ROBO
AUTOMATION & ENGINEERING

www.robo.com.tr

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aplusreklam.com

we make your data intelligent...

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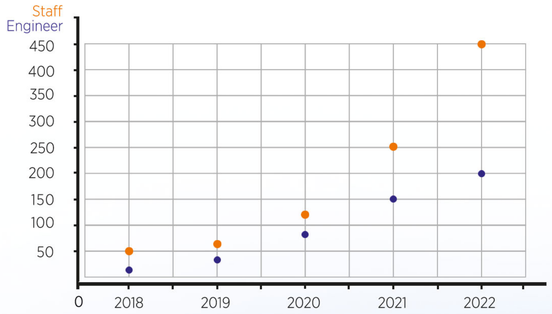
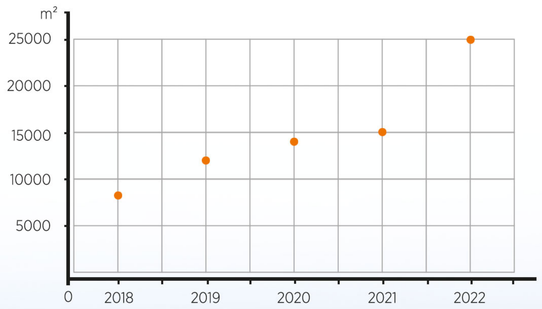
- ROBO is a global technology group company; leading in the business of transforming traditional production lines to a highly efficient and versatile contemporary systems through implementation of automation and robot technologies.
- From 'Project Planning' to 'Design', 'Virtual Commissioning', 'Manufacturing', 'Programming', 'Testing', and 'Commissioning'; in other words, ROBO has been providing turnkey automation solutions for various industries for decades.
- Every project that comes to life from an idea creates an extraordinary excitement. Happiness of realizing the efficient, fast, and error-free production is just beyond the success.
- We are helping our clients to be part of the industry of the future via the turnkey intelligent automation solutions we provide, through all the aspects from design to software.

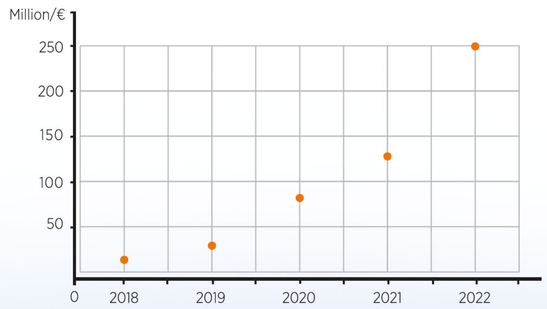
Head Count



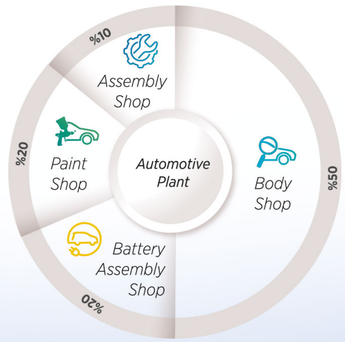
Closed Area



Pipeline Project Volume



Sectoral Project Volume



ROBO is a global automation and engineering group company that was established in 2006.

2006

Establishment

- ROBO has been officially established

2011

Incorporation

- ROBO has merged with Barres Machinery

2014

First Project in UK

- ROBO has successfully completed the first Automation Project in UK for Jaguar - Land Rover Group
- ROBO Established a Contact Office in UK

2016

First Project in Europe

- ROBO has successfully completed the first Automation Project in Sweden for Volvo - Scania Group
- ROBO Established a Contact Office in Germany

2017

First Turnkey BIW Project for Automotive Industry

- ROBO has successfully completed the first Turnkey BIW Robotic Automation Project for Ford Otosan (FMAX Truck Manufacturing Line) in Eskisehir, Türkiye

2018

Relocation to ROBO Campus

- ROBO has moved to its modern campus building in Gölcük, Kocaeli, Türkiye

2019

Awarded as R&D Center

- ROBO has been officially certified as Research & Development Center for automative industry by the Ministry of Technology of Türkiye

2020

Expansion of ROBO Campus

- ROBO acquired additional land, constructed new workshops, and expanded the closed area 20.000 m²

First EV Battery Assembly Line - Ford Otosan

- ROBO has successfully completed its first BEV Battery Production Line project with Ford Otosan, in Kocaeli/ Türkiye

2021

TOGG

- Turnkey EV BIW Production Line & Transfer Systems for the first national EV OEM of Türkiye in Gemlik, Bursa, Türkiye

2022

New EV Battery Assembly Line - Ford Otosan

- ROBO is undertaking the capacity increase project for BEV Battery Production Line with Ford Otosan

First Project with Ford Europe

- ROBO has been awarded to turnkey deliver Brownfield and upper body Greenfield integration capacity for Ford Europe in Romania

Portfolio - Turnkey Robotic Automation Solutions

Define & Obtain

ROBO develop process and solutions for their Clients within shortest time and highest technologies through the RFQ, customer privacy (NDA) and partnering with client

- On-Site Assessment;
- Data Analysis & Pre-Simulation
- Benchmark Previous Projects

Design

We visualize the best-fit solutions by field experienced designers

CATIA SIEMENS NX SOLIDWORKS ePLAN

World Class Tools
We are able to use any design and simulation tools that are preferred by big OEMs

Virtual Simulation Driven Design
We use world-class robot simulation software to simulate loading and unloading of the designed systems, prior to the manufacturing

Virtual Commissioning
We simulate and optimize robotic and automated production systems using 3D robotic workcell design, simulation, and offline programming. Cooperation with good partners worldwide.

VISUAL COMPONENTS WinMOD Process Simulate

Manufacturing

We manufacture the designed parts in-house;
We assemble the manufactured parts in our workshops;
We apply the best practice quality controls at every stage of process

In-House Manufacturing Capacity
With flexible capacity we manufacture and assemble critical parts in-house

Strong network of third party manufacturers
We manage a wide network of manufacturers that can be utilized at any time

Installation

We pre-install and pre-acceptance the produced work cells.

- Electrical Installation
- Mechanical Installation

Programming

We program the robotic systems with our in-house programming team and our partners.

Advanced Programming Skills
Our team has proven expertise to program the robotic systems that ensures minimum cycle times and optimum space usage.

-PLC&HMI&SCADA
SIEMENS Rockwell Automation
-Robotic programming
KUKA ABB FANUC
-Technology Equipment

Commissioning

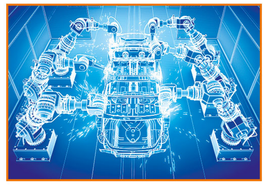
We install all systems and components of industrial plant are designed, installed, tested, operated and maintened according to the operational requirements of the owner or final clients.

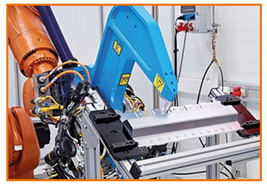
- Dry run studies start
- BIW Production Try-Out (First physical part avaible)
- MTO (BIW Start)
- MPV
- MPR

FINAL ACCEPTANCE

Portfolio - Manufacturing Technologies

Body Shop


- Arc-Welding
- Spot Welding

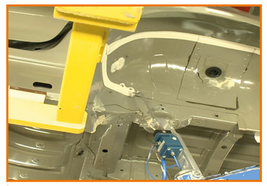

- Riveting

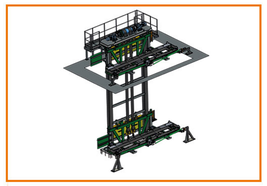
- Laser Hybrid Welding
- Laser Cutting

- Transfer and Conveying System

Paint Shop

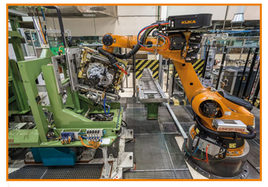
- PVC, NVH, UBS Sealing
- Cosmetic Sealing


- Underbody Coating
- Waxing


- Oven Conveyors & Lifting System

- External Conveyor System

General Assembly Shop

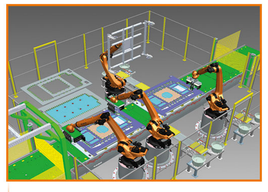

- Robotic Handling

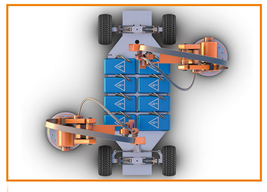
- Robotic Screwing

- Conveyor & Transfer System

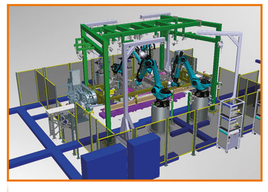
- Buffer System

Battery Assembly Shop


- Robotic Screwing


- Robotic Handling

- EOL Electric Test


- EOL Leak Test

Body Shop

General Assembly Shop

Paint Shop

Battery Assembly Shop

SELECTED REFERENCE PROJECTS - AUTOMOTIVE

TOGG - Turnkey Robotic BIW (Body in-White) Greenfield

Year	2021
Plant	GEMLIK / BURSA
Scope	BODY SHOP
Cycle Time	120 seconds
Robotics	216 robots

FORD OTOSAN - Turnkey Paint Shop Robotic PVC NVH UBS and Cosmetic Sealing

Year	2019
Plant	GOLCUK / KOCAELI
Scope	PAINT SHOP
Cycle Time	70 seconds
Robotics	25 robots

FORD EUROPE - Turnkey Robotic BIW (Body in-White) Greenfield / Brownfield

Year	2022
Plant	CRAIOVA / ROMANIA
Scope	BODY SHOP
Cycle Time	48 seconds
Robotics	150/400 robots

TOGG - Turnkey Buffer Transfer System

Year	2021
Plant	GEMLIK / BURSA
Scope	GENERAL ASSEMBLY
Cycle Time	120 seconds
Transfer System	250 RBD/25 LIFT/20 TTB/10 CSC

FORD OTOSAN - Turnkey Robotic BIW (Body in-White) Greenfield

Year	2020
Plant	GOLCUK / KOCAELI
Scope	BODY SHOP
Cycle Time	92 seconds
Robotics	480 robots

FORD EUROPE - Turnkey Robotic BIW (Body in-White) Greenfield

Year	2017
Plant	INONU / ESKISEHIR
Scope	BODY SHOP
Cycle Time	900 seconds
Robotics	25 robots

FORD OTOSAN - Turnkey Paint Shop External Conveyor Transfer System

Year	2020
Plant	GOLCUK / KOCAELI
Scope	PAINT SHOP
Cycle Time	70 seconds
Transfer System	450RBD/35LIFT/40TTB/30CSC

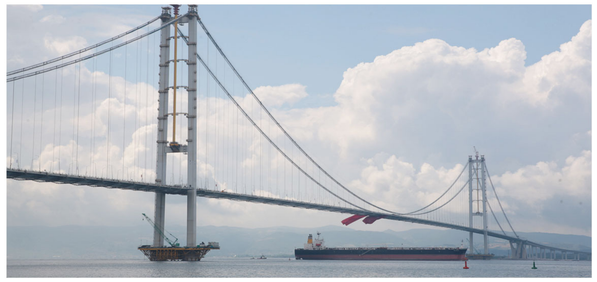
FORD OTOSAN - Turnkey Battery Pack Robotic Assembly Line

Year	2022
Plant	GOLCUK / KOCAELI
Scope	BATTERY ASSEMBLY
Cycle Time	110 seconds
Robotics	25 robots

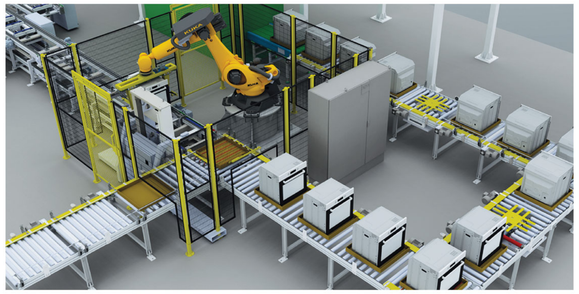
JAGUAR - Turnkey Automotion System

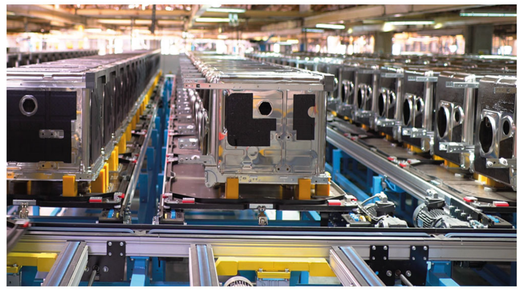
Year	2014
Plant	BIRMINGHAM
Scope	BODY SHOP
Cycle Time	80 seconds
Robotics	150 robots

OSMANGAZI BRIDGE - Turnkey Gantry System

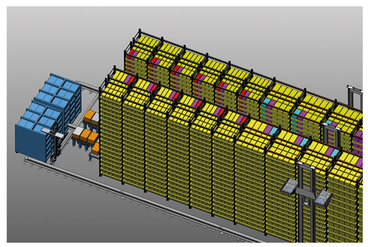


ARÇELİK & B/S/H - Turnkey Production Line



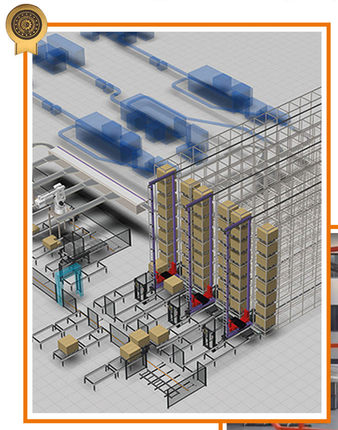


R&D PROJECTS - AGV AS/RS Digital Twin EOL Battery Test System

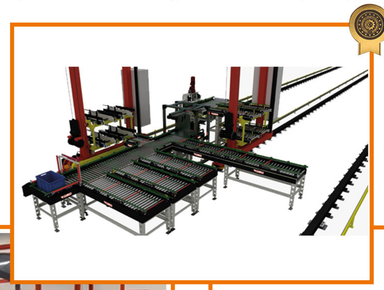


R&D

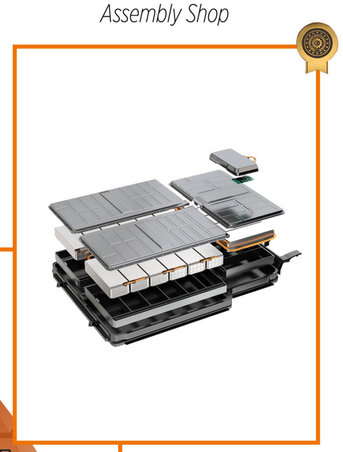
TUBITAK - AS/RS
(Automated Storage & Retrieval Sytem)

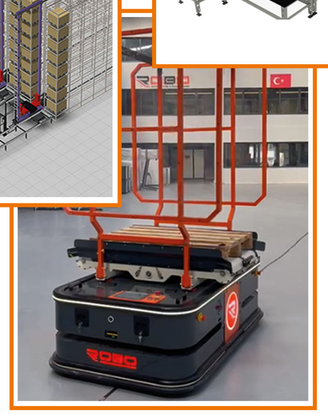


TUBITAK - AS/RS
(Automated Storage & Retrieval Sytem)

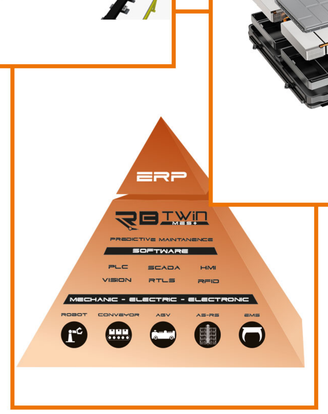


TUBITAK - Battery
Assembly Shop





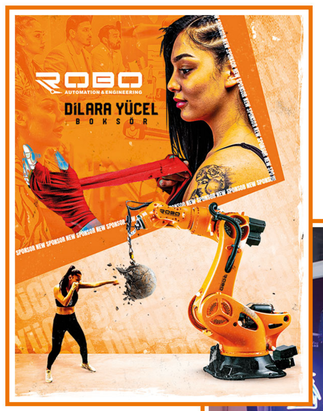
AGV
(Automated Guided Vehicle)



RBTwin MES+

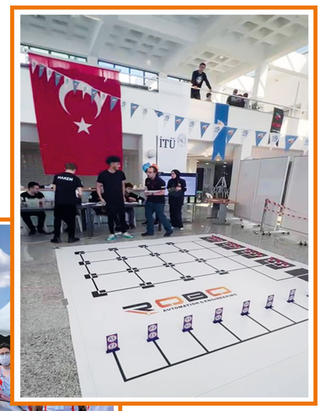
Sponsorships

Dilara Yücel
(Youngest Woman Boxer In Türkiye)



Gölcük Fen Lisesi
FRC (FIRST Robotics Competition)

İTÜRO Istanbul Technical University
Robot Olympics 2022



Mehmet Öner Anadolu Lisesi
FRC (FIRST Robotics Competition)

Kocaeli University Mekatronom Team
TEKNOFAST

Certificates

T.C. SANAYİ VE TEKNOLOJİ BAKANLIĞI

AR-GE MERKEZİ BELGESİ

Sanayi ve Teknoloji Bakanlığı tarafından,

Robo Otomasyon Mühendislik Elektrik Makina San. ve Tic. A.Ş.

5746 Sayılı Araştırma ve Geliştirme Faaliyetlerinin Desteklenmesi Hakkında Kanun kapsamında sağlanan teşvik ve muafiyetlerden yararlanmak üzere bu belge verilmiştir.

Mustafa VARANK
Bakan

ROBO OTOMASYON MÜHENDİSLİK ELEKTRİK MAKİNA SANAYİ VE TİCARET A.Ş.
Karaköprü Mah. Atatürk Blv. No:410 Gölcük / Kocaeli / TÜRKİYE
İş Sağlığı ve Güvenliği Yönetim Sisteminin
OHSAS 18001:2007

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Karaköprü Mah. Atatürk Blv. No:410 Gölcük / Kocaeli / TÜRKİYE
Çevre Yönetim Sisteminin
ISO 14001:2015

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Karaköprü Mah. Atatürk Blv. No:410 Gölcük / Kocaeli / TÜRKİYE
Kalite Yönetim Sisteminin
ISO 9001:2015

Membership

enosad 2004 — ENDÜSTRİYEL OTOMASYON SANAYİCİLERİ DERNEĞİ

TAŞIT ARAÇLARI TEDARİK SANAYİCİLERİ DERNEĞİ — taysad — AUTOMOTIVE SUPPLIERS ASSOCIATION OF TURKEY

EFFRA — EUROPEAN FACTORIES OF THE FUTURE RESEARCH ASSOCIATION

SAHA ISTANBUL — SAVUNMA, HAVACILIK VE UZAY KÜMELENMESİ DERNEĞİ