

#### **Company Profile**

# **Universal Robots A/S**

### **Short profile**

Universal Robots is working towards making robot technology accessible to all. The Danish company has taken the global market by storm with unique industrial robots that optimize production in all industries. By offering a user-friendly, affordable robot, Universal Robots lowers the automation barrier enabling automation in areas previously considered too complex or costly.

### **Corporate values**

- The highest priority of Universal Robots is 2X value creation. All decisions and all employees are responsible for creating financial value for our customers and UR.
- Universal Robots puts control of factory automation back into the hands of operators.
- Universal Robots is committed to being the global authority on easily programmable, safe and flexible industrial robots.
- Universal Robots strives to make distributors successful. And chooses and supports distributors who are willing to build partnerships based on mutual gain.
- Universal Robots facilitates the development and sharing of robotic applications.
- Universal Robots attracts and rewards performance-driven employees who can share a passion for building a globally admired company.
- Universal Robots thinks globally when taking decisions while making adjustments to meet local differences and cultures.
- As a global company, Universal Robots proactively share information with colleagues who will benefit from our knowledge and experiences.

Website: www.Universal-Robots.com

Download photos: http://www.universal-robots.com/GB/Press/Multimedia.aspx

Cases: http://www.universal-robots.com/GB/Cases.aspx

Social media:

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### **History**

#### 2003

Universal Robots was founded on the basis of the idea of creating a light robot that is easy to install and program. The company's three founders, Esben Østergaard, Kasper Støy and Kristian Kassow, provided the foundation for this by means of their analysis of the special requirements for robots in the food industry at the University of Southern Denmark in Odense. Together they came to the conclusion that the robotics market is dominated by heavy, expensive and unwieldy robots.

#### 2005

As a consequence of this, the three engineers founded Universal Robots in 2005. Their declared goal was to make robot technology accessible to small and medium-sized enterprises. The establishment of the company was made possible by an investment by Syddansk Innovation.

#### 2008

The Danish State Investment Fund was convinced by the potential and joined up with the management and Syddansk Innovation to invest in the company.

#### 2009

The first UR5 robots are sold by distributors in Denmark and Germany.

#### 2010

Universal Robots has expanded its business to include the whole of Europe.

#### 2011

Universal Robots enters the Asian market and establishes a local office in China.

#### 2012

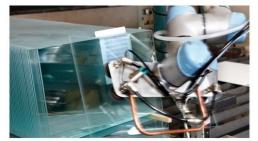
Universal Robots' 10 kilo robot, UR10, is launched. The company establishes an American subsidiary based in New York, USA. A total of 1,600 UR robots is installed in industry worldwide.

### 2013

Universal Robots establishes a Chinese subsidiary in a new base in Shanghai. The company establishes a distributor network in South America and Oceania.

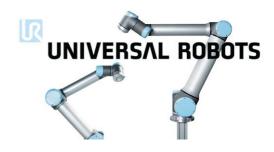
#### 2014

The company moves to a new HQ and expands its production capacity notably to a space of 12,000 sqm. The third generation of the lightweight robot arms UR5 and UR10 with a variety of new features is introduced at the AUTOMATICA Show in Munich, Germany. A total of 2,500 UR robots are installed worldwide. Universal Robots also establishes a subsidiary in Barcelona, Spain.









#### The international market for robots

The market for robots has been characterised by heavy, expensive and unwieldy robots made by engineers for engineers. However, it is not always necessary to move extremely heavy loads. An increasing number of assembly and lifting tasks require nimble robot arms like Universal Robots' products. Small, low-noise robots are the simple and ideal solution for optimising production within all forms of industry.

### The products

Universal Robots' first product was the UR5, a six-jointed articulated arm robot that revolutionised the market for industrial robots. The UR5 weighs 18 kilos, has a lifting capacity of up to 5 kilos and a working radius of 85 cm.

In 2012, Universal Robots' UR10, with a lifting ability of 10 kilos and a reach of 130 cm, was launched. The UR10 has been designed according to exactly the same principles as the UR5, which means it is just as flexible and easy to fit into the production process.

In 2014 a brand new generation of the robot arms UR5 and UR10 was introduced. These feature true absolute encoders, the eight adjustable safety rated functions, 32 built-in I/O's and the improved workflow for connecting equipment to the control boxes. The safety system "UR Safety 3.0" was certified by TUV.

Detailed product information and technical specifications relating to the UR5 and UR10 are available at <a href="http://www.universal-robots.com/GB/New">http://www.universal-robots.com/GB/New</a> Products.aspx

### Operation

The robot arm is simple to use and can therefore be operated by all technical employees in the production facility. It works independently and does not need monitoring by additional staff during operation.

#### Sales structure

Universal Robots has its headquarters in Odense, Denmark, and offices in New York, Shanghai and Barcelona. Universal Robots' robot arms are marketed internationally via an extensive network of distributors. A list may be seen at:

http://www.universal-robots.com/GB/Distributors/List of distributors.aspx









### **Characteristics:**

The six-jointed industrial robots are small, light and user-friendly and offer invaluable benefits in terms of technical resources:

### **Programming is Child's Play**

Teach Mode: Train the robot by simply grabbing the robot arm to teach desired waypoints.

### Help wherever you need a hand

Simple, space saving and easy to integrate without changing the production layout. Almost any manual task can be automated at low cost.

#### Let the play begin

Touch Screen: User friendly, yet sophisticated 3D visualisation via an intuitive tablet. Training a UR robot to perform a task can easily be done via the arrow keys on the graphical user interface. This patended technology enables users with no previous programming experience to quickly set up and operate the UR Robots, allowing the machine operators to be promoted to robot programmers.

#### **Quick Start-up**

Our robots stay on track. The new True Absolute Encoders acquire absolute position immediately upon power-up and do not require batteries. Once initialized you never have to reposition the robot. Perfect for applications requiring automatic start-up and integration into other machinery.

### Turn your production into a healthier workplace

The UR robot is approved and certified by TÜV (Technical Inspection Association) and can operate with no safety guarding based on the risk assessment. You can apply a UR robot to dirty, dangerous jobs that previously had to be done by humans, thereby reducing injury rates — both repetitive strain and accidents. Built-in Emergency stop adds additional safety.

## **Patented adjustable safety parameters**

Adjust the robot's safety parameters to match each specific production task. UR produces the only robot with this advanced, patented safety feature; password protected to avoid unauthorised adjustments.

#### Flexible, collaborative and lightweight co-worker

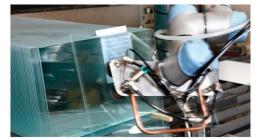
The six-axis robot arm weighs only 18 and 28 kg respectively, and handles payloads up to 5 and 10 kg. The reach is 850 - 1300 mm.

### Affordable start-up price and fast ROI

The robot arm was developed specifically with the requirements of small and medium-sized enterprises in mind - enterprises that depend on flexible automation and demand a fast return on investment. Instead of costly sensor technology, the robot arms use a unique, patented technology in the joints to determine power and movement. As a result of new thinking, the robot can undercut the prices of other automatic solutions. It operates particularly cost-efficiently and normally pays off within an operating period of less than a year..

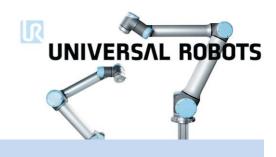
#### **High energy efficiency**

The robot requires very little power owing to its compact size. This means that it is significantly more energy-efficient and environmentally friendly than larger, heavier industrial robots, resulting in a large









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potential for savings and also opening up the possibility of battery-powered operation and therefore greater mobility.

#### Low noise level

The robot operates virtually silently and therefore emits no annoying kind of noise whatsoever. This results in a pleasant working environment for staff in its immediate proximity.

#### Modular design

The design of the robot minimises the risk of production downtime. In the event of any malfunction or defect, the robot is quickly and easily fixed thanks to its modular construction.

#### **Danish Design**

Modern, sleek design. Looks as good as it works. User Interface in multiple languages.

# List of prizes awarded to Universal Robots:

You find the entire list at http://media1.limitless.dk/UR Downloads/UR Awards GB

#### 2013

In USA the UR5 robot won the RoboBusiness 2013 Game Changer Award in Human-Machine Interaction

Universal Robots received the Metalworking Industry Outstanding Suppliers Awards, awarded by the Ringier Trade Media China

UR5 & UR10 received the Good Design Award 2013 from the Japan Institute of Design Promotion

The robot UR10 was named the most innovative product in Denmark and won the award InnovationSTORM 2013

Universal Robots won the Gold Award for Innovative Product on the 12th China (Shandong) Int'l Industrial Automation and Applied Technology Exhibition

Universal Robots was named one of Denmark's 30 most important export companies and thus included in the "ExportCanon"

CTO and founder Esben Østergaard, Universal Robots, wins DIRA Automation Award 2013

Best Robotics Provider 2013 in Asian Manufacturing Awards

UR wins the national Growth Prize, "DI Entrepreneurship Award" awarded by The Confederation of Danish Industry (DI).

Product of the Year: Readers of Control Engineering magazine decided that the UR10's "Product of the Year in the category "Robots and Manipulators"

### 2012

"Invention and Entrepreneurship Award", chosen by IEEE Robotics, Automation Society and IFR.

