



# CRA Series Cobot

**Redefine Cobot**

# About Dobot

## No.1 Global Lightweight Cobot Exporter

Founded In 2015 Dobot Created

**The World's First Desktop Grade  
Collaborative Robot**

Customers from 15+ Industries including

**Consumer Electronics, Automotive,  
Metal Processing**

First To Offer

**Product Lineup Covering  
0.5 To 20 kg Payloads**

Sold Over 68,000 Lightweight Collaborative Robots To

**140 Countries And Regions  
With 350+ Distribution Partners**

CR, CRS, MG400, M1 Pro, Nova, Magician

**6 Main Product Lines  
With Over 10 Collaborative Robot Models**

5 Years In A Row

**No.1 Chinese Industrial  
Robot Exporter**

# Production Base

## Advanced Automated Production Lines

The Dobot production base covers a total area of 13 acres with **10 world class production lines** capable of producing **100,000 units** per year. Operation began in January 2022 and has consistently delivered reliable robots all over the world.



# 5 Industry Leading Core Technology

## Safe Operation



### SafeSkin

- 15 cm pre-sensing distance
- The only robotic arm in China with automatic avoidance
- Collaboration efficiency: 1 m/s > national standard 0.25 m/s

## Easy to Use



### Smart Interactive Panel

- Drag-and drop, graphical programming
- Full platform operating terminal coverage
- Takes only 10 minutes to familiarize

## Flexible & Smart



### AI Control

- 3D visual deep learning
- Adaptive force control technology
- Flexible response to production uncertainty

## Accurate Control



### High-Performance Motion Control

- Full parameter calibration technology
- Dynamically optimal control algorithms
- Vibration suppression algorithms

## Quick Deployment

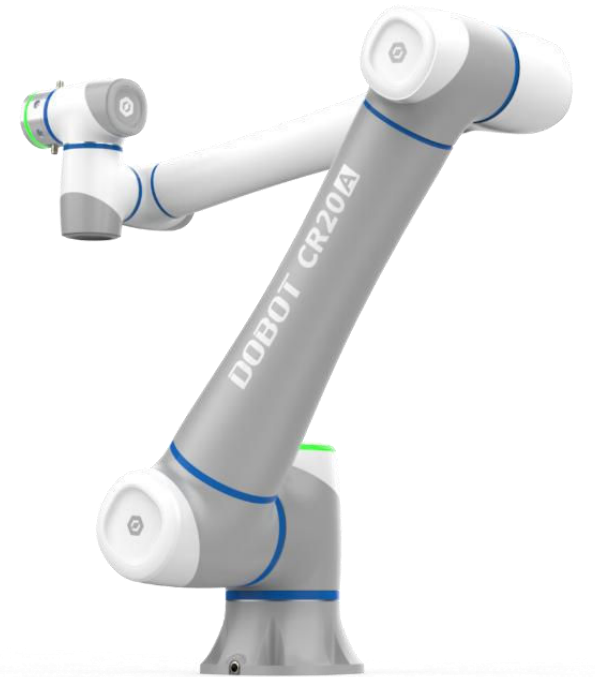
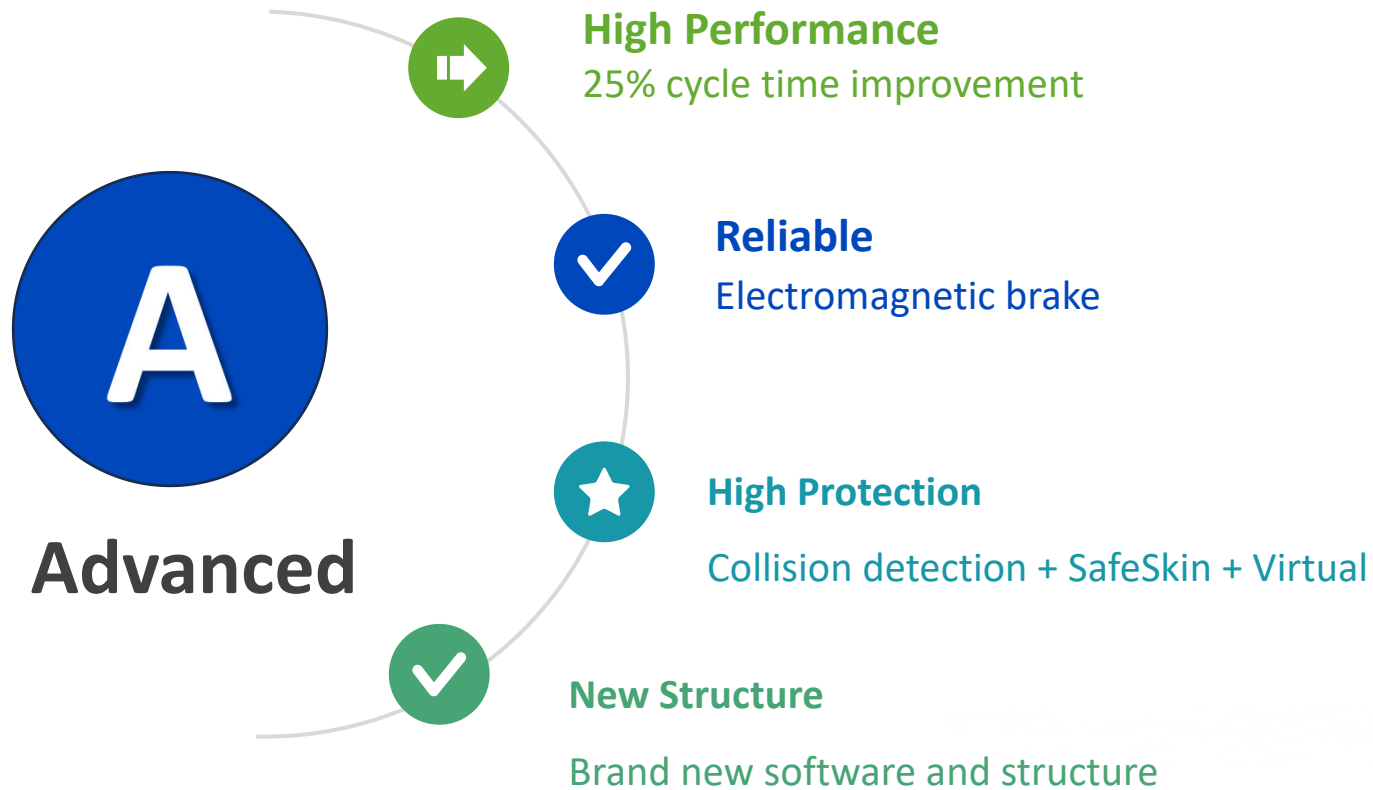


### Secondary Development

- Adaptation to 100+ accessories
- Process packages for screwdriving, welding, palletizing applications
- SDK supports 11 mainstream development software

# CRA Series

## Fully Enhanced New Generation



## CRA Series – Product Features

- High performance harmonic reducer
- Highly integrated joints  
25% cycle time improvement



# CRA Series – Product Features

- 18 ms instant activation
  - Falls <1 mm at power outage
- No displacement at emergency stop and power on/off



# CRA Series – Product Features

- Collision detection + SafeSkin + Virtual boundaries for multiple layers of safety.
- Dual CPUs monitor robot's position, speed and safety I/O and more.



# CRA Series – Product Features

## Rich Interfaces & Flexible Expansion

- Supports Modbus, Ethernet/IP and Profinet industrial Ethernet communication.
- Supports direct connection to industrial PCs, PLCs, HMIs and other industrial automation systems.
- 24 PNP/NPN general-purpose IOs for flexible expansion



# CRA Series – Product Features

## IP54 Rated Control Box

- 25% smaller in volume
- Enhanced exterior with IP54 rated for harsh environments



# CRA Series – System Software

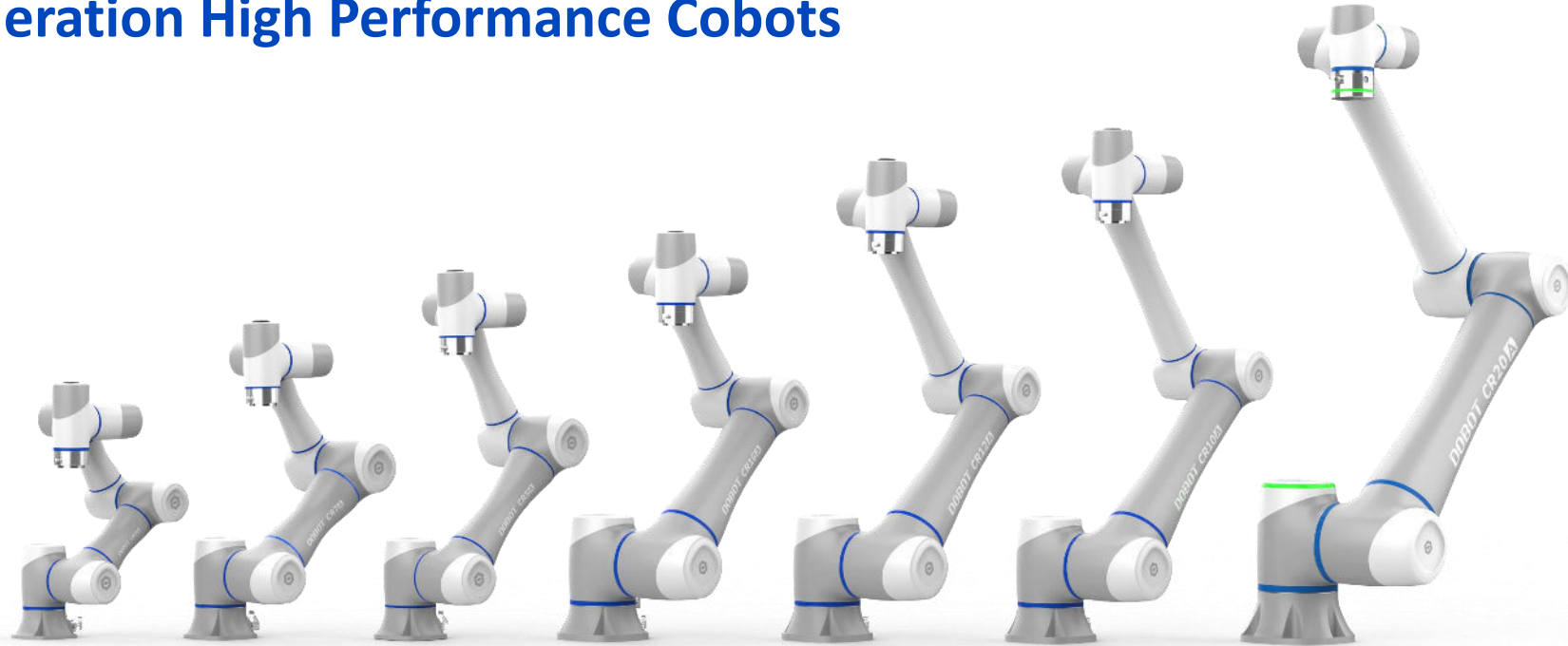
## New Structure for Simplistic User Experience

- New UI design, reasonable layout and more convenient operation.
- New virtual simulation environment function, debugging is intuitive and easy to use.
- Provide graphical programming and script programming for different needs.
- Support PC, tablet, smartphone, teaching pendant and other terminal operations.



# CRA Series

## New Generation High Performance Cobots



**CR3A**

**CR7A**

**CR5A**

**CR16A**

**CR12A**

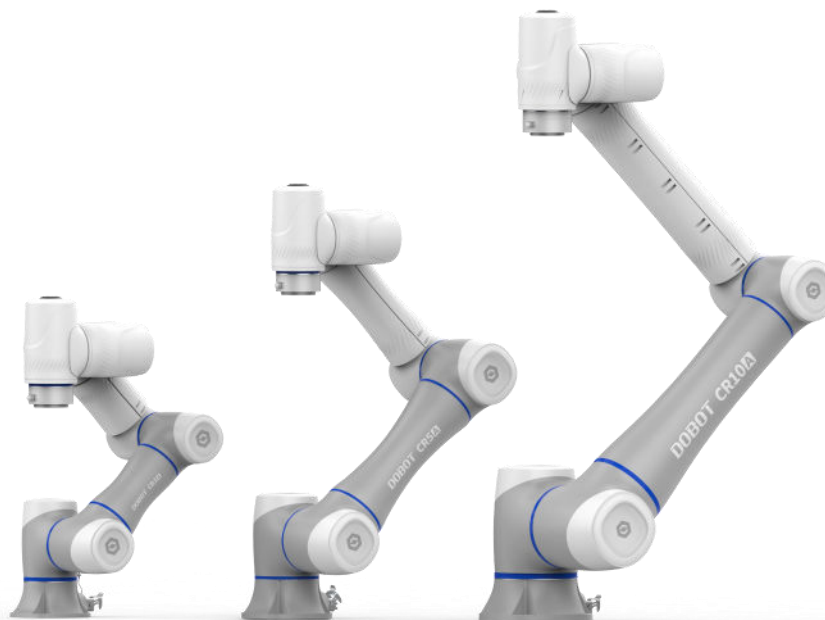
**CR10A**

**CR20A**

<b>Repeatability</b>	±0.02 mm	±0.02 mm	±0.02 mm	±0.03 mm	±0.03 mm	±0.03 mm	±0.05 mm
<b>Maximum Speed</b>	2 m/s	2 m/s	2 m/s	2 m/s	2 m/s	2 m/s	2 m/s
<b>Working Radius</b>	620 mm	800 mm	900 mm	1000 mm	1200 mm	1300 mm	1700 mm
<b>Payload</b>	3 kg	7 kg	5 kg	16 kg	12 kg	10 kg	20 kg

# CRAS Series

Takes Care of Safety & Efficiency with SafeSkin Pre-collision Detection



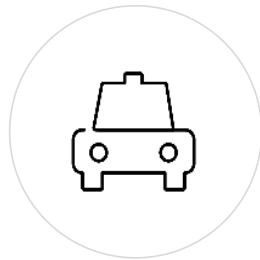
	CR3AS	CR5AS	CR10AS
<b>Repeatability</b>	±0.02 mm	±0.02 mm	±0.02 mm
<b>Maximum Speed</b>	2 m/s	2 m/s	2 m/s
<b>Working Radius</b>	620 mm	900 mm	1300 mm
<b>Payload</b>	3 kg	5 kg	10 kg

# Industries & Applications

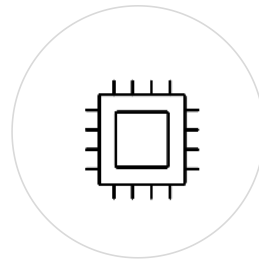
Dobot robots are compatible with a wide range of ecosystem accessories and easy-to-use process packages, which are widely used in scenarios such as **loading and unloading, sorting, handling, polishing, gluing, inspection, welding, palletizing and screwdriving**. Helping customers from various industries to quickly integrate and efficiently introduce them into production.



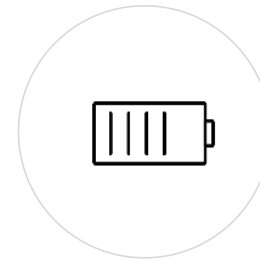
Consumer Electronics



Automotive



Semiconductor



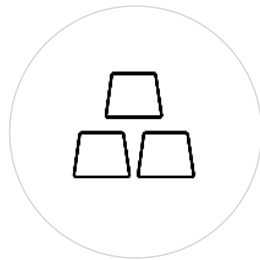
Renewable Energy



Home Appliance



Food Packaging



Metal Processing



Plastics



Healthcare & Cosmetics



Retail

# Automotive

## Industry Challenges:

- Assembling parts still relies heavily on manual labor. It is costly and inefficient, quality cannot be guaranteed.
- Small batch and varied production demand is urgent, where traditional automation struggles to meet the requirements.

## Product Features:

- ✓ CRA Series has a maximum payload of 20 kg which can transport large automotive workpieces.
- ✓ 1700 mm working radius for various tasks such as transporting vehicle doors and windshield.
- ✓ Flexible deployment allows varied production.
- ✓ Easy to use, low maintenance cost as no professional technicians are needed.

## Solutions

Body polishing, engine assembly, paint inspection, car light screwdriving, glass gluing, handling and palletizing.



Car Spoiler Polishing



Gearbox Screwdriving



Dashboard Cutting



Joint Seal Loading & Unloading

# Consumer Electronics

## Industry Challenges:

- Electronic products require a high precision, manual labor struggles to achieve consistency and efficiency requirements.
- Traditional automation is costly, occupies a large space, and lack of flexibility, not conducive to the later transformation.

## Product Features:

- ✓ CRA Series has a repeatability of  $\pm 0.02$  mm for small parts assembly.
- ✓ High cycle time allows improvement in efficiency in loading & unloading.
- ✓ Small footprint with flexible deployment allows varied production.
- ✓ Easy to use, low maintenance cost as no professional technicians are needed.

## Solutions:

Laptop screwdriving, PCB board handling, component testing, military cell phone gluing, PCBA insertion, sorting and loading, PCB soldering.



Laptop Computer  
Screwdriving



PCB Board Assembly  
Line Handling



Inspection on Electronic Parts



Military Cell Phone  
Gluing

# Metal Processing

## Industry Challenges:

- Manual loading & unloading means low efficiency with high labor cost.
- Repetitive and labor intensive work with safety hazards

Traditional automation is difficult to deploy with a low utilization rate.

## Product Features:

- ✓ CRA Series has a maximum payload of 20 kg which can complete loading & unloading of large workpieces.
- ✓ IP54 control box protects against water and dust in harsh industrial environment.
- ✓ Can be combined with AGV to realize multi-machine flexible operation mode.
- ✓ Easy to use, low maintenance cost as no professional technicians are needed.

## Solutions:

AGV CNC Loading & Unloading, hydraulic parts and loading & unloading, bearing processing lathe loading & unloading and lock cylinder processing loading & unloading.



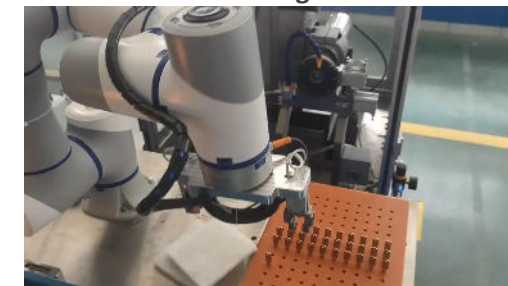
AGV CNC Loading & Unloading



Hydraulic parts and Loading & Unloading



Bearing Processing Lathe Loading & Unloading



Lock Cylinder Processing Loading & Unloading

# Partners

Dobot serves more than 200,000 customers, covering various industries such as consumer electronics, automotive, semiconductor, chemical, medical, metal processing, food and beverage, and new retail.

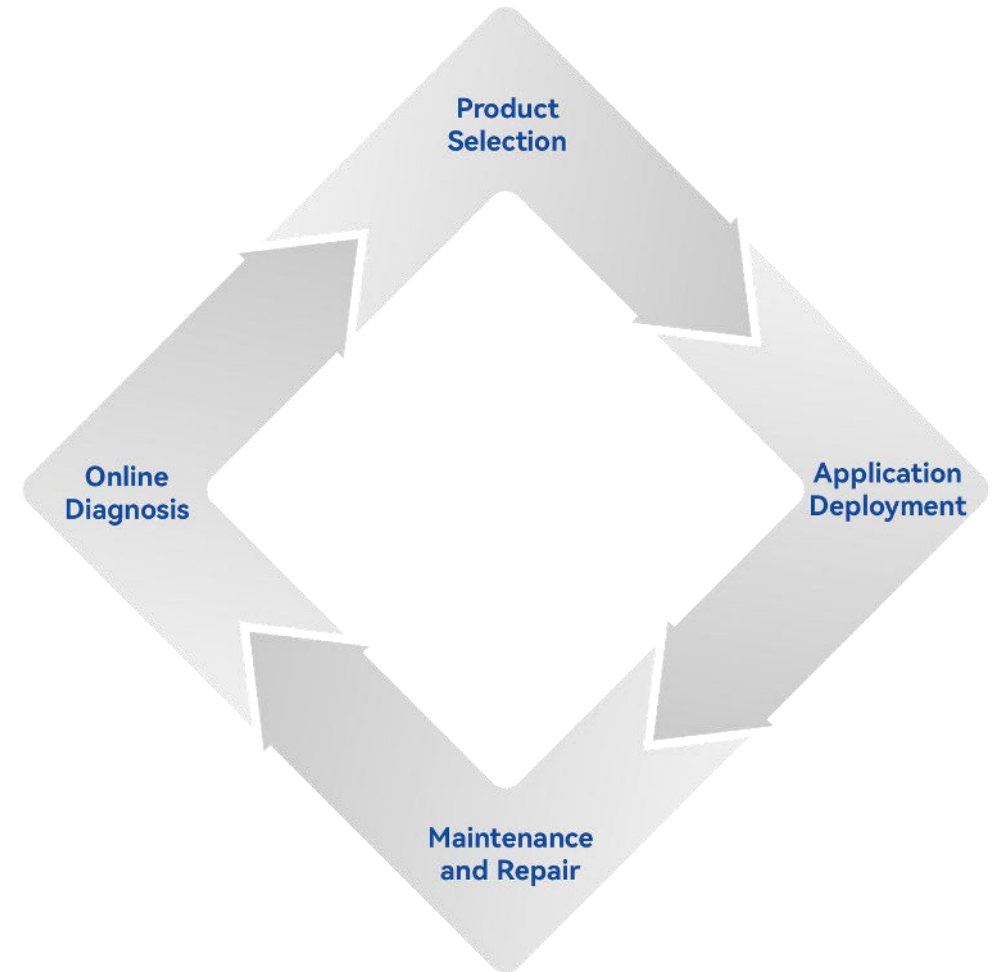
 Volkswagen	 BMW	 PORSCHE	 TOYOTA	 BYD	 Valeo 法雷奥	 RENAULT
 FOTON 福田汽车	 上汽通用五菱 SGMW	 OMRON	 MinebeaMitsumi Passion to Create Value through Difference	 Honeywell	 Johnson Controls	 Jatco
 FOXCONN	 Goertek®	 LUXSHARE ICT 立讯精密	 LEMS 蓝思科技	 WINGTECH	 KYOCERA	 JABIL
 FUJITSU	 DENSO	 APC Legendary Reliability™	 BECKHOFF	 SAMSUNG	 Panasonic	 SONY
 HUAWEI	 oppo	 LG	 Midea®	 Haier	 Hisense	 SKYWORTH
 Nestlé	 BOSE	 swatch+	 Google	 Alibaba Group	 Tencent 腾讯	 mi xiaomi

# Service & Support

## Service Guarantees

Dobot offers a complete product life cycle support which includes robot model selection, application deployment, maintenance, repair, and online diagnosis. Our experts are here to ensure you get the most out of Dobot robots.

- 7 x 24 support
- Complete product life cycle service, from product selection to maintenance
- Online and offline training and on-site support
- 12 months standard warranty, extendable up to 5 years
- Robot replacement to minimize downtime
- Remote monitoring and diagnosis



## Distributor Training

We provide advanced training courses from beginner to advanced to help customers systematically understand the operation principle, usage and maintenance of robots. Upon completion of the training, students who passed the assessment will be awarded the Customer Service Engineer Competency Certification and Training Certificate.

### Onsite Training

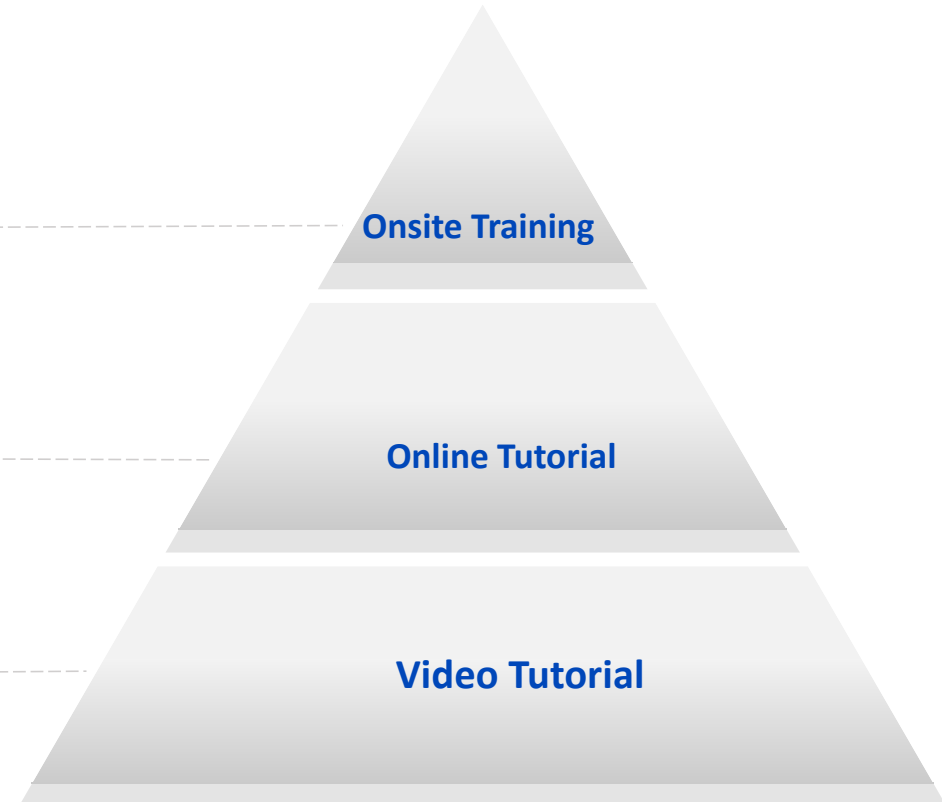
Core theory with practical training allows learners to understand thoroughly about robotics professional application skills.

### Online Tutorial

Senior lecturer share in-depth knowledge of robot industry applications.

### Video Tutorial

Learn the basic operation of collaborative robots from scratch.






# Thank you.



 [www.dobot-robots.com](http://www.dobot-robots.com)

 [sales@dobot-robots.com](mailto:sales@dobot-robots.com)

 [linkedin.com/company/dobot-industry](https://www.linkedin.com/company/dobot-industry)

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