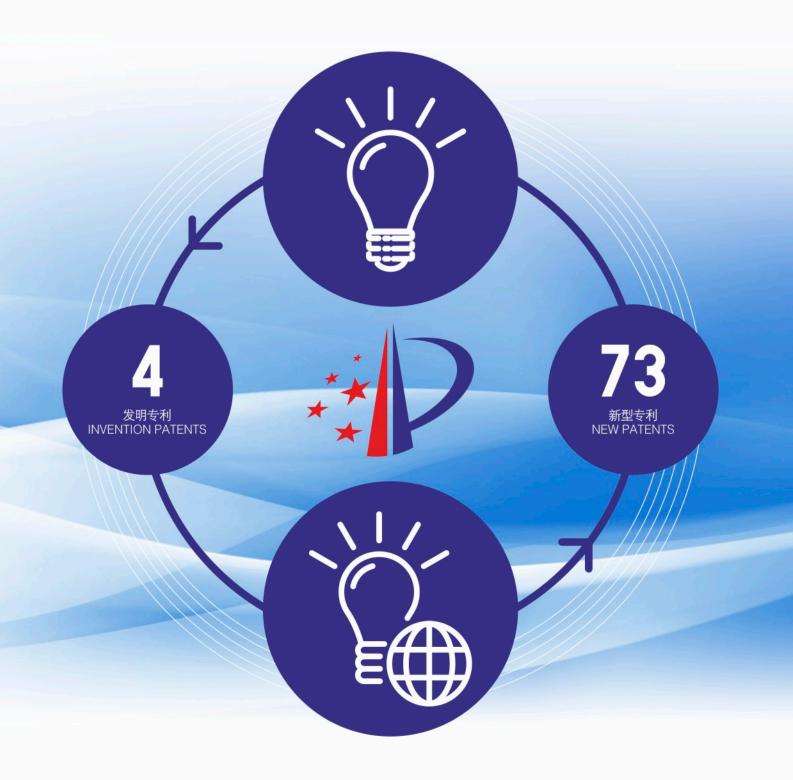
The founder was awarded the title of "Young Talent" by the Huzhou Municipal Party Committee

# 2023

入选中国人社部留学人员创业启动支持计划:优秀项目获评"国家级高新技术企业" Selected into the Chinese Ministry of Human Resources and Social Security's Entrepreneurship Startup Support Program for Overseas Students: Excellent Project Awarded as "National High-tech Enterprise"

### 2024





作为全球美妆行业领导者如迪奥、欧莱雅、巴斯夫、莹特丽等 公司的合作伙伴, 乐虹科技的产品赢得了市场的广泛信赖, 拥 有77项专利,其中包括4项发明专利和73项实用新型专利。

As a partner of global beauty industry leaders such as Dior, L'Or é al, BASF, Intetra and other companies, Lehong Technology's products have won widespread trust in the market and have 77 patents, including 4 invention patents and 73 practical patents. New patent.



# 团队管理 TEAM MANAGEMENT

乐虹团队由一群对美妆行业充满热情的专业人士组成,基于对美妆生产工艺的深刻理解,为美妆工厂提供包括蜡基单元,粉类单元(压粉&散粉),笔类单元,轻彩妆单元(气垫&卸妆膏)灌包的全站解决方案。

The LeRouge team is composed of industry experts passionate about the beauty sector. With a deep understanding of cosmetic manufacturing processes, we provide turnkey solutions for beauty production facilities. Our offerings include the design and implementation of wax-based units, powder processing units (for pressed powders and loose powders), pencil assembly units, and lightweight makeup units (such as cushion foundations and cleansing balms), along with filling and packaging systems.



生产部 Production department Machining workshop 机加车间 钣金车间 Sheet metal workshop 硅胶车间 Silicone workshop Assembly and commissioning 装配调试 销售部 Sales department Sales Plan 销售计划 Channel management 渠道管理 产品价格 Product pricing 项目进度管理 Project progress management 总经理 工程部 Engineering department **GENERAL MANAGER** R&D team 研发组 工程组 Engineering Team 图纸BOM Drawing BOM 客户需求管理 Customer request management 供应链部 Supply chain department Standard parts procurement 标准件采购 库存&收发货 Inventory & Receiving and Shipping 供应商开发管理 Supplier development management 成本管控 Cost control 质量部 Quality department 来料&成品检验 Incoming materials & finished product inspection 质量8D管理 Quality 8D Management 质量问题处理 Quality problem shooting SOP标准化 SOP standardization

10

10位机械设计工程师 10 mechanical design engineers 7

行政部 Administration department

财务部

Financial department

7位电气设计工程师 7 electrical design engineers 7

7位现场调试工程师 7 field commissioning engineers 15

TEAMWOR

15位机加工技师 15 machining technicians

# LER○↓GE 乐虹科技

# 制造与质量管理 **MANUFACTURING AND QUALITY MANAGEMENT**

作为中国美妆设备的领军企业, 乐虹科技致力于将传统的 美妆生产工艺和自动化技术相结合, 为美妆工厂提供智能 化,柔性化,标准化的一站式美妆制造解决方案。公司占 地面积近2万平方米,设有先进的工程与研发中心,机加 工车间, 钣金车间, 硅胶车间和装配&调试车间, 保证从 研发到生产的每一个环节都精益求精。

As a leading innovator in China's beauty equipment industry, LeRouge Technology is committed to merging traditional cosmetic manufacturing processes with cutting-edge cosmetic manufacturing processes with cutting-edge automation technologies. We provide beauty production facilities with intelligent, flexible, and standardized turnkey manufacturing solutions. The company spans nearly 20,000 square meters and is equipped with state-of-the-art engineering and R&D centers, precision machining workshops, sheet metal fabrication facilities, silicone production areas, and assembly & testing workshops. This ensures that every stage, from R&D to production, is executed with the highest level of precision and quality. executed with the highest level of precision and quality.

# 可提供机械/电气设计, 机械加工, 钣金加工, 硅胶加工, 装配/调试等全站解决方案

PROVIDE TURNKEY SOLUTIONS FOR MECHANICAL / ELECTRICAL DESIGN, MACHINING, SHEET METAL PROCESSING, SILICONE PROCESSING, ASSEMBLY / COMMISSIONING









# **CUSTOMER-ORIENTED SOLUTIONS**

Q)

用科技妆点美 WHEN TECHNOLOGY MEETS BEAUTY

# 质量管理体系 **QUALITY MANAGEMENT SYSTEM**

# 质量部 QA DEPT.

#### 制程品控 PROCESS QUALITY CONTROL

IQC: 来料检验 OQA: 出货检验 PQE: 供应商质量

### 系统品控 SYSTEM QUALITY CONTROL

QMS: 质量管理体系 EMS: 环境管理体系 DCC: 质量控制文件

#### 产品品控 PRODUCT QUALITY CONTROL

DFEMA: 研发风控 FAE: 失效分析 CQE: 客户质量管理



产品研发 Product development

供应链 Supply chain

生产制造 Manufacturing

产品交付 Product delivery



# 散粉自动生产线 LOOSE POWDER AUTOMATIC PRODUCTION LINE

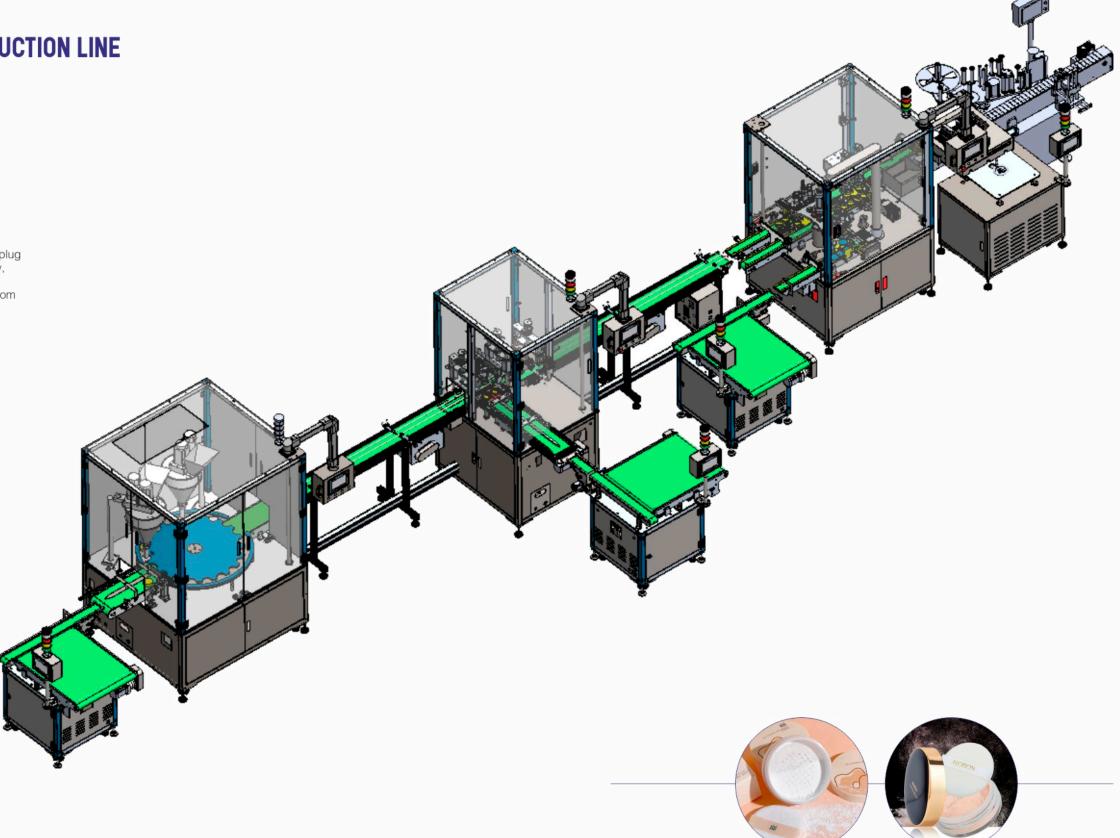
### 功能Function

- ◆适用产品: 散粉
- ◆用途:灌装&组装
- ◆工序:自动供瓶、灌装、抖动、自动供内塞、自动压内塞、自动供外盖、自动旋盖、静电除尘、贴标等
- ◆优势: 打通生产前段至后段,实现全链条自动化
- ◆ Applicable product: Loose powder.
- ◆Use: Filling and packaging.
- Process: Automatic bottle supply, filling, shaking, automatic inner plug supply, automatic inner plug pressing, automatic outer cap supply, automatic lid display, electrostatic precipitator, labeling, etc
- ◆Advantage: Innovative visual positioning ensures full automation from the beginning to the end of production.

### 机械特点 Technical Features

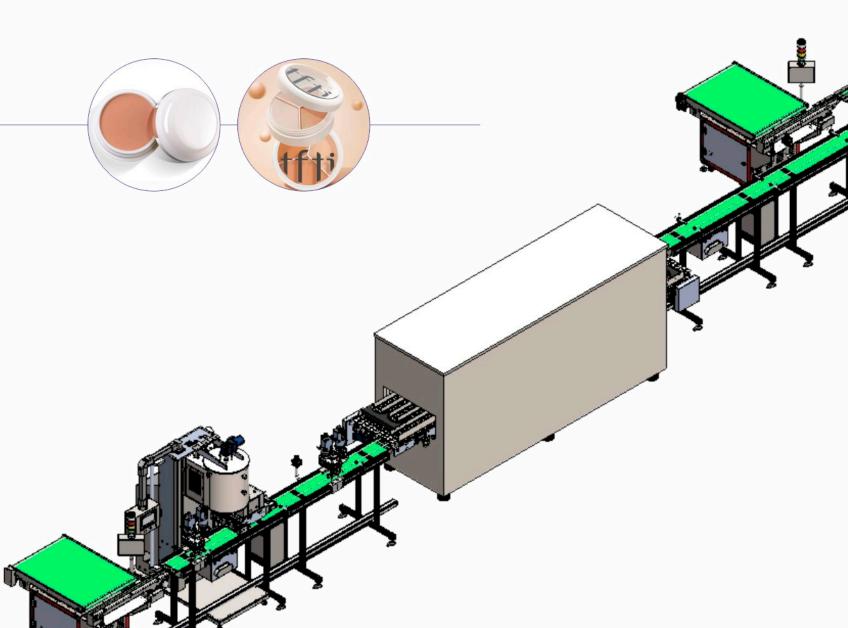
- ◆操作人员: 2人
- ◆节拍: 36-42pcs/min
- ◆电源: AC 380V 50/60Hz
- ◆功率: 12kW
- ◆尺寸: L11000×W1500×H1850mm
- ◆气压: 0.6Mpa
- ◆灌装量: 5-20g
- ◆灌装精度: ±0.2g
- ◆Number of operators: Two person
- ◆Production Capacity: 36-42pcs/min
- ◆Power supply: AC 380V 50/60Hz
- ◆Power: 12KW
- ◆Size: L11000 × W1500 × H1850mm
- ◆Atmospheric pressure: 0.6Mpa
- ◆Filling volume: 5-20g
- ◆Filling accuracy: ± 0.2g

- ◆伺服电机: Inovance
- ◆调速电机: Jingyan
- ◆传感器: Keyence/Omron
- ◆电气元件: SMC/Schneider
- ◆控制元件PLC: Inovance
- ◆Servo motor: Inovance
- ◆Speed control motor: Jingyan
- ◆Sensor: Keyence/Omron
- ◆Electrical Components: SMC/Schneider
- ◆Control PLC: Inovance





# 热灌装自动生产线 HOT FILLING AUTOMATIC PRODUCTION LINE



功能Function

- ◆适用产品: 卸妆膏、除甲醛凝胶、芳香剂等;
- ◆用途:用于蜡基类产品入盒前的自动化生产;
- ◆工序:灌装、冷冻、反熔、供盖、预旋&旋盖、贴标等;
- ◆优势:解决了蜡基类产品生产过程中脱壁、干裂的核心痛点,效果平整均匀无气泡。

### 机械特点 Technical Features

- ◆双头灌装
- ◆操作人员: 1-2人
- ◆节拍: 40-45pcs/min
- ◆电源: AC 380V 50/60Hz
- ◆功率: 12kW
- ◆气压: 0.6Mpa
- ◆尺寸: L14730×W2150×H1850mm
- ◆灌装量: 5-200g(可定制)
- ◆灌装精度: ±0.2g/100g

- ◆伺服电机: Inovance
- ◆调速电机: Jingyan
- ◆传感器: Keyence
- ◆电气元件: SMC/Schneider Electric/Airtac
- ◆控制元件PLC: Inovance

- ◆ Applicable Product: Such as remover cream, formaldehyde removal gel, and fragrance.
- Use: For the automation production before the waxbased products are boxed.
- Production processes: Filling, freezing, reverse melting, feeding caps, pre-screwing and screwing, labeling.
- Advantage: It solves the core issues of wall stripping and cracking during cream filling, ensuring a smooth and uniform result without bubbles.
- ◆Dual-head filling
- ◆Number of operators: one to two person
- ◆Production capacity: 40-45pcs/min
- ◆Power supply: AC 380V 50/60Hz
- ◆Power: 12KW
- ◆Atmospheric pressure: 0.6Mpa
- ◆Size: L14730 × W2150 × H1850mm
- ◆Filling volume: 5-200g(Customizable)
- ◆Filling accuracy: ±0.2g/100g
- ◆Servo motor: Inovance
- ◆Speed control otor: Jingyan
- ◆Sensor: Keyence
- ◆Electrical components: SMC/Schneider Electric/Airtac
- ◆Control PLC: Inovance



# 气垫自动生产线 AIR CUSHION AUTOMATIC PRODUCTION LINE

### 功能 Function

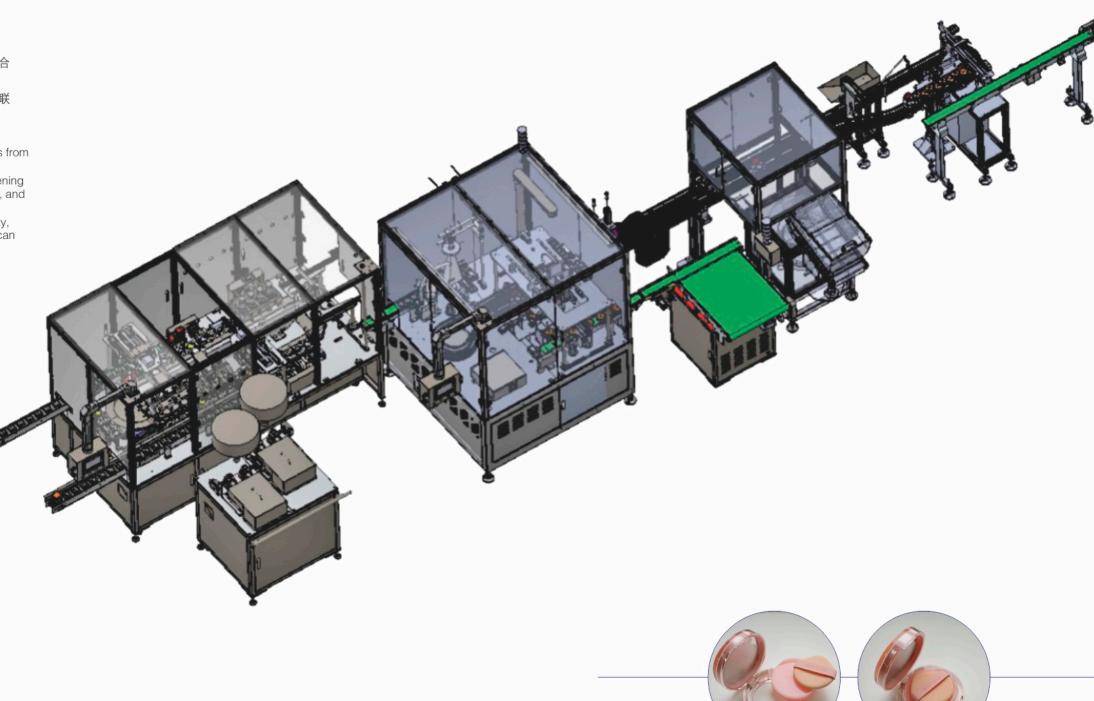
- ◆适用产品:气垫类产品;
- ◆用途:实现气垫从灌装、组装到成品的全站式自动化生产;
- ◆工序:灌装(拍打、压卡环、合盖)、镜盒开盖、组装、自动上粉扑、合 盖、成品移出:
- ◆优势:全自动整线,提高人均能效,稳定性更高;可单机生产,也可联机生产。
- ◆ Applicable product: Air cushion products.
- Purpose: To achieve full station automated production of air cushions from filling, assembly to finished products.
- ◆ Process: Filling (tapping, pressing the snap ring, closing the lid), opening the mirror box lid, assembling, automatic powder puff, closing the lid, and removing the finished product.

◆ Advantage: Full-automatic production line, improve labor productivity, and higher stability. It can be produced offline, or online production can also be carried out.

### 机械特点 Technical Features

- ◆操作人员Number of operators: 2~3人 two~three people
- ◆节拍Production capacity: 36-40pcs/min
- ◆电源Power supply: AC 380V 50/60Hz
- ◆尺寸Size: L10000×W3010×H1950mm
- ◆灌装量Filling capacity: 5-20g
- ◆灌装精度Filling accuracy: ±0.2g/100g
- ◆功率Power: 16kW
- ◆机身材料Fuselage material: SUS304 铝型 SUS304 Aluminum profile
- ◆整机与物料接触部分contacted material: 不锈钢材料制成Made of stainless steel material
- ◆自制切换阀Self-made switching valve: 德国食品级S136材料German food-grade S136 material

- ◆PLC: Inovance
- ◆人机界面Man-machine interface: 10-inch-Inovance
- ◆测物电眼Electrical eye measurement: Keyence
- ◆伺服电机Servo motor: Inovance
- ◆步进电机Stepper motor: Leisai
- ◆开关电源Switching power supply: 24V-6A-Meanwell
- ◆调速器(包括保险开关)Speed governor: Taibang
- ◆视觉Vision: Hikvision





# 卸妆膏高速灌装线 MAKEUP REMOVING BALM HIGH-SPEED FILLING LINE

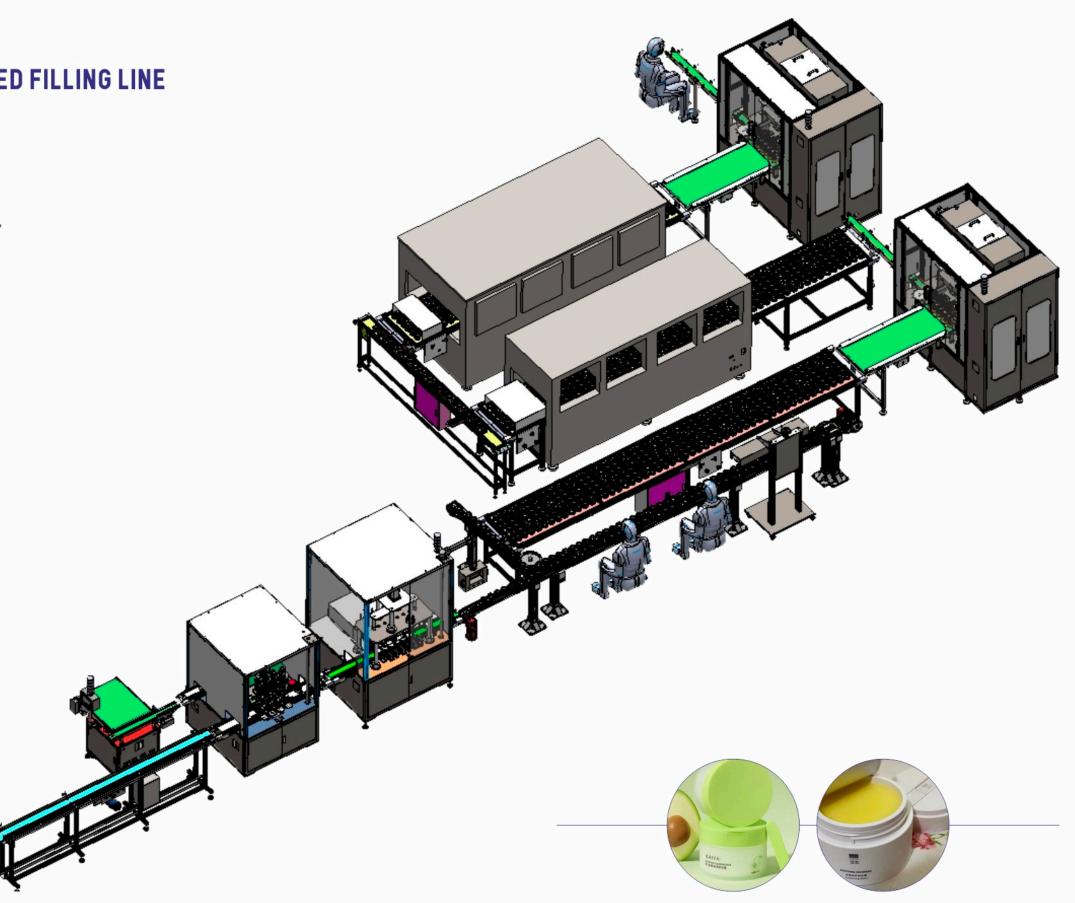
### 功能 Function

- ◆适用产品: 卸妆膏、冷霜、凡士林等广口瓶包装产品;
- ◆用途:高速灌装;
- ◆工序:除尘,灌装,冷却,反熔等;
- ◆优势:灌装阀独立伺服控制,可任意调节每个针管灌装量,精准控制灌装精度, 陶瓷片高精度反熔,灌装效果平整均匀,无气泡、无裂纹。
- Applicable product: Makeup remover cream, cold cream, petroleum jelly, and other wide-mouth jar products.
- use: Automatic filling.
- Production processes: Dust removal, filling, cooling, and reverse melting.
- Advantage: The filling valve is independently servo controlled, which can adjust the filling amount of each needle tube arbitrarily and accurately control the filling accuracy, Ensure high precision and uniform filling without bubbles or cracks.

### 机械特点 Technical Features

- ◆六头灌装 Six head filling
- ◆操作人员Number of operators: 2人 Two people
- ◆节拍Production capacity: 40-60pcs/min
- ◆电源Power supply: AC 220V 50/60Hz
- ◆功率Power: 18kW
- ◆气压Power: 0.6Mpa
- ◆灌装量Filling volume: 5-150ml
- ◆灌装精度Filling accuracy: ±0.1g/100g
- ◆尺寸Size: L11000×W2900×H2100mm

- ◆伺服电机Servo motor: Inovance
- ◆调速电机Speed control motor: Jingyan
- ◆传感器Sensor: Keyence
- ◆电气元件Electrical components: SMC/Schneider
- ◆控制元件PLC Control PLC: Inovance





# 多模式柔性口红机 MULTI-MODE FLEXIBLE LIPSTICK MACHINE







### 功能 Function

- ◆适用产品: 鸟嘴,斜口,圆形,迷你口红; 腮红棒,香膏棒,遮 瑕棒等产品:
- ◆用途:灌装&脱模;
- ◆工序: 预热、灌装、反融、冷却、入芯脱模等;
- ◆优势: 机械手脱模为专利设计, 柔性高, 打造定制化、多元化的智能生产方案。
- Applicable product: Bullet-shaped, slanted tip, round, and mini lipsticks; lip balm, perfume sticks, sunscreen sticks, and other stick-shaped products.
- ◆Use: Filling & Demoulding.
- Process: automatic cover supply, pre-spin, circumrotation, automatic defect removal.
- Advantage: The robotic arm demolding is a patented design, creating customization and diversification.

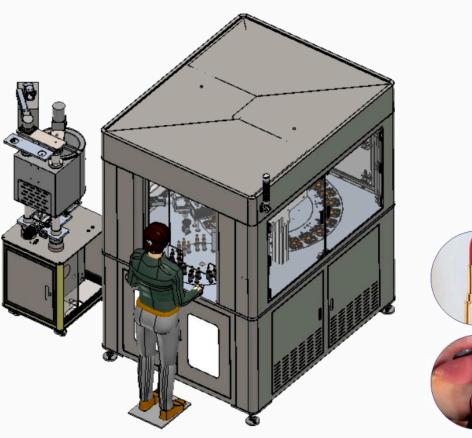
#### 机械特点 Technical Features

- ◆操作人员Number of operators: 1人 one people
- ◆节拍Production capacity: 8pcs/min
- ◆电源Power supply: AC 380V/ 50-60Hz
- ◆功率Power: 5.5kW
- ◆气压Atmospheric pressure: 0.6Mpa
- ◆冷却温度Cooling temperature: -20℃
- ◆尺寸Size: L1600×W1200×H1900mm

### 元器件信息 Key Components

- ◆伺服电机Servo motor: Inovance
- ◆调速电机Speed control motor: Jingyan
- ◆传感器Sensor: Keyence
- ◆电气元件Electrical Components: SMC/Schneider
- ◆控制元件PLC Control PLC: Inovance
- ◆机械手Robotic arm: Inovance
- ◆温控模块Temperature module: Xianda

# 多模式柔性高速口红机 MULTI-MODE FLEXIBLE HIGH-SPEED LIPSTICK FILLING MACHINE







#### 功能Function

- ◆适用产品: 鸟嘴、斜口、圆形、迷你口红; 腮红棒、香膏棒、遮 瑕棒等产品;
- ◆用途:灌装&脱模;
- ◆工序: 预热、灌装、反融、冷却、入芯脱模等;
- ◆优势: 机械手脱模为专利设计,柔性高,打造定制化、多元化的智能生产方案。占地面积小,人均能效高。

### 机械特点 Technical Features

- ◆双伺服灌装 Dual servo filling
- ◆操作人员Number of operators: 2人 Two people
- ◆节拍Production capacity: 25-30pcs/min
- ◆电源Power supply: AC 380V/ 50-60Hz
- ◆功率Power: 5.5kW
- ◆气压Atmospheric pressure: 0.6Mpa
- ◆冷却温度Cooling temperature: -20℃
- ◆料桶容量Bucket capacity: 20L
- ◆尺寸Size: L1750mm×W1400mm×H2025mm

- Applicable product: Bullet-shaped, slanted tip, round, and mini lipsticks; lip balm, perfume sticks, sunscreen sticks, and other stick-shaped products.
- ◆Use: Filling & Demoulding.
- Process: automatic cover supply, pre-spin, circumrotation, automatic defect removal.
- Advantage: The robotic arm demolding is a patented design, creating customization and diversification. Small footprint and high per capita energy efficiency.

- ◆伺服电机Servo motor: Inovance
- ◆调速电机Speed control motor: Jingyan
- ◆传感器Sensor: Keyence
- ◆电气元件Electrical Components: SMC/Schneider
- ◆控制元件PLC Control PLC: Inovance
- ◆机械手Robotic arm: Inovance
- ◆温控模块Temperature module: Xianda



# 口红喷珠光机 LIPSTICK PEARL SPRAYING MACHINE







### 功能 Function

- ◆适用产品:口红、润唇膏、香膏棒等产品;
- ◆用途:膏体表面喷涂珠光;
- ◆工序:产品膏体自动旋出,自动喷珠光,膏体自动旋入;
- ◆优势:表面珠光均匀;膏体表面无擦伤,无珠光残留;外壳表面无污染,无需二次清洁。

### 机械特点 Technical Features

- ◆操作人员Number of operators: 1人 one people
- ◆节拍Production capacity: 8-10pcs/min
- ◆电源Power supply: AC 220V/50-60Hz
- ◆功率Power: 1.5kW
- ◆气压Air Pressure: 0.6Mpa
- ◆尺寸Size: L1000×W1000×H1800mm
- ◆适用口红尺寸Applicable lipstick size: 长度Length: 20-50mm 直径Diameter: 常规 Standard

- Applicable product: Lipstick, lip balm, balm and other stickshaped products;
- ◆Usage: Pearlescent spray on the surface of the paste.
- Process: automatic cover supply, pre-spin, circumrotation, automatic defect removal.
- Advantages: Uniform pearl finish on the surface; There are no scratches or pearl residue on the surface of the paste; The surface of the shell is free of contamination and does not require secondary cleaning.

#### 元器件信息 Key Components

- ◆调速电机Speed control motor: Jingyan
- ◆步进电机Stepper motor: Leisai
- ◆传感器Sensor: Keyence
- ◆电气元件 Electrical components: SMC/Schneider Electric/Airtac
- ◆控制元件PLC Control PLC: Inovance

# 双头转盘灌装机 DOUBLE HEAD ROTARY DISK FILLER







### 功能Function

- ◆适用产品: 粉底液、唇彩、唇釉、睫毛膏
- ◆用途:灌装&组装
- ◆工序:静电除尘、灌装、压内塞、旋盖、脱模
- ◆优势:配有可加压加热的外置料桶,伺服控制活塞阀精准灌装,可选配旋转灌装功能,设备小巧,灵活周转

### 机械特点 Technical Features

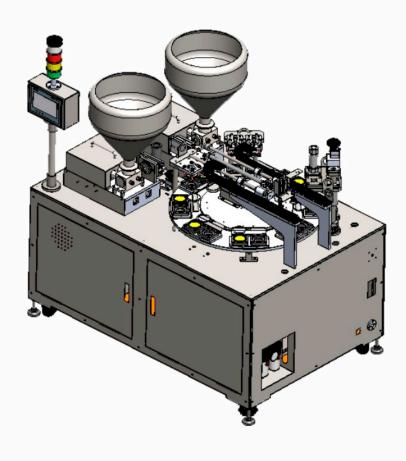
- ◆双头灌装Dual-head filling
- ◆操作人员Number of operators: 2~3人 two~three people
- ◆节拍Production capacity: 32-40pcs/min
- ◆电源Power supply: AC 220V/50-60Hz
- ◆尺寸Size: L950×W800×H1950mm
- ◆灌装桶Filling barrel: 10L
- ◆功率Power: 5kW
- ◆气压Air pressure: 0.4-0.6Mpa

- Applicable products: liquid foundation, lip color, lip glaze, eye black
- ◆Purpose: Filling & Assembly
- Process: electrostatic precipitator, filling, internal plug pressing, capping, demolding
- Advantages: Equipped with an external material barrel that can be pressurized and heated, servo controlled piston valve for precise filling, optional rotary filling function, compact equipment, flexible turnover

- ◆伺服电机Servo motor: Inovance
- ◆调速电机Speed control motor: Jingyan
- ◆传感器Sensor: Keyence/Omoron
- ◆电气元件Electrical components: SMC/Schneider
- ◆控制元件PLC Control PLC: Inovance/Siemens



# 双头气垫转盘灌装机 **DOUBLE-HEAD AIR CUSHION ROTARY FILLING MACHINE**







### 功能 Function

- ◆适用产品:气垫类产品;
- ◆用途:灌装;
- ◆工序:自动灌装、自动拍打、压卡环、成品取出;
- ◆优势:灌装高密&NBR海绵,可灌装高粘度料体,可调节杯托, 便于换产;灌装均匀,无溢出无白边;卡环平整,无鼓包;产能 高。

#### 机械特点 Technical Features

- ◆双头灌装Dual-head filling
- ◆操作人员Number of operators: 2人 Two people
- ◆节拍Production capacity: 16-20pcs/min
- ◆电源Power supply: AC 220V/50-60Hz
- ◆功率Power: 5kW
- ◆气压Air pressure: 0.6Mpa
- ◆尺寸Size: L2700×W1240×H1900mm

◆灌装精度Filling accuracy: ±0.2g

- ◆ Applicable Product: air cushion products.
- ◆Purpose: Filling.
- ◆Process: Automatic filling, automatic tapping, clamping ring pressing, finished product extraction.
- ◆Advantages: Filling high-density&NBR sponge, can fill high viscosity materials, adjustable cup holder, easy to change production; Fill evenly, without overflow or white edges; The snap ring is flat and free of bulges; High production capacity.

#### 元器件信息 Key Components

- ◆伺服电机Servo motor: Inovance
- ◆传感器Sensor: Keyence
- ◆电气元件Electrical components: SMC/Schneider Electric/Airtac
- ◆控制元件PLC Control PLC: Inovance

# 四头气垫环形灌装机 FOUR-HEAD AIR CUSHION RING FILLING MACHINE







#### 功能Function

- ◆适用产品:气垫类产品:
- ◆用途:灌装;
- ◆工序:自动灌装、自动拍打、压卡环、成品取出;
- ◆优势:灌装高密&NBR海绵,可灌装高粘度料体,可调节杯托, 便于换产;灌装均匀,无溢出无白边;卡环平整,无鼓包;产能

### 机械特点 Technical Features

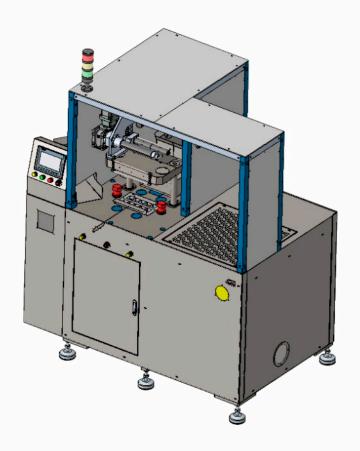
- ◆四头灌装Four-head filling
- ◆操作人员Number of operators: 2人 Two people
- ◆节拍Production capacity: 36-40pcs/min
- ◆电源Power supply: AC 380V/50-60Hz
- ◆功率Power: 6kW
- ◆气压Air pressure: 0.6Mpa
- ◆尺寸Size: L2700×W1240×H1900mm
- ◆灌装量Filling volume: 5-20g
- ◆灌装精度Filling accuracy: ±0.2g

- ◆Applicable Product: air cushion products.
- ◆Purpose: Filling.
- ◆Process: automatic filling, automatic tapping, clamping ring pressing, finished product extraction.
- ◆Advantage: Filling high-density&NBR sponge, can fill high viscosity materials, adjustable cup holder, easy to change production; Fill evenly, without overflow or white edges; The snap ring is flat and free of bulges; High production capacity.

- ◆伺服电机Servo motor: Inovance
- ◆调速电机Speed control motor: Jingyan
- ◆传感器Sensor: Keyence
- ◆电气元件 Electrical components: SMC/Schneider Electric/Airtac
- ◆控制元件PLC Control PLC: Inovance



# 多模式压粉机 MULTI-MODE POWDER PRESS MACHINE







### 功能 Function

- ◆适用产品:干粉、高珠光粉、眼影、腮红、等多种粉质产品;
- ◆用途: 粉饼成型压制;
- ◆工序: 上粉、卷布、压制、脱模;
- ◆优势:配有大缸径油缸,能够满足不同粉质的工艺要求;除了生产单色粉产品外,还能实现拼色式多色粉压制;利用模腔控制粉量,克重更精准;可实现多段式压制,保证粉质稳定。
- Applicable Product: Dry powder, high pearlescent powder, eye shadow, blush, and other powder products.
- ◆Use: Powder molding and pressing.
- Production Processes: Powder, roll cloth, press, mold release
- ◆Advantage: Equipped with a large bore oil cylinder, it can meet the process requirements of different powders; In addition to producing monochrome powder products, it can also achieve color matching multi-color powder pressing; By using the mold cavity to control the amount of powder, the weight can be more accurately measured; Can achieve multi-stage pressing to ensure stable powder quality.

### 机械特点 Technical Features

- ◆操作人员Number of operators: 1人 one people
- ◆节拍Production capacity: 1~2模/min
- ◆电源Power supply: AC 380V/50-60Hz
- ◆尺寸Size: L1826×W1046×H1908mm
- ◆压强Pressure intensity: 200KG/cm²
- ◆功率Power: 5.5kW

### 元器件信息 Key Components

- ◆步进电机Stepper motor: Leisai
- ◆液压系统Hydraulic system:
- ◆传感器Sensor: Keyence/Omoron
- ◆电气元件Electrical components: SMC/Schneider
- ◆控制元件PLC Control PLC: Inovance/Siemens

# 粉饼色彩打印机 POWDER COLOR PRINTER







#### 功能Function

- ◆适用产品:各种粉饼类产品;
- ◆用途:粉饼图案的二次开发;
- ◆优势: 高精准度, 双向打印, 可满足各种定制需求。
- Applicable products: various powder products.
- ◆Use: secondary development of powder patterns.
- Advantages: High precision, bidirectional printing, can meet various customization needs.

### 机械特点 Technical Features

- ◆操作人员Number of operators: 1人 one people
- ◆节拍Production capacity: 8-10pcs/min
- ◆电源Power supply: AC 220V/50-60Hz
- ◆功率Power: 1kW
- ◆打印精度Print precision: ±0.3mm
- ◆尺寸Size: L900×W700×H1000mm

- ◆步进电机Stepper motor: Leisai
- ◆传感器Sensor: Omoron
- ◆电气元件Electrical components: SMC/Schneider



# 笔芯灌装机 PEN CORE FILLING MACHINE







#### 功能 Function

- ◆适用产品: 眉笔、眼线笔、口红笔等笔类产品;
- ◆用途:灌装;
- ◆工序: 料体预融、灌装;
- ◆优势:使用活塞泵精准定量,配合模具闷灌方式,排气通畅,减少气孔,提高断力强度,触摸屏与PLC操作系统各种参数均在人机界面,操作便捷。

### 机械特点 Technical Features

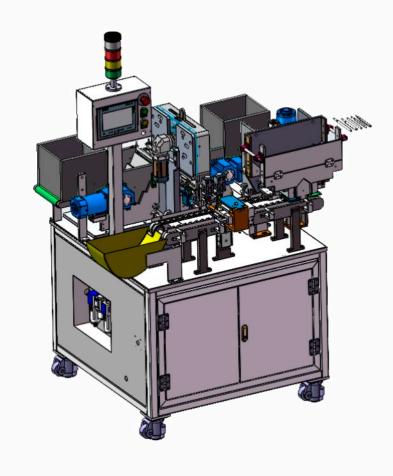
- ◆操作人员Number of operators: 1人 one people
- ◆节拍Production capacity: 40pcs/min
- ◆电源Power supply: AC 220V/50-60Hz
- ◆功率Power: 2kW
- ◆气压Air pressure: 0.6Mpa
- ◆尺寸Size: L1000×W1000×H1800mm

- Product Application: eyebrow pencil, eyeliner, lipstick pen and other pen products.
- ◆Purpose: Filling.
- ◆Process: Material pre-fusion, filling.
- ◆ Advantages: Use piston pump to accurately control the amount, cooperate with the mold to fill, exhaust smoothly, reduce air holes, and improve the strength of the break, Touch and PLC operating system, various parameters are on the man—machine interface, convenient to operate.

### 元器件信息 Key Components

- ◆电气元件Electrical components: SMC/Schneider
- ◆控制元件PLC Control PLC: Inovance

# 套笔帽机 PEN CAP MACHINE







#### 功能 Function

- ◆适用产品: 眉笔、口红笔等笔类产品;
- ◆用途: 笔帽组装;
- ◆工序:自动供料、自动取料、自动套盖、成品取出;
- ◆优势: V型输送带定位槽兼容性更强,定位更精准;效率高,可 联机使用。

#### 机械特点 Technical Features

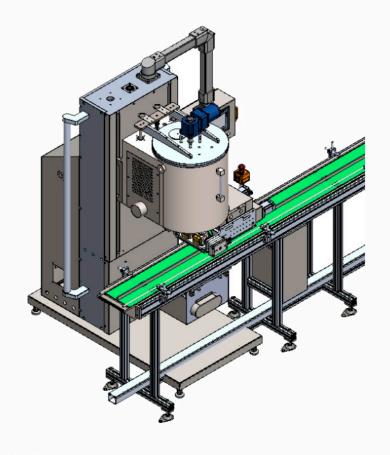
- ◆操作人员Number of operators: 1人 one people
- ◆节拍Production capacity: 40-46pcs/min
- ◆电源Power supply: AC 220V
- ◆功率Power: 3kW
- ◆气压air pressure: 0.6Mpa
- ◆尺寸Size: L1300×W920×H1720mm
- ◆兼容笔杆尺寸Compatible pen shaft size: 直径Diameter 6.5–11, 长度Length 90–170mm

- Applicable products: Eyebrow pencils, lipstick pencils, and other pen-type products.
- ◆Use: Pen cap assembly.
- Process: Automatic feeding, automatic material removal, automatic cover setting, finished product removal.
- Advantages: V-belt positioning groove has stronger compatibility and more accurate positioning; high efficiency, can be used online.

- ◆伺服电机 Servo motor: Inovance
- ◆调速电机Speed control motor: Jingyan
- ◆传感器Sensor: Keyence
- ◆电气元件Electrical components: SMC/Schneider Electric/Airtac
- ◆控制元件PLC Control PLC: Inovance



# 在线热灌装机 ONLINE HOT FILLING MACHINE







### 功能 Function

- ◆适用产品:各种需要加热灌装产品
- ◆用途:灌装
- ◆工序: 料体加热、搅拌、自动灌装
- ◆优势:双头双伺服独立控制,灌装精度高,料桶可自动升降,触 摸屏和PLC操作系统控制桶盖自动升降;配合双轨道单独控制输 送线,保证生产节拍

### 机械特点 Technical Features

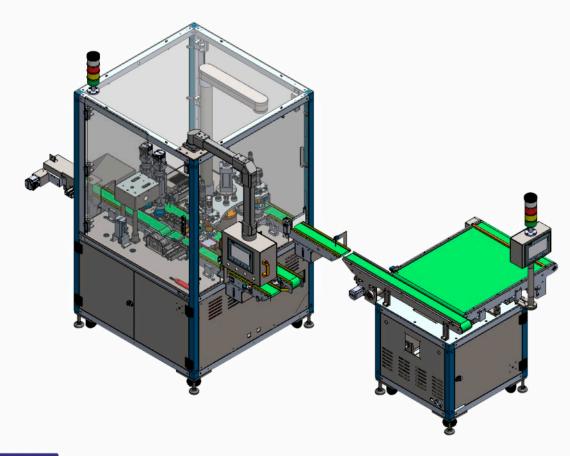
- ◆双头灌装Double head filling
- ◆操机人员Number of operators: 1人 one people
- ◆节拍Production capacity: 35-40pcs/min
- ◆电源Power supply: 380V50Hz
- ◆尺寸Size: L1050×W680×H1350mm
- ◆功率Power: 5.4kW
- ◆灌装精度Filling accuracy: ±0.2g/100g
- ◆灌装桶容量Filling bucket capacity: 25L
- ◆气压: 0.6Mpa

- ◆ Applicable products: various products that need to be heated and filled:
- ◆Purpose: filling;
- ◆Process: material heating, stirring, automatic filling;
- ◆ Advantages: double-head double servo independent control, high filling accuracy, the material barrel can be automatically lifted, touch screen and PLC operating system control the automatic lifting of the barrel cover, Cooperate with the double-track separate control conveyor line to ensure the production rhythm.

#### 元器件信息 Key Components

- ◆伺服电机Servo motor: Inovance
- ◆调速电机Speed control Motor: Jingyan
- ◆光纤传感器Fiber optical sensor: Omron
- ◆电气元件Electrical components: SMC/Schneider Electric/Airtac
- ◆控制元件PLC Control PLC: Inovance

# 自动旋盖机 AUTOMATIC CAPPING MACHINE



### 功能Function

- ◆适用产品: 各类广口瓶
- ◆用途: 广口瓶旋盖
- ◆工序:自动供盖、预旋、终旋、自动不良剔除
- ◆优势:解决了广口瓶旋口、螺牙划伤、扭力不均匀的核心痛点
- ◆Product Application: Various wide-mouth bottles
- ◆Use: Screwing the caps of wide-mouth bottles
- Process: automatic cover supply, pre-spin, circumrotation, automatic defect removal
- Advantages: Solves the core pain points of wide-mouth bottle screwing, thread scratches, and uneven torque

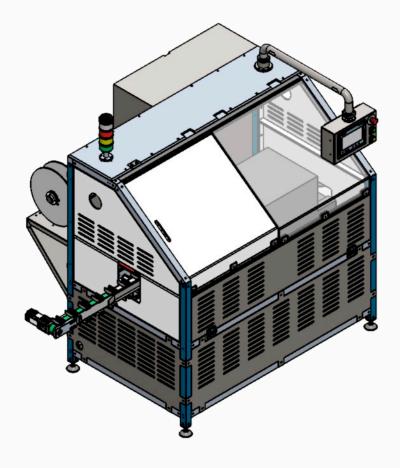
#### 机械特点 Technical Features

- ◆双头旋盖 Double-headed screw cap
- ◆操机人员Machine operator: 1人 one people
- ◆节拍Production capacity: 40-42pcs/min
- ◆电源Power supply: 220V50Hz
- ◆尺寸Size: L4000×W1650×H1650mm,台面高度750mm
- ◆功率Power: 3kW
- ◆气压Air pressure: 0.6Mpa

- ◆步进电机Stepper motor: Leisai
- ◆传感器Sensor: Keenzee
- ◆电气原件Electrical originals: SMC, Schneider, Yadke
- ◆控制元件PLC Control PLC: Inovance
- ◆伺服电机Servo motor: Inovance



# 自动套膜机 AUTOMATIC SLEEVING MACHINE



### 功能 Function

- ◆适用产品:各种圆形/方形口红/眉笔类产品
- ◆用途:产品套膜
- ◆工序:人工放管,自动套膜,自动切膜,自动热收缩
- ◆优势:可任意调整切膜尺寸;成品外观平整,无褶皱

### 机械特点 Technical Features

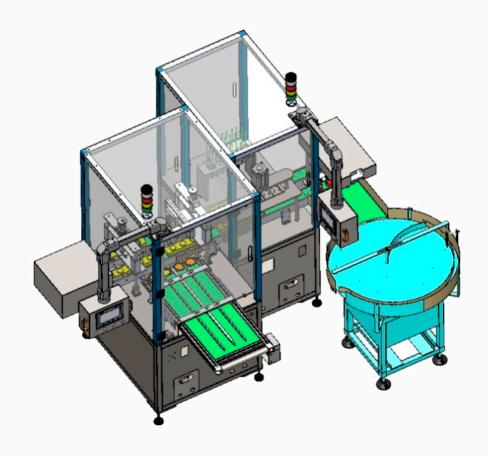
- ◆操作人员Number of operators: 1人 one people
- ◆节拍Production capacity: 40-45pcs/min
- ◆电源Power supply: 220V50Hz
- ◆尺寸Size: L2000×W1400×H1600mm
- ◆功率Power: 4.5kW
- ◆气压Air pressure: 0.6Mpa

- Applicable products: Various round/square lipstick/eyebrow pencil products
- ◆Purpose: Product mold set
- Process: manual tube placement, automatic film covering, automatic mold cutting, automatic thermal shrinkage
- ◆Advantages: The cutting film size can be adjusted arbitrarily; The finished product has a smooth appearance without wrinkles

### 元器件信息 Key Components

- ◆伺服电机Servo motor: Inovance
- ◆调速电机Speed control motor: Jingyan
- ◆双向喷气式收缩机Bidirectional jet shrinker: Domestic satsuki
- ◆光纤传感器Fiber optical sensor: Omron
- ◆电气元件Electrical components: SMC/Schneider Electric/Airtac
- ◆控制元件PLC Control PLC: Inovance

# 铝箔封口机 ALUMINUM FOIL SEALING MACHINE







### 功能Function

- ◆适用产品: 各类铝箔片封口产品
- ◆用涂: 铝箔封口
- ◆工序: 自动供料, 自动取铝箔, 自动烫压, 成品取出
- ◆优势:柔性高,适用性广,CNC高精度加工,可调节烫头温度 及烫压时间,保证密封性的同时避免铝箔表面烫伤,溢胶。
- Applicable products: Various types of aluminum foil sealing products
- ◆Purpose: Aluminum foil sealing
- Process: Automatic feeding, automatic aluminum foil retrieval, automatic hot pressing, finished product retrieval
- Advantages: High flexibility, wide applicability, CNC high precision machining, adjustable hot head temperature and hot pressing time, ensuring sealing while avoiding aluminum foil surface burns and glue overflow

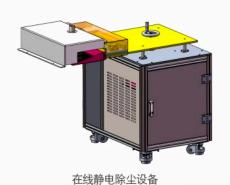
### 机械特点 Technical Features

- ◆四头封口 Four head sealing
- ◆操作人员Number of operators: 1人 one people
- ◆节拍Production capacity: 26-30pcs/min
- ◆电源Power supply: 220V/50Hz
- ◆功率Power: 3kW
- ◆气压Air pressure: 0.6Mpa
- ◆尺寸Size: L1000×W900×H17000mm

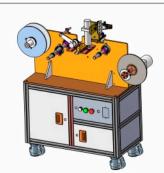
- ◆伺服电机Servo motor: Inovance
- ◆人机交互触摸屏HMI touchscreen: 10-inch Inovance
- ◆调速器Speed control motor: Taibang
- ◆传感器Sensor: Omoron
- ◆电气元件Electrical components: Schneider
- ◆控制元件PLC Control PLC: Inovance



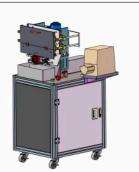
# 小单机设备系列 SMALL STAND-ALONE EQUIPMENT SERIES



Online electrostatic precipitator



标签回卷机 Label rewinder



卷包芯墨水灌装机 Roll core ink filling machine



笔芯挤出机 Refill extruder



在线镜盒点胶机 Online mirror box dispensing machine

# 自动化供料岛系列 AUTOMATED FEEDING ISLAND SERIES



自动化供料设备系列 Automatic feeding equipment series



自动化供料设备系列 Automatic feeding equipment series



自动化供料设备系列 Automatic feeding equipment series

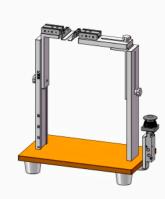


自动化供料设备系列 Automatic feeding equipment series

# 实验室设备 LABORATORY EQUIPMENT



压粉打样机 Pressed powder proofing machine



粉饼跌落测试台 Powder drop test bench



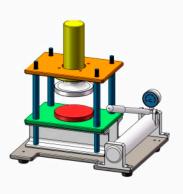
口红跌落测试机 Lipstick drop testing machine



镜盒跌落测试机 Mirror box drop test machine



湿粉压粉机 Wet powder pressing machine



半自动干粉打样机 Semi-automatic dry powder proofing machine



软管压爆测试机 Hose pressure explosion testing machine



高速粉碎机 High speed grinder



口红软模脱模机 Lipstick soft mold stripping machine



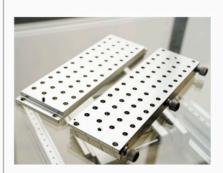
# 口红模具 LIPSTICK MOLD



口红正灌模具 Lipstick filling mold



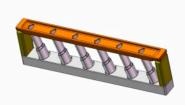
48穴口红模具 48-Hole lipstick mold



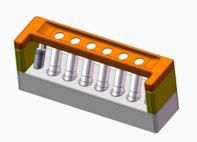
48穴口红模具 48-Hole lipstick mold



6孔倒灌口红模具 6-hole pour-over lipstick mold



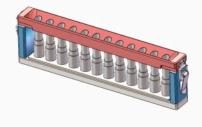
6孔正灌口红模具 6 hole filling lipstick mold



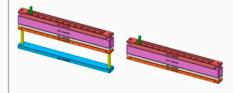
6孔正灌口红模具 6 hole filling lipstick mold



12孔倒灌口红模具 12-hole pour-over lipstick mold



12孔正灌口红模具 12 holes positive filling lipstick mold



12孔双色口红模具 12 hole two-color lipstick mold

# 硅胶模具 **SILICONE MOLD**



粉类硅胶模具 Powder silicone mold

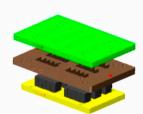


全硅胶口红模具 Full silicone lipstick mold



半硅胶口红模具 Semi silicone lipstick mold

# 压粉模具 **POWDER PRESSING MOLD**



压粉模具 Pressed powder mold





压粉模具(鱼鳞) Pressed powder mold (fish scales)



压粉模具(雪花) Pressed powder mold (snowflake)



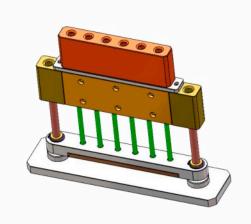


湿粉模具(完美日记) Wet Powder Mold (Perfect Diary)

# 笔类模具 **PENCIL MOLD**



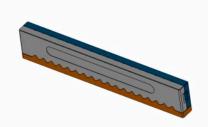
成型入芯一体模具 Forming core integrated mold



成型入芯一体模具 Forming core integrated mold



侧灌眉笔模具 Side filling eyebrow pencil mold

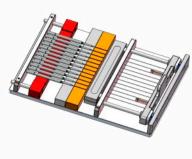


眉笔模具 Eyebrow pencil mold



眉笔灌装模具 Eyebrow pencil filling mold





入芯模具 Core mold



# 合作客户 **OUR CUSTOMERS**











用科技妆点美 38.39





























































用科技妆点美 (When technology meets beauty)这一Slogan体 现了乐虹科技的核心理念:以人为本,创新驱动,快速响应。 我们以此三大要素为行动指南,持续推动美妆行业的智能化发 展,致力于成为全球美妆智造领域的领航者。

The slogan "When technology meets beauty" embodies the core philosophy of Lehong Technology: people-oriented, innovationdriven, and quick response. We use these three elements as a guide to action, continue to promote the intelligent development of the beauty industry, and are committed to becoming a leader in the global intelligent manufacturing field of beauty.