STOCK CODE 688165

EFORT

Creating intelligent robot intelligently,
Liberating human productivity.

EFORT Intelligent Robot Co., Ltd.
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WWW.EFORT.COM.CN
VERSION：2025-V1.2

OFFICIAL ACCOUNT

STOCK CODE 688165

智造专家 埃夫特

Build NO.1 Industrial Robot Brand in China

Independent Development of Drive & Controller
Platform Robotic Products
Application Expertise

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Creating intelligent robot intelligently,
Liberating human productivity.

EFORT

COMPANY PROFILE

Vice chairman unit of
CMIF robot branch association

Undertake more than
30 national R&D projects

2007
EFORT was founded
Headquatered in Wuhu, Anhui Province China,2007

2020
Listed in SSE STAR Market

52,178W
Registered Capital

EFORT Intelligent Robot Co.,Ltd. a prominent high-tech company in the robotics industry, has been listed on the STAR Market since 2020. Ever since EFORT was founded, we have been committed to forward-looking strategic planning and relentless pursuit of core technologies. As a result, we have gradually became a well-known provider of robot solutions and intelligent manufacturing expertise in China. Our focus lies in developing a full range of robot products and offering cross-industry solutions for intelligent manufacturing. Through the integration of advanced global automation technology and experience, we have established a collaborative development model encompassing the entire industrial chain, which includes core robotic components, complete robot systems, and high-end robot system integration.

Based on the development and manufacturing of universal robots, EFORT provides solutions in many application fields including spraying, welding, palletizing, handling, loading and unloading. Those solutions are widely applied in diverse industries, including automotive, electronics, photovoltaics, lithium-ion batteries, metal products, furniture, household appliances, food and beverage. Our robots and solutions have made their presence across China and are exported to numerous countries and regions in Europe, Asia, Africa, and Oceania.

As EFORT expand our business globally, we are establishing local subsidiaries and branches in Asia, Europe, and America. By leveraging our access to global resources, we aim to assist our customers in enhancing their competitiveness.

EFORT is committed to becoming a world-class intelligent equipment provider. We held a number of robot core technology research centers around the world. We always insist on using robot technology to promote manufacturing innovation.The company serves as the leading enterprise in the national robotics industry chain, one of the first batch of “Little Giant” industrial enterprises in China with the characteristics of "SRDI(specialized,refinement,differential,innovation)", the vice chairman unit of the CMIF Robot Branch, a member unit of the National Robotics Standardization General Group, and one of the first batch of leading technology enterprises in Anhui Province. It has established multiple national and provincial-level or above research and development platforms, including the National Enterprise Technology Center for the Robotics Industry, the National-Local Joint Engineering Research Center, the National Postdoctoral Research Station, the Anhui Provincial Technology Innovation Center, and the Anhui Provincial Engineering Technology Research Center.

Since its establishment, EFORT has presided over and undertaken more than 30 national-level scientific and technological research projects in the field of robotics, including the Ministry of Science and Technology's 863 Program, the National Key Research and Development Program, and the National Science and Technology Major Special Projects. It holds over 400 patents of various types and has participated in the formulation of 26 national, industry, group and local standards in the robot industry, forming a comprehensive research and innovation capability.

As EFORT, we insist on the value proposition of “customer-centric”. We continuously strive to understand market demands and provide the best solutions for our customers. With a nationwide professional team and a 24/7 online customer service system, we are fully committed to help our customers to create enhanced value.

CORPORATE CULTURE

Mission and Vision
Creating intelligent robot intelligently,
Liberating human productivity.

Values
Customer-centric,
Striving oriented,
Commitment to continuous improvement.

Cultural Philosophy
Sincerity,Diligence,
Lean,Innovation,
Collaborative,Professional.

EFORT
GLOBAL PRESENCE

EFORT ROBOT FAMILIES

EFORT
INTELLIGENT MANUFACTURING EXPERT

「SCARA」 「MINI」 「SMALL PAYLOADS」 「MEDIUM PAYLOADS」 「EXPLOSION PROTECTION」 「LARGE PAYLOADS」 「PALLETIZING」 「WELDING」 「PAINTING」 「COLLABORATIVE」

CORE COMPETITIVENESS

• Core components - Autonomy

- EFORT and related parties have mastered the technology of three core components including robot controller, gear box and servo drive.
- The proportion of autonomous and domestic core parts of the robot is more than 95% so far, robot controller, servo drive, motion control core, MCU and power device are autonomous and controllable.

Robot Controller

Gear Box

Servo Drive

• Industrial Robot - Full Range

- Comprehensive portoflio including explosion-proof painting robots.
- Full range robots availibility for varies application.

General Industrial Robot

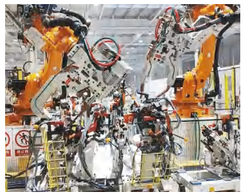
Welding Robot

Painting Robot

Cobot

• System Intergation Capacity - Multi Industries

- Shrink system integration business, retain system integration capabilities to empower partners to make good use of EFORT robots.



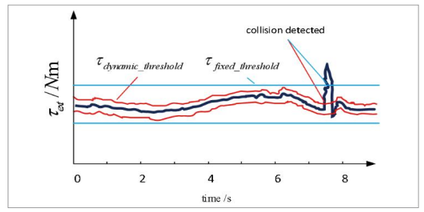
BIW line

Railway Cabinet Painting

KEY TECHNOLOGIES

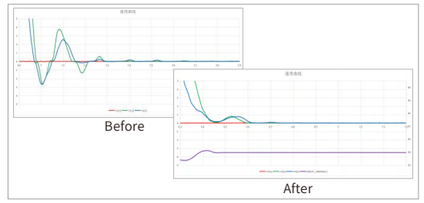
• Collision Detection

Based on the dynamics model of robot, collision sensitivity can be set freely according to the installation position of the robot, you can set to stop or back off after collision. It is better to protect human and machine.



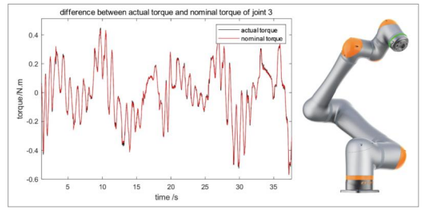
• Vibration Suppression

In grinding, gluing and metal cutting applications, robot need to run along the expected path accurately, accelerate and decelerate frequently, start and stop at high speed. These movements may easily cause the robot to virbrate. EFORT offers advanced technology to increase the rigidity of the robot and improve the low-speed vibration performance by optimizing the gearbox, driving schemes and mechanical structure of body.



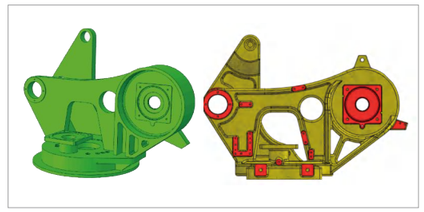
• Self-Teaching

The robot body adopts a pneumatic balance structure,coordinated with precise dynamics control,the weight torque of the arm can be dynamically balanced according to the position and posture of the robot,so that the robot arm can be easily dragged. While the operator drags the wrist of the robot to move, at the same time, the robot controller records the wrist movement trajectory in real time and saves it and automatically generates the program.Self-Teaching is a programming method that is very easy to learn, operators can handle that through simple training.



• High Stiffness of Manipulator

Thanks to the topology optimization method is used for all robots, we are able to improve the rigidity and safety factor of each component, at the same time reduce the weight. This technology makes the load-to-weight ratio more reasonable and gets better dynamic response.



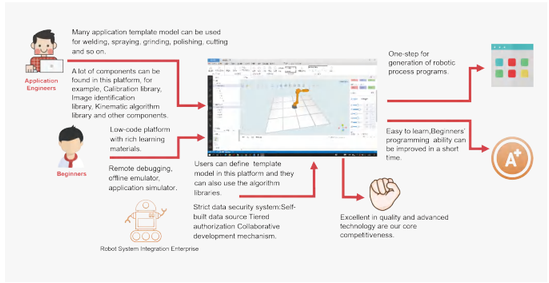
• Safety Zone Monitoring

In the production process, in order to avoid interference and collision when multiple robots are working together or when robots are working with other equipments,user can define the movement zone of TCP by monitoring the location relationship between TCP and the defined zones to control the robot to move or stop.Through configuring the parameter and type of the zone, two or more robots can work at the same station. According to the actual working conditions, the types of the zone include prohibited zone, stop zone, sharing zone and signal sharing zone.

APPLICATION SOFTWARE

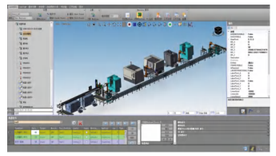
• MoDou-IDE (Integrated Development Environment)

MoDou-IDE is an integrated development platform specifically designed to develop robotics applications and solutions based on EFORT high-performance controllers, which can help you to improve your development productivity and build your core competitiveness in technology.
Firstly, it provides an unified development platform, including a large number of development resource database and development components.
Secondly, lots of development programs can be used in this platform, including functional packages, process packages, operation and control algorithms, vision algorithms and so on.
Thirdly, MoDou not only allows offline programming of robot applications and simulation, but also the online function of debugging.
Fourthly, based on the template center, users can quickly build their own applications and solutions, and also gain development technical experience in process.



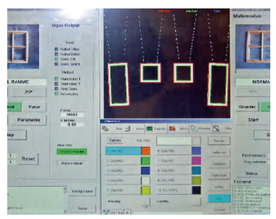
• ER_Factory

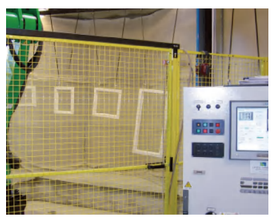
ER_Factory is a 3D robotic simulation programming software developed and owned independtly by EFORT ,which can help programmers ensuring the track accuracy process requirements in the commision-ing site.ER_Factory allows calculating robot motion trajectory by surface curve features to ensure the track accuracy requirements, which can be applied to vareity of processes including handling, palletizing, painting, milling processing, polishing, grinding, engraving, laser cutting, spot welding, arc welding, etc. Strong postposition functions of ER_Factory enables offline program creation of domestic and foreign mainstream robot products; and it could be applied to simulation verification and virtual debugging of production process of automated production line, providing feasible solutions for customers.



• AxPS Automation Door/Window Painting System

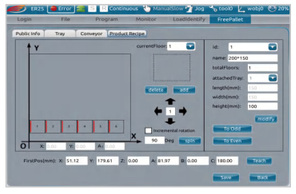
AxPS is an automatic trajectory generation system integrated with machine vision.There is a scanning device at the front of the painting area to generate 2D or 3D data of the workpiece and send data to the robot. After receiving information, the robot controller automatically generates the robot program according to the pre-setted spraying process parameters. This system greatly reduces the programming time and difficulty, thus improves the production efficiency.





• Palletizing Process Software

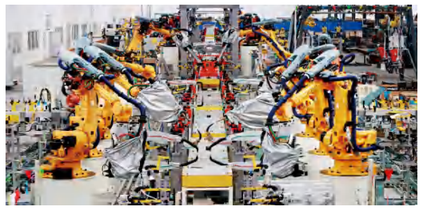
EFORT palletizing robot is equipped with palletizing Process Software Package,which includes three parts: basic settings, process settings and production monitoring. This package can support up to 4 lines and 4 pallets at the same time with each pallet can support up to 50 product with different specifications.It allows palletize type custom manual drag-and-drop Settings, easily to operate. Palletizing package provides a rich function call interface, and users can achieve multi-product multi-palletizing robot intelligent by simple programming.



INDUSTRIES AND APLLICATIONS

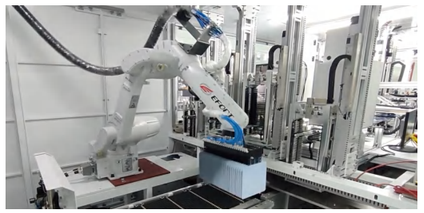
• Automotive

EFORT has more than 10 years of experience in the field of automotive and auto parts, familiar with automotive stamping, welding, painting, final assembly process, and has rich experience in the application of multi-robot collaborative operation in the automotive production line. In the automatic welding process of body in white, EFORT independent research and development technology is used to complete the multi-machine cooperation from the three major parts of the bottom plate, side wall, top cover, door cover upper part, gluing, positioning welding,repair welding, total assembly, roll edge process, to achieve flexible production of multi-vehicle models.



• Photovoltaic (PV)

EFORT uses ER15, ER20, ER25, ER35, ER50, ER130, ER180, ER210 series products,doing flower basket loading and unloading and insert applications in the photovoltaic industry battery piece of cloth with soft nap, diffusion, thermal oxidation, alkali and annealing; processsing glass feeding, strip junction box coating, curing, grading and other process applications in the compoent end. Our products are equipped with industry customized software process package. They are easy to operate and use, can improve the degree of automatic production and productivity.



• Electronics

EFORT is committed to providing superior robot application solutions and helping the electronics manufacturers achieve better automation and intelligence evolution. In the electronics industry, EFORT has developed a series of articulated industrial robots with strong exclusive electronics industry focus, which can be applied to single-station, double-station and multi-station scenarios. The products are characterized by fast speed, good reliability, high protection level and good usability,which help customers to improve operation speed, reduce design and debugging time, and further achieve cost reduction and efficiency.

• Ceramic

EFORT deeply cultivates the ceramic industry, launches special robots for spraying glaze applications, and is widely used in ceramic leading enterprises. The special robot with the unpowered articulated arm solves the problem of slow and difficult traditional display teaching. The IP level of robot body and control cabinet is greatly improved to fit the harsh working environment of ceramic spraying process.It is suitable for typical applications in the ceramic industry including glaze spraying, blank forming, grinding, handling, palletizing,etc.EFORT can provide complete application solutions for all these scenarios.

• Lithium Battery

EFORT intensively researches the use of robots in the application scenarios of the lithium battery industry. Based on the in-depth research on the manufacturing process of power batteries, consumer batteries and energy storage batteries, EFORT launched full-size SCARA series robots and the full-load six-axis robot product matrix, with the payload covering 3kg to 300kg. By integrating core processes such as stacking, baking, material transfering, plasma cleaning, gluing, laser welding, fastening assembly and quality inspection, EFORT robots achieve high flexibility, high precision and high beat performance, while taking into account ease of use and stability, fully meet the stringent requirements of lithium battery production.

Palletizing

EFORT has a variety of small, medium and large payload palletizing models, with high-speed intelligent palletizing, loading and unloading functions. Our standard intelligent universal palletizing process package can be customized refractory brick and ceramic industry special palletizing package, with visual interface, easy programming and other characteristics.The palletizing scene can be simulated easily on computer by ER-Factory App and customized on IDE platform.Our palletizing robots are widely used in all kinds of occupations to meet the palletizing needs of food, beverage, feed, fertilizer, building materials, metal products, household appliances and other different products in the form of bags, boxes, barrels, bottles and etc. They can improve the efficiency of the production line with high productivity and safety level.

1

Grinding

Special wrist structure and high protection can satisfy deburring and grinding applications of the hardware, castings,electronic manufacturing parts, bathroom and auto parts and other products. The use of intelligent grinding process package and offline simulation software automatically generating complex surface trajectory and processing parameters adjustment can achieve fast speculative production, strong impact resistance and greatly shorten the product switching adjustment cycle. It improves the efficiency and repeatability of robot applications.

2

Handling

With the functions of safe area monitoring, production line tracking, visual positioning and collision detection, it provides a reliable, safe and efficient solution for the automatic handling of materials.

3

Painting

With unique patented technology, it can satisfy the different needs of customers. Self teaching,only one person can complete all the actions of demonstration.In practical application, the speed of the robot can be adjusted to improve the production efficiency. Point-to-point online programming, demostrates manually and records positions and actions.It can not only set special spraying parameters for different workpieces but also spray different workpieces. Our technology supports offline programming, we don’ t need to stop the operation of the robot while programming. The automatic trajectory generation system integrated with the vision system can significantly reduce the time required for programming. Professional technical ability enables products involved in the more and more fields..

4

Welding

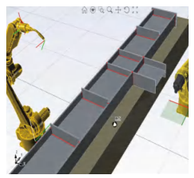
Arc Welding Robot Station

We have a variety of models to choose from, with beautiful appearance, compact structure, smooth operation and other characteristics; Industry-leading arc welding feature packs including:Arc tracking, contact locating, laser tracking, intermittent welding, user-defined arc swing file and other features. The operation interface is high close to Chinese and easy to use, greatly reduce the learning cost of robot operation. It’ s convenient for every customer to use. Support for varies communication protocol，and can be freely matched with robot,welding power supply, arc welding function package and other components, as well as auxiliary equipment such as gun cleaning station and positioner, which can meet more kinds of welding needs, thereby improving production efficiency and improving economic benefits. It is now widely used in a variety of industries including E-bike,fitness equipment, steel structure, shipbuilding, auto parts,etc.

Smart Welding System for Non-standard Parts

For the unique requirements of non-standard parts welding, Smart Welding system offer the possibility to integrates vision, laser, simulation programming, welding process and other technologies to achieve automatic welding without manual teaching and instruction. System obtains welding seam information with vision or inputting 3D model of components, automatically generates welding process. The system automatically corrects deflection with laser scanning, then generates welding trajectory. The robot can be equiped with line moving aux axis, gantry and other equipment to extend the operating range to work on large size objects.The Smart Welding system also can be connected with MES system to achieve data transferring. The Smart Welding system can be widely used for steel structure, bridge, shipbuilding, elevator, heavy industry, etc.

5



Stamping

EFORT developed a cost-effective robot for the stamping industry with forward engineering.It has some practical features just like soft PLC graphical guided interface, hot-swappable demonstrator,sensitive collision detection, automatic stop for unintended collision,autonomous safety area detection and stamping process package. It is not only easy to operate but also ensuring Human-Machine Safety.Supporting ModbusTCP and ProfibusDP and easy integration by built-in air pipe and I/O interface.

6

EFORT ROBOT COLLEGE

- **EFORT robot college provides customers with a complete curriculum system and decent training on robots to help customers improve the professional skills of talent teams.**

Excellent Training Facilities

A Complete Curriculum System

Enterprise Customized Training

AFTER-SALES TECHNICAL SERVICE

- **7×24 hours online customer service system, we have professional after-sales technical service team all over the country, to provide customers with a full range of professional support and service.**

01

Service Purpose

Ultimate service, attentive service concept.

02

Service Time

7×24.

03

Global Service Team

All customer regions presence.

04

Industry Know-how

Knowledge for various industries.

05

Serivce Dimensions

Onsite Service +
Online service +
Training + Spare Parts.

06

Quick Response

Spare parts regionalization
+ special service.

07

Channel Empowerment

Robot training
+ competency certification.

BUSINESS PARTNER

- **Customers are widely distributed, including the world's top 500 and internationally renowned enterprises in photovoltaic, lithium battery, automobile, rail transit, aerospace and other subsectors.**

- Auto -

- Electric Manufacturing -

- Photovoltaic -

- Lithium -

- Bathroom, Furniture, Other General Industries -

EFORT

Scan the code to get the electronic version.