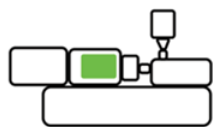


# Lean automation for CNC machines with Cobots and acubez

# SU-PAD Company

SU-PAD was established in 1987 by Pini Sadeh and David Cohen, to provide high-end equipment and innovative solutions, to the Israeli industry.

For over 30 years, SU-PAD has been innovating and implementing advanced solutions in 4 different divisions, which allow its customers to enter the market quickly and compete with a relative advantage, alongside the world's leading brands and by constantly improving the professionalism, quality and service.



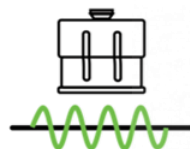
INJECTION MACHINES & EQUIPMENT



3D PRINTERS



ROBOTICS & AUTOMATION



PLASTIC WELDING



**SOLUTIONS YOU CAN TRUST**

# Agenda

- Opening remarks and introduction

Haim Zeherman - Automation & Robotics Department Manager | SU-PAD

- What are cobots and their added value for the metal industry

Kandan Özgür Gök - Country Manager - Turkey & MEA | UR

- acubez – The solution for easy machine tending

Ephraim Ulmer - Cofounder & Business Development | acubez

- Q&A panel

# Expectations

- Duration: 45 minutes + 15 minutes for Q&A
- The webinar is recorded
- Please mute your microphone
- Write your questions inside the Q&A chat
- There will be 3 anonymous polls





# Kandan Özgür Gök

## Country Manager - Turkey & MEA



**UNIVERSAL ROBOTS**

# Teradyne Robotics



# Company overview



**2005**

Founded in Denmark

**40%**

of the cobot market

**1,100+**

Partners in the UR ecosystem

**1000+**

employees

**2008**

Introduced first commercially viable cobot

**50,000+**

cobots sold

**20+**

offices

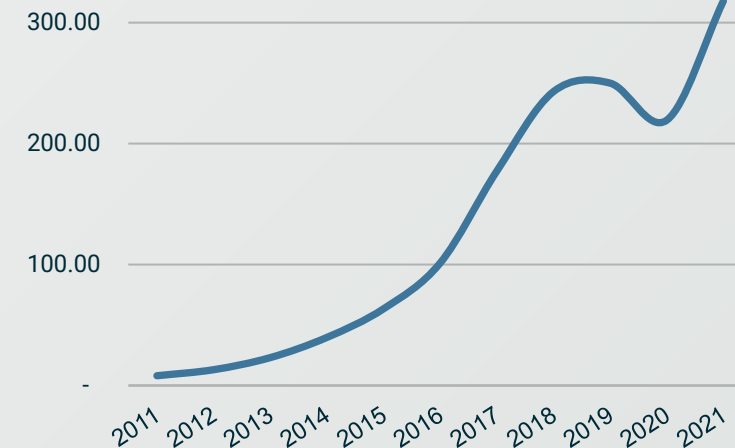
Part of

**Teradyne Inc.**

**Product portfolio**

with range of reaches and payloads

**Revenue Trend (M\$)**



# Universal Robots in numbers

**800+**

Distributors &  
Integrators

**20+**

Offices

**1000+**

Employees

**50,000+**

Cobots sold

**40%**

Cobot market  
share\*

**440+**

UR+ products



\*Source: Interact Analysis



# A global company



## Our offices across the world

-  UR Corporate Headquarters
-  UR Global Offices



# New headquarters coming 2024

## - World's largest cobot and AMR hub



We want to create a world  
where people work with  
robots,  
not like robots



A woman with blonde hair tied up, wearing a black jacket, is working in a factory. She is positioned in the center, looking directly at the camera. She is handling a large, perforated metal plate. Two large, silver robotic arms with red and blue accents are visible on either side of her. The background shows industrial machinery and a control panel with a screen and buttons.

**Automation for anyone.  
Anywhere.**














**We continuously  
redefine  
automation**





## Traditional industrial robots

## Collaborative robots

Difficult set-up		→		Fast set-up
High programming expertise needed		→		Straightforward to program
Fixed installations		→		Versatile deployment
Extensive space requirements		→		Limited space requirements
Need a safety fence		→		Collaborate side-by-side with humans subject to risk assessment
Numerous additional costs	\$\$\$	→		Cost effective with fast payback



## Why automate?



Labor shortages



Increased competition



Changing demand

# We're helping businesses remain

 Productive

 Competitive

 Confident



Lab analysis



Welding



Packaging & Palletizing



Machine Tending



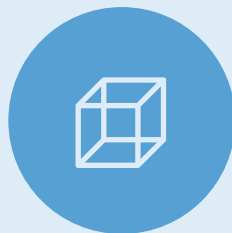
Gluing & Dispensing



Assembly



Injection Molding



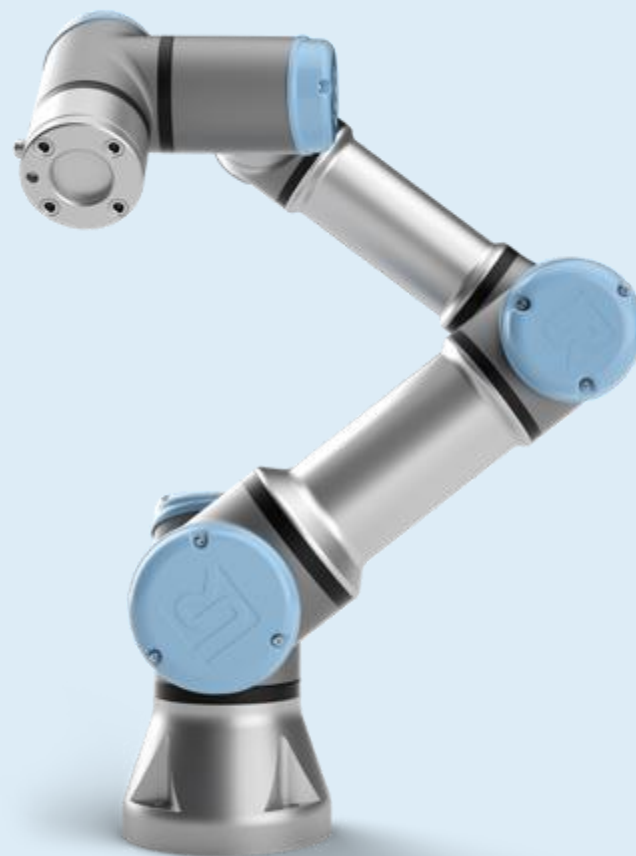
Pick & Place



Screw Driving



Quality Inspection



# And we're helping some household names...

## Electronics & Technology



## Automotive & Contractors



## Metal & Machining



## Pharma & Chemistry



## Food and Beverage



## Scientific & Research



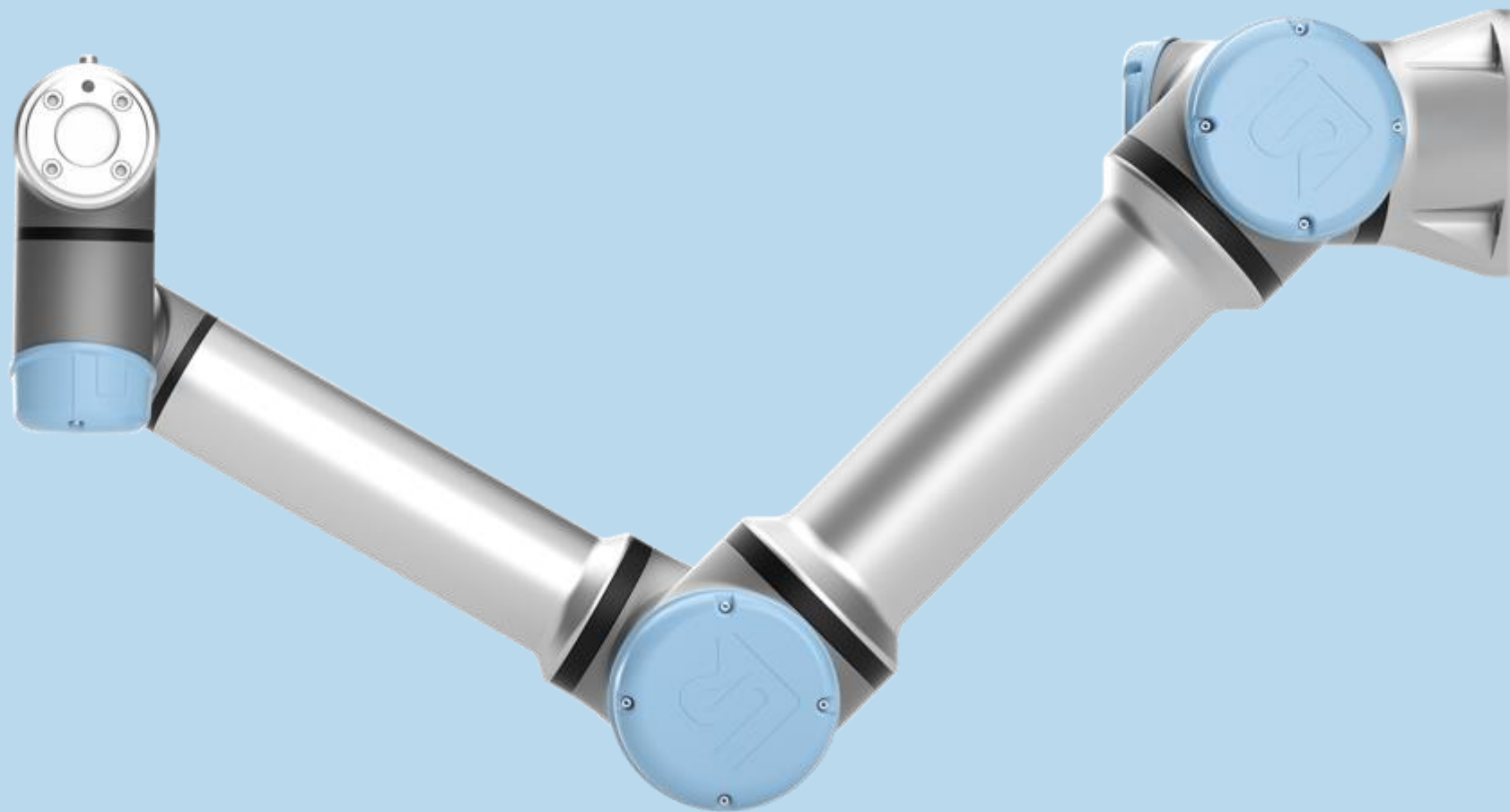
## Plastic & Polymers



## Furniture & Equipment

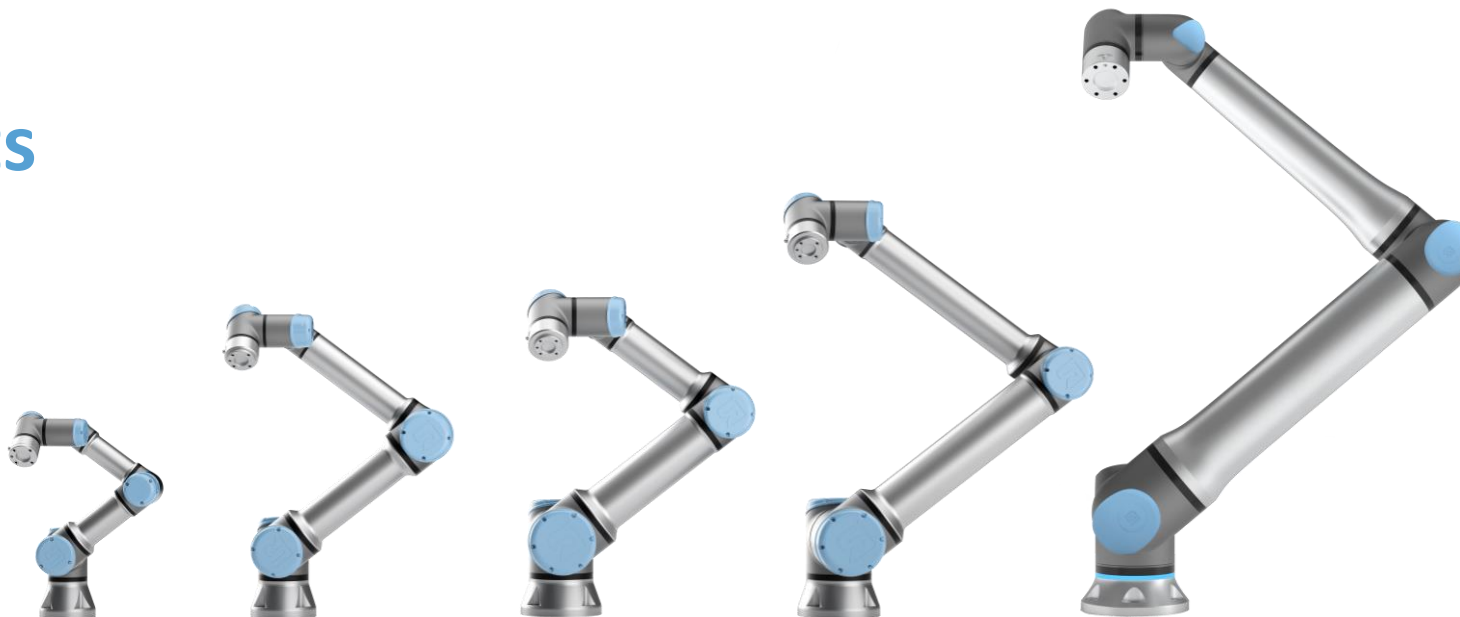






# Our products

# Universal Robots Portfolio



	<b>UR3e</b>	<b>UR5e</b>	<b>UR16e</b>	<b>UR10e</b>	<b>UR20</b>
 <b>Payload:</b>	3 kg 6.6 lbs	5 kg 11 lbs	16 kg 35.3 lbs	12.5 kg 27.5 lbs	20 kg 44.1 lbs
 <b>Reach:</b>	500 mm 19.7 in	850 mm 33.5 in	900 mm 35.4 in	1300 mm 51.2 in	1750 mm 68.9 in
 <b>Weight:</b>	11.2 kg 24.7 lbs	20.6 kg 45.4 lbs	33.1 kg 73 lbs	33.5 kg 73.9 lbs	64 kg 141.1 lbs
 <b>Footprint:</b>	Ø 128 mm	Ø 149 mm	Ø 190 mm	Ø 190 mm	Ø 245 mm

**Fast robot delivery**  
**We're ready when you are**



A black and blue industrial robot arm, the UR20, is shown in a dynamic pose against a blue gradient background. The arm is articulated with three joints, and its end effector is a cylindrical tool head. The background features a subtle grid pattern on the floor.

# INTRODUCING THE UR20

20 kg payload | 1750 mm reach | weighs 64 kg



# What's in the box?

## e-Series Standard vs. OEM

### e-Series Standard

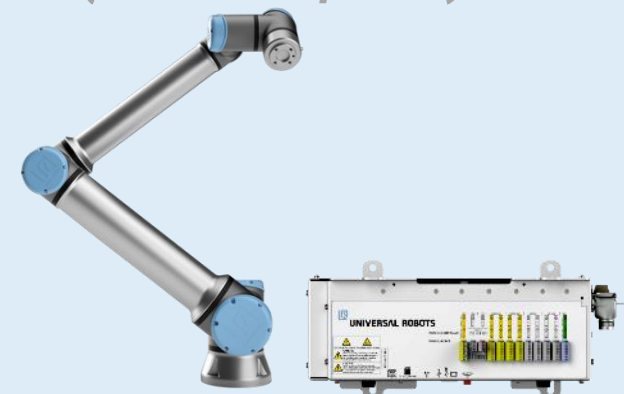


Includes:

- Robot Arm (3, 5, 10, 16)
- Standard Control Box w/ Cabinet
- Teach Pendant
- Power Cable
- User Guides

### e-Series OEM

*(AC or DC options)*



Includes:

- Robot Arm (3, 5, 10, 16)
- OEM Control Box (AC or DC)
- User Guides





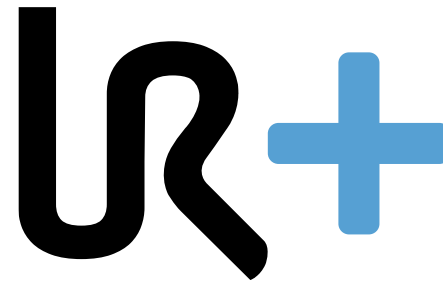


UR+ products: Components Kits Software

Consumers

Producers

People with automation needs



Solutions, products, knowledge and services  
A powerful ecosystem

“ I am looking for a gripper, a screwdriver or another key product.  
- Customers



“ I am offering a UR+ product that is compatible and easy to use.  
- Partners

# UR Academy

e-Learning



UR Education



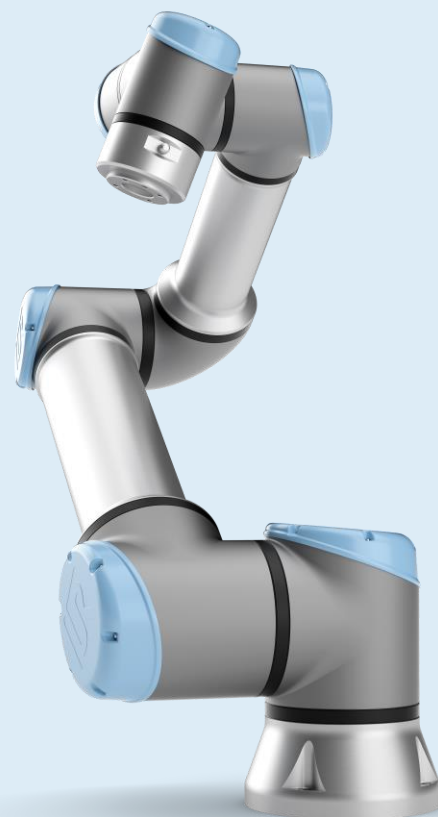
In-class training



ATP network

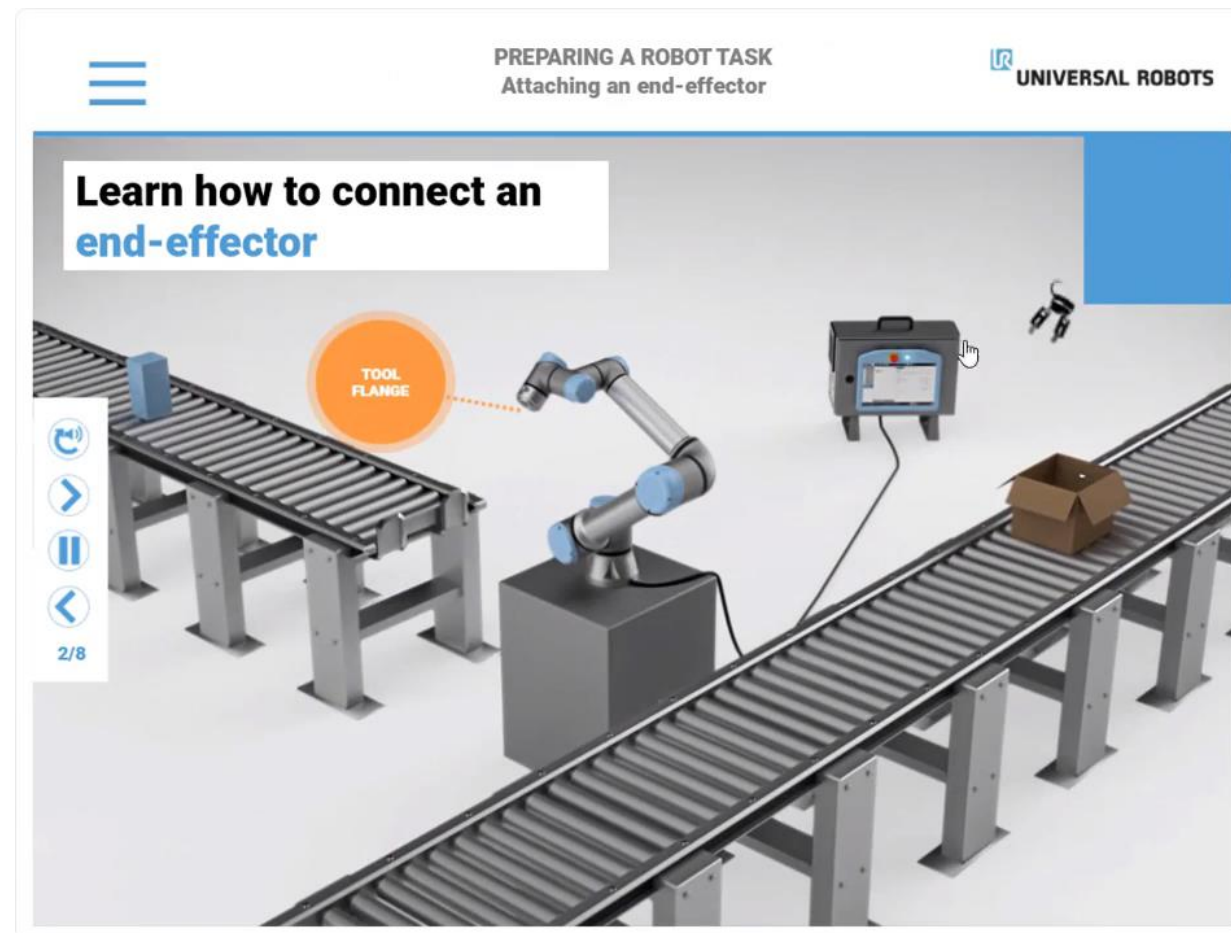


Online training



# E-Learning

- World class e-Learning
- Core, Pro and Application track
- Available for CB3 and e-Series
- 14 modules that build on each other
- Free of charge and freely accessible
- Robot programming basics
- Interactive simulations - not a passive online lecture
- Available for computers and tablets
- Certificate for completion of all modules
- > 179,000 users
- 16 languages

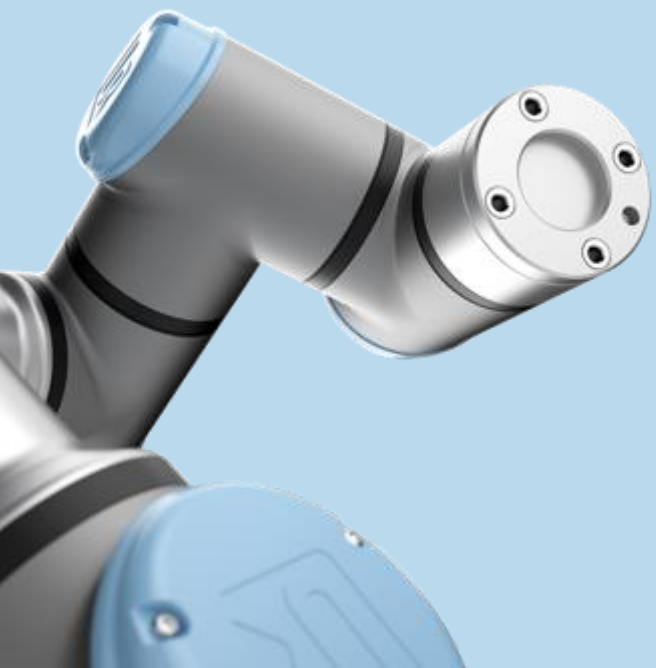


# Transformation!



# Thank you

Let's change the world!





# Ephraim Ulmer

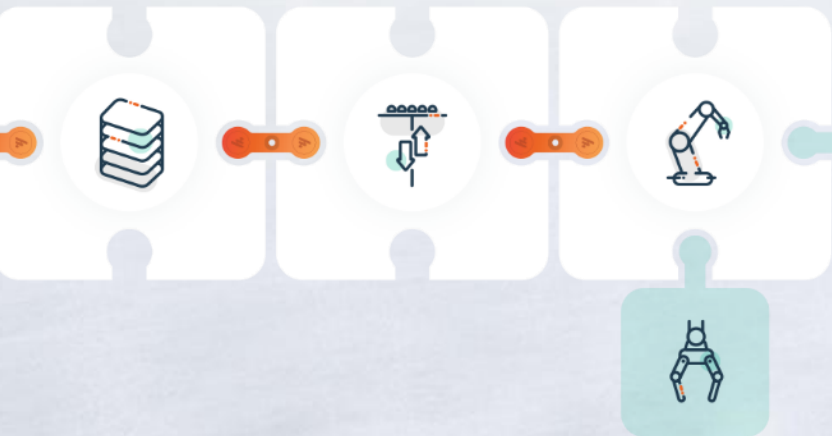
## Co-founder & Business Development



Flexible • Efficient • Low Risk

# Machine Tending Automation with Cobots

April 24, 2023



Industry 4.0



# Acubez™ Modular Automation



**Ephraim Ulmer**

Co-Founder and Business Development,  
Acubez Modular Automation Ltd.

✉ [ephraim.u@acubez.com](mailto:ephraim.u@acubez.com)

[in linkedin.com/in/ephraimulmer](https://www.linkedin.com/in/ephraimulmer)





## Who we are?

### “Hands-on”

Developing and manufacturing standardized modular automation solutions

### Focus

Machine-tending segment

### Current markets

Israel and Europe

Founded

2018

Inhouse R&D Team

10+

---

Welcome to the world of easy automation. Welcome to Acubez™

---



## Machine Tending Automation

# Maximize efficiency of your existing machines



Laser  
Marking



CNC  
Machines



Inspection  
Machines



Grinding  
Machines

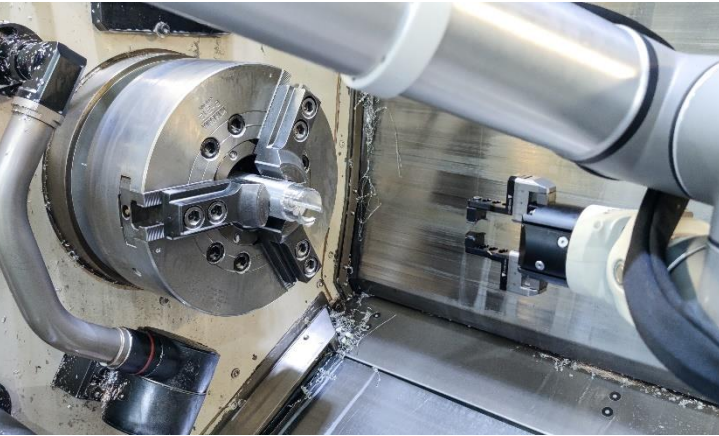


End of Line  
Machines





# Webinar Agenda



## Key Drivers

**Why implement Automation?**



## Key Barriers

**Difficulties to implement Automation**

## Overcoming the Barriers

**Deploying Automation can be easy!**



## The Solution – Acubez™

**Modular, flexible cobot-based automation**



# Why implement automation?



**Manpower Shortage**



**Cost Reduction**



**Consistency in Quality**



**Crisis (e.g. Pandemic)**



**Safety**



'lights-out' manufacturing



**Increased Efficiency and Machine Utilization**



**Fast ROI**

# Key Barriers to implement automation

- High upfront capital requirements
  - Risk of the automation equipment becoming absolute as demand changes
  - Lack of flexibility
- 
- Complexity of implementation
  - Lack of skilled labor
  - Job changeover complexity and time
- 
- Management commitment & resistance to change
  - Floor space





# Overcoming the barriers

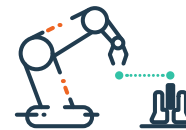
## Key Barriers to implement automation

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- Management commitment & resistance to change
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## Requirements



Reducing Risk



Easy to operate



Loving it!

## The Solution

### Acubez automation platform

- ✓ ROI: 6 - 18 months
- ✓ standardized modularity
- ✓ Flexible solution

### Acubez automation platform

- ✓ 1 to 2 days installation
- ✓ 1 day training
- ✓ Intuitive, ZERO code GUI
- ✓ 15 min. job changeover

### Acubez automation platform

- ✓ Intuitive, ZERO code GUI suitable for any operator
- ✓ Most compact solution
- ✓ Cutting-edge design

Sneak peek

# Modular automation





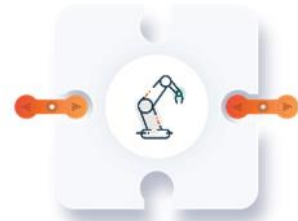
# Synchronized: Mechanically & Digitally

- ✓ Modular
- ✓ Scalable
- ✓ End-to-end

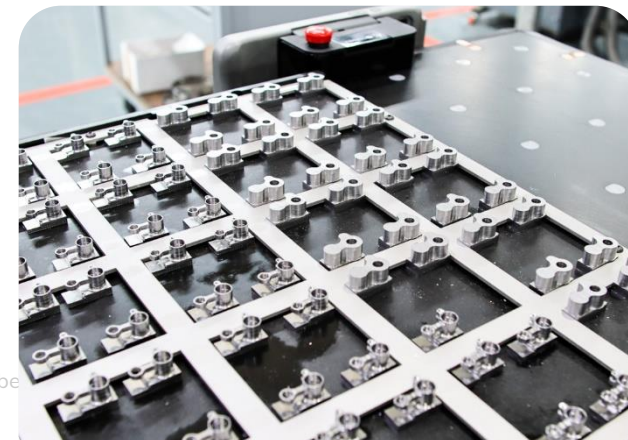


Flexible • Expandable • Standardized

# Modular Automation

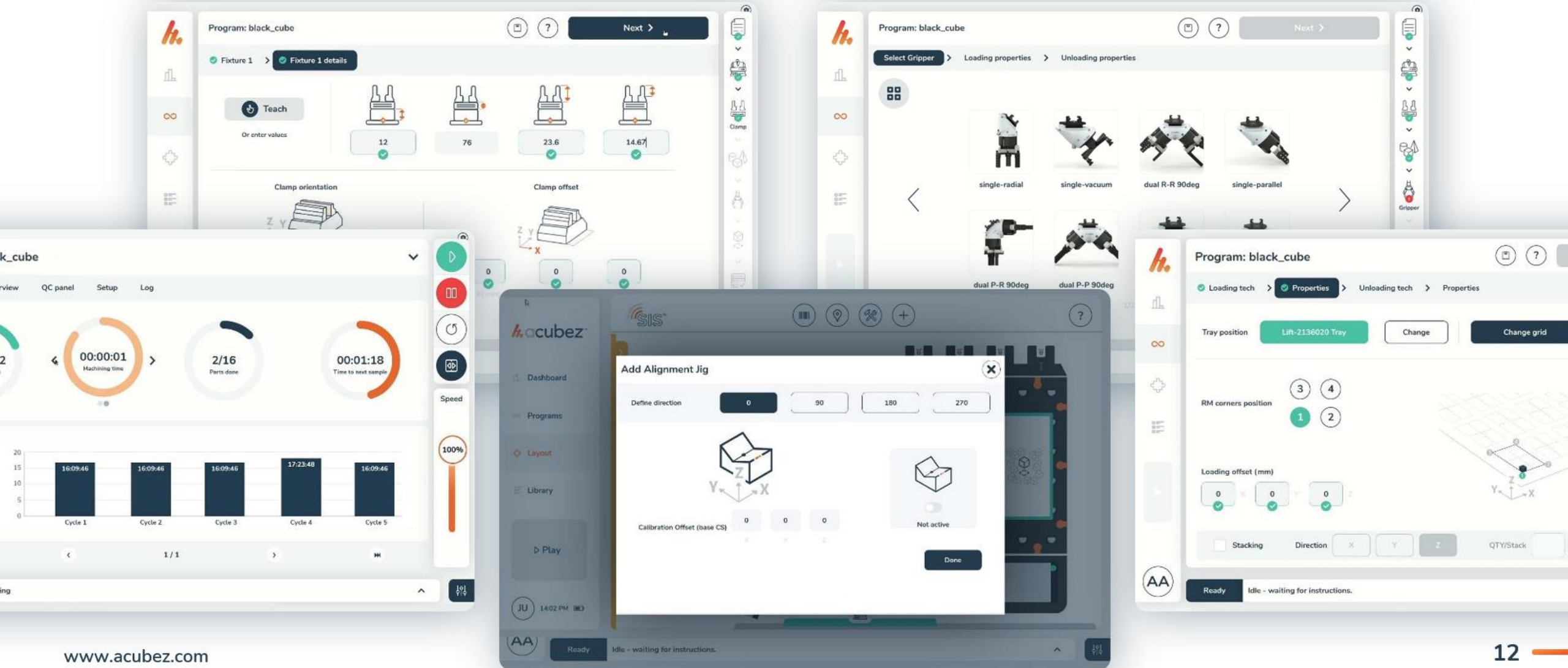


And more...





# Intuitive GUI: the acubez™ touch



# Start small, grow as-you-go



Low capacity



h.acubez™ 800



Medium capacity



h.acubez™ 1000



High capacity



h.acubez™ 1400

Fast Return on Investment

# ROI: less than 12 months!

Typical return-on-investment calculation for automated Okuma MU-400V II:



acubez™ 800

acubez™ 1000

Increased machine efficiency with automation	From 75% to 95%	From 75% to 95%
Machining hours added weekly	27 hours	50 hours
Value of added hours annually	62,150 Euro	115,500 Euro
Acubez budgetary cost	65,000 Euro	100,000 Euro
Return on investment	13 months	10.5 months





# Thank you!

Start your journey  
with modular  
automation today

[www.acubez.com/connect](http://www.acubez.com/connect)

