PRECISION
ENGINEERING TECHNOLOGIES

PERFORMANCE ADVANCED COBOT

Enhancing Flexibility and Efficiency

Empower your workspace with our cobots that automate nearly any task, freeing you to excel at what truly matters: creating, collaborating, and achieving greatness.

Engineered for your success

www.petechglobal.com

Intelligent-Precise-Versatile

The Performance Advanced Cobot (PAC) is a high-end industrial collaborative robot that integrates autonomous driving technology and Industry 4.0 standards. With advanced environment mapping, autonomous path planning, intelligent obstacle avoidance, environment and object recognition, as well as voice control technology, PAC Series can easily complete various tasks, including object handling, grasping, assembly, machine tending, etc. This robot is widely used in flexible Smart Manufacturing, Lab Testing, Inspection, Material Sorting and other scenarios, helping enterprises improve production efficiency and achieve intelligent transformation and upgrading.

Precise

±0.05mm
Highest Repeat Positioning Accuracy

±0.13mm
3D Vision Spatial Compensation Accuracy

Original Factory Integration, Complete Technology Independence

Mobile base and arm, visual sensors are all developed by Li-Gong, using the same controller for control, different from other integrated assemblies and multiple controllers, achieving seamless connection and high integration.

Performance Advanced Cobot **530**

Performance Advanced Cobot **520**

Performance Advanced Cobot **210**

Performance Advanced Cobot **205**

Extensive Application Scenarios

Loading & Unloading

Material Handling

Palletizing

Assembly

Experimental Operation

Intelligent

TOS Operating System

Integrates the original four independent modules into one harmonized controling system.
Hand (robotic arm), Foot (AMR), Eye (vision), Brain (AI)

Data Interconnection with other production equipments

Resolve the problem of data/information isolation

Autonomous Navigation

Actively avoiding obstacles and optimize path planning in real time

Easy

3 steps to add a new task

- Create Map
- Mark Points
- Add to Mission Queue

5 minutes to create a complex job

2 sets of logical judgement + 8 actions

30 minutes to master operation

Hand-base Collaboration Graphical Programming

0-code graphical construction tasks

Users can quickly create and adjustthe program and tasks of the robot armand base without writing code,reducing the learning difficulty andimproving the efficiency of use.

Voice Commands Remote Control

Cross-space, remote voice control, understanding natural language, and executing tasks through voice commands.

Safe

Human-Robot collaboration
Safe and Controllable

Passed TÜV and SGS safety certification, ensuring the safety and stability of the robot

Convenient

Various Interfaces
Strong Extensibility

Provide multiple IO interfaces and various communication protocols, making it easy for developers to quickly develop customized applications to meet various operation needs.

Seamless Battery
Replacement Continous Endurance

After choosing the battery kit, Performance Advanced Cobot can replace the battery without powering off and hot starting, improving the robot's work efficiency

Performance
Advanced Cobot

The PAC Series is a kind of collaborative industrial robot which can be widely used in machine tool loading and unloading, assembly, stacking, handling, welding and other applications. It has different load capacities of **5~32kg** and the working radius can reach **1600mm.** It is an ideal tool to help manufacturing users reduce costs and increase efficiency.

Performance Advanced Cobot **5Kg**

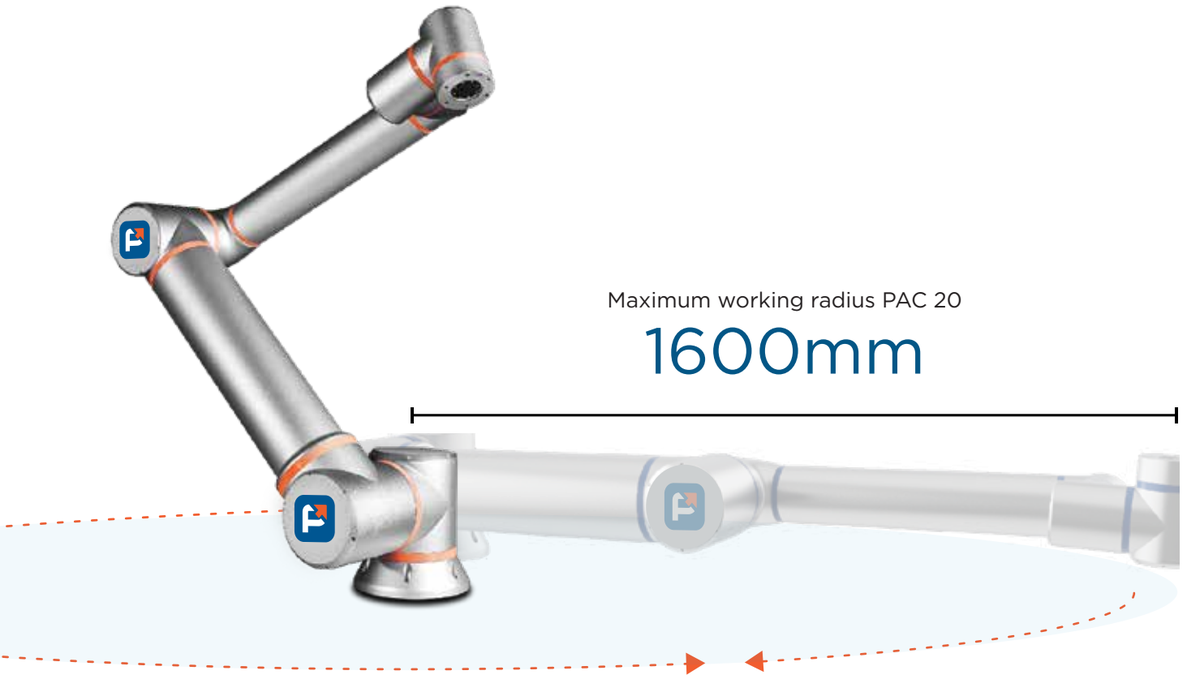
Performance Advanced Cobot **10Kg**

Performance Advanced Cobot **20Kg**

Performance Advanced Cobot **32Kg**

Safe & Reliable

The product has passed EN ISO 13849-1 2015(PL = d, CAT 3) and EU CE certification, and supports level 10 collision detectionand sensor safety detection without safety protection.



High Protection Reqirements

Accurate & Stable

Repeated positioning accuracy can reach **±0.02mm** Can work continuously and with high precision for a long time

Easy to Use

0 code programming,
full graphical interaction

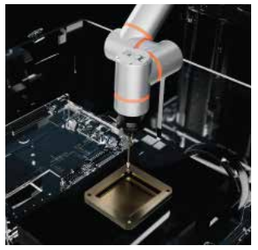
Widely Used

Stacking

Loading & Unloading

Polishing

Painting



Assembly

Welding

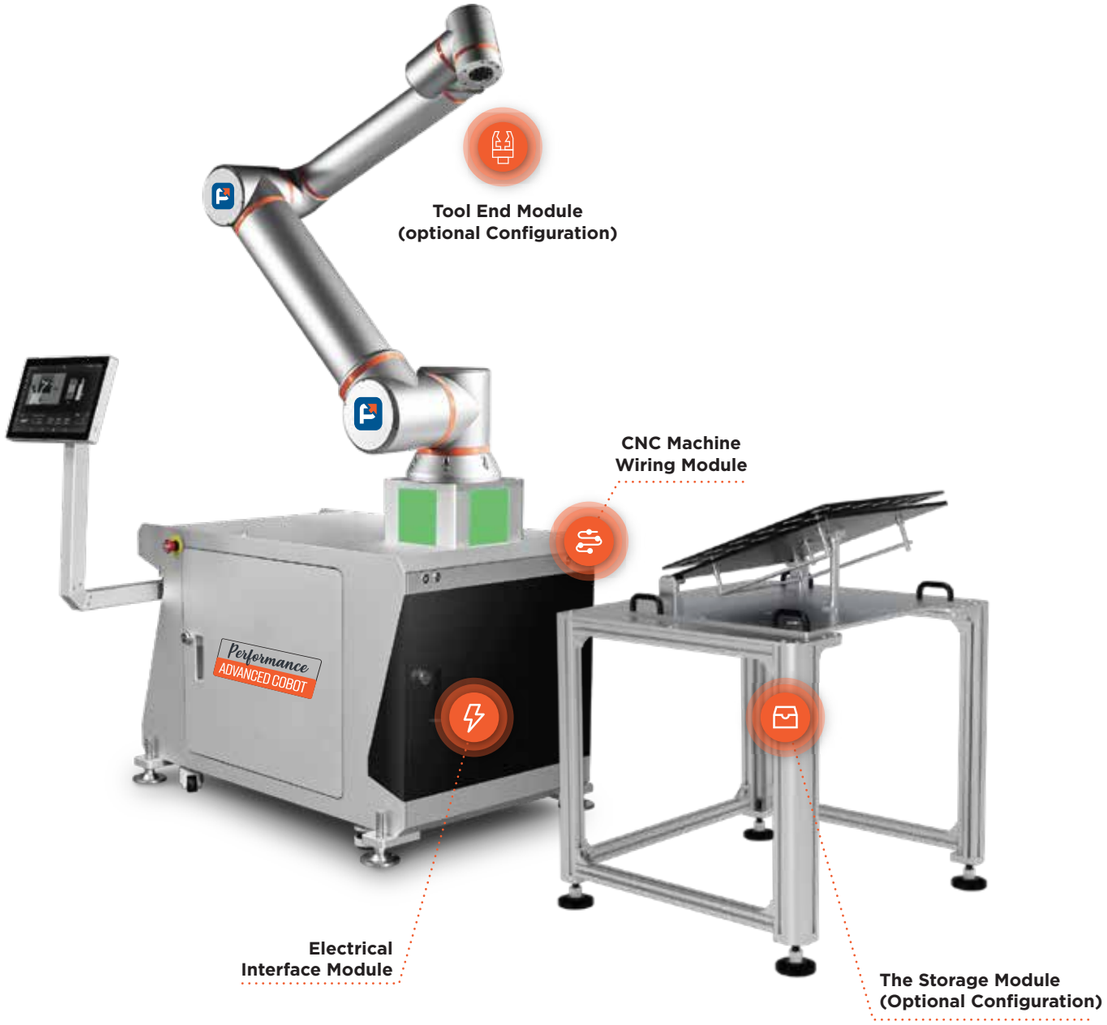
Experimental Operation

Machine Tending Robot

The PAC Series Machine Tending Robot is compatible with various types of CNC milling machines with three, four, or five axes, as well as various lathes, EDM machines, and CMM machines.

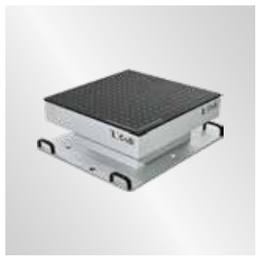
Safe & Reliable

CE certificationSafe human-machine collaboration



Wide Applicability

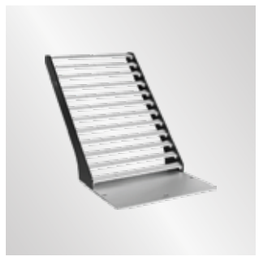
Modular design; Multiple dockers; Meet the processing needs of different part shapes



Gotron

Zerotron

Chesstron



Laddertron

Supporting A Wide Range of Applications

Compatible with different brands and types of production equipments

PAC Series Machine Tending Robot 20

PAC Series Machine Tending Robot 30

Complete

Clamping Solutuion

Providing workpiece clamping products and robots' end-of-arm tooling. Non-standard custom clamping design services are also offered to meet special process requirements.

End-of-arm Tooling for Robots

In-machine Tooling and Clamping System

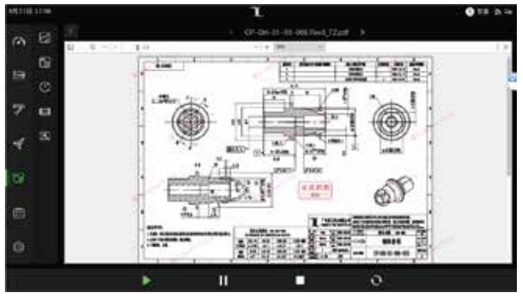
Real-time Reporting

Real-time collection and aggregation of production data for visualized data management

Easy

XOS Operating System

Graphical interaction for easy entry-level operation; Input product information and start production with one click



Drawing and Process Viewing

Drawings and process files can be check online through the XOS human-machine control system

Ai Capability

Utilizes computer vision, deep learning, various optimization algorithms, and model libraries for workpiece and process recognition and management

Efficient

1min
Product Changeover

15mins
Redeploy

120mins
Training

Fast Deployment

Finish deployment andtraining on-site within 2 days

Quick Response

Remote technical support,efficient operation and maintenance

ENGINEERED FOR YOUR SUCCESS

PRECISION
ENGINEERING TECHNOLOGIES
A Group Company of Phillips Machine Tools

Precision Engineering Technologies India Private Limited
Building no. 126, Hi-Tech Defense & Aerospace Park,
Jalahobli, Bangalore - 560061, Karnataka, India.
support.in@petechglobal.com | www.petechglobal.com