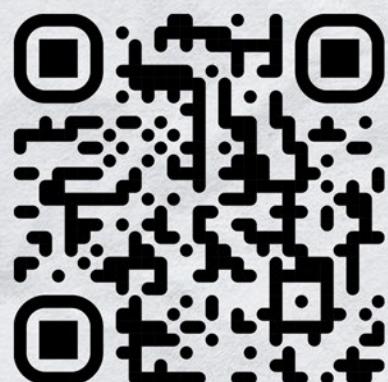


2026

ADÖKSAN
Die Casting



you can visit our
website



OUR MISSION

Adöksan has committed itself to provide Aluminium High Pressure Die Cast Products and relevant value added services with very high quality, best performance to price ratio by employing state of the art technologies and methodologies and adhering latest quality standards.

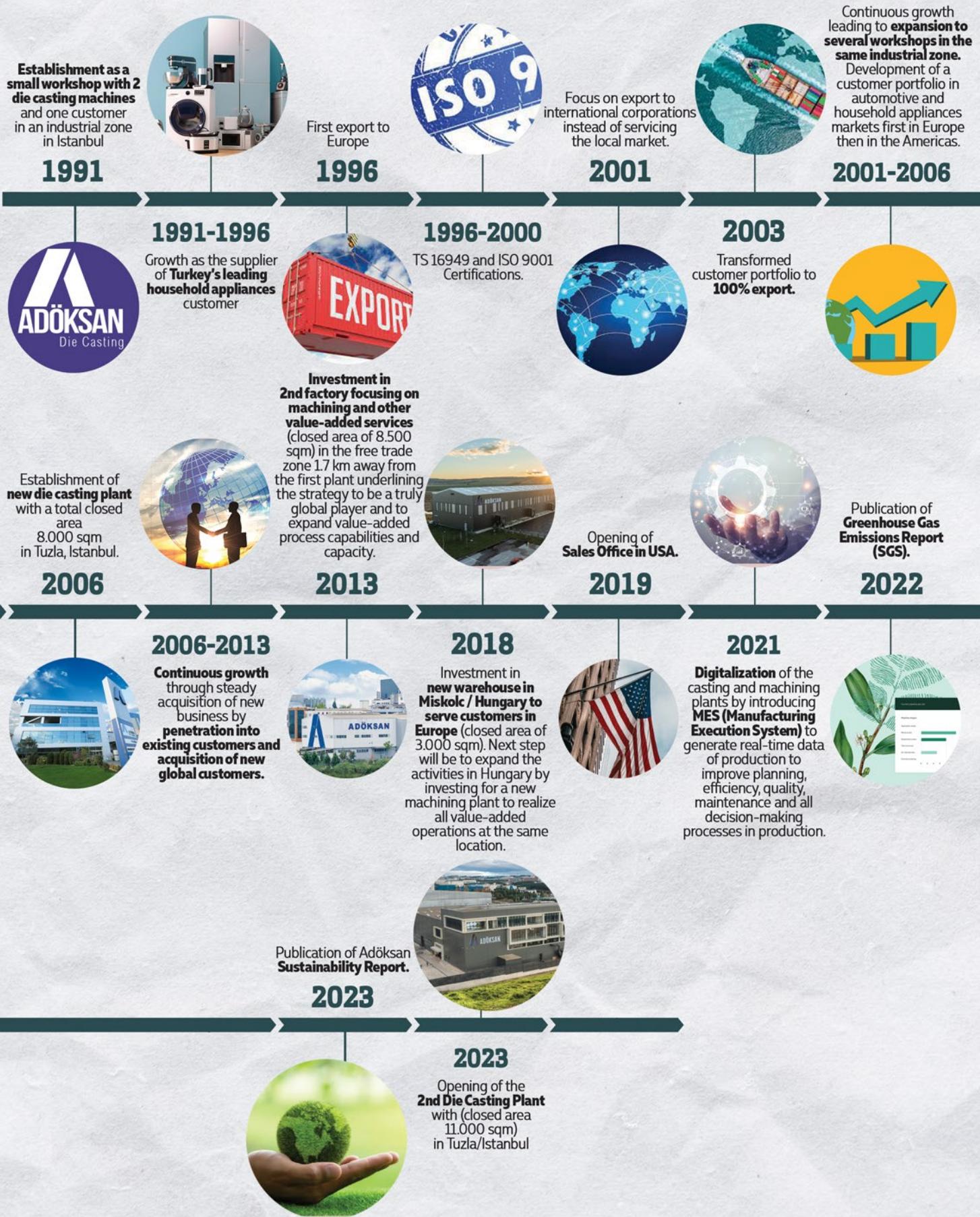
OUR VISION

Becoming long term, trusted solution partner for all major key industrial players and the best in class innovative supplier in the served sectors by extending its capabilities and Know-How to the required level and eventually becoming a multi-facet, full service module provider.

MISSION & VISION



HISTORY





FACTS & FIGURES

Annual Growth Rate in the last 10 years: 15%

Number of employees: **700+**

Business Area: **Producer of High Pressure Aluminum Die Cast Solutions** with emphasis on machining and other value added processes. Adöksan **exports 100%** of its production.

Customer Mix: **75% Automotive - 15% Engineering - 10% Appliances**
All global manufacturing companies with facilities located all over the world.

Size of Plants: **4 Plants** totaling **30.500** sqm Closed Area.

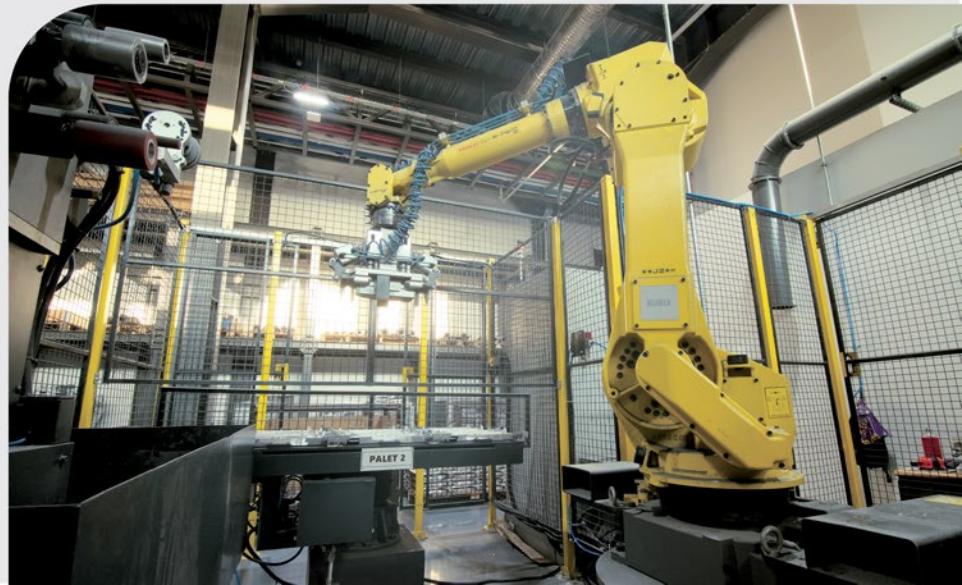
1st plant: **8.000** sqm for **aluminum die casting** and surface treatment.
2nd plant: **8.500** sqm for **value added services**: Machining, Coating, Assembly.
3rd plant: **3.000** sqm as **logistics hub in Hungary**.
4th plant: **11.000** sqm for aluminum die casting.

Size of Die Casting Park: **27 machines**

plant 1: **17** machines
plant 4: **10** machines
Machines are equipped with **robot cells**.

Size of CNC Machine Park: **60** latest technology horizontal and vertical **CNC machines** with latest fixture and cutting tool concepts and other technologies.

Coating Capabilities: **Anodizing, Chromatization, Powder-, Teflon- and KTL- Coating**



VALUES

Highest level of quality aspiration with the target **0 PPM**.

Providing as much value and service as possible for **customer satisfaction**.

Retaining best in class **innovation, quality** and **technology**
by the right investment at the right time.

Partnership with the customers, involving and committing itself to co-development and supply chain integration to ensure just-in-time delivery.

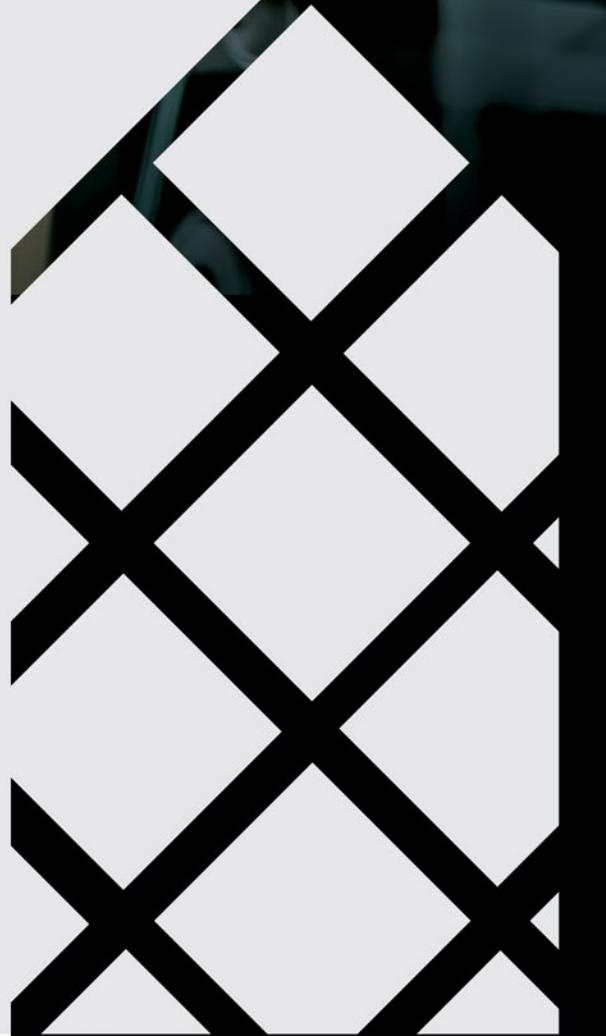
Long term relationships with the customers, true understanding of their strategy, organization and people.

Investment in Human Resources; valuing cultural, gender and national diversity; majority of senior management educated or with work experience in Europe, many fluent in English and German.

Team spirit and **collaboration** regardless of titles and job descriptions.

Fairness and **truthfulness** at both internal and external affairs.

Protecting the environment and preserving the natural resources for future generations.



& DESIGN & ENGINEERING



Providing the right engineering solutions is Adöksan's core competence. Adöksan's approach to project design dictates maximum collaboration with the technical teams of customers from conceptualization through to in-process implementation.

When requested, Adöksan takes the role of **co-designer for customers** giving **full technical support** during the development of new products until the part is suitable for serial production.

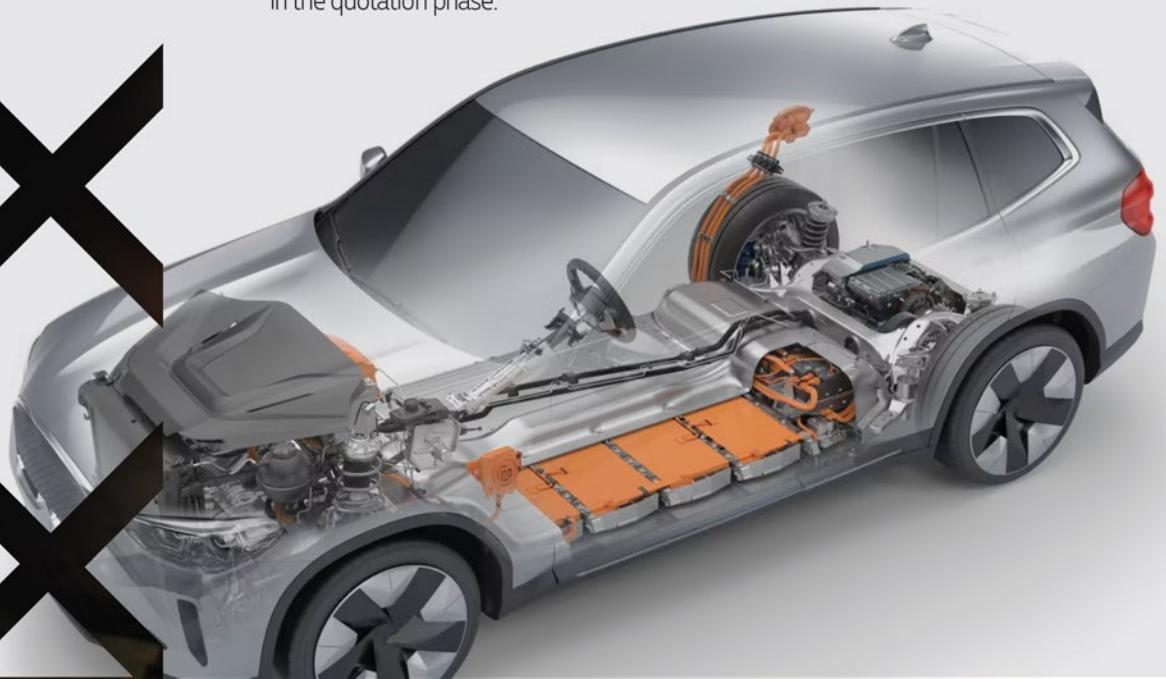
To achieve the best possible results, Adöksan uses modern **CAD-Software SOLIDWORKS, CATIA, Siemens NX** and **PTC Creo** as well as **ANYCAST** as simulation programs. Tool designs are approved based on flow and particle tracing simulations.

Tooling is an essential determinant of **successful die casting**. In order to ensure design and manufacture of the right tools for the most challenging projects, Adöksan **collaborates with long-term partners in Italy**. Also, Adöksan recently **installed a technical expertise agent in Italy**.

Adöksan has **invested in tool maintenance and spare part production** in-house to ensure production continuity.

Adöksan continuously **invests in latest technologies**. Adöksan purchased a **spotting press** for its tool shop, which can run automatic cycles to **better simulate the production process and reduce set-up times**. Adöksan has also adopted the **multi-channel mold cooling unit** which **regulates the temperature of 12 different points of the tool** simultaneously enabling excellent results even for the most complex designs.

Machining is a process of **strategic importance** for Adöksan. Hence, design of machining process is critical. Adöksan determines the **optimum fixture and cutting tool concepts** and calculates machining cycle time very accurately in the quotation phase.



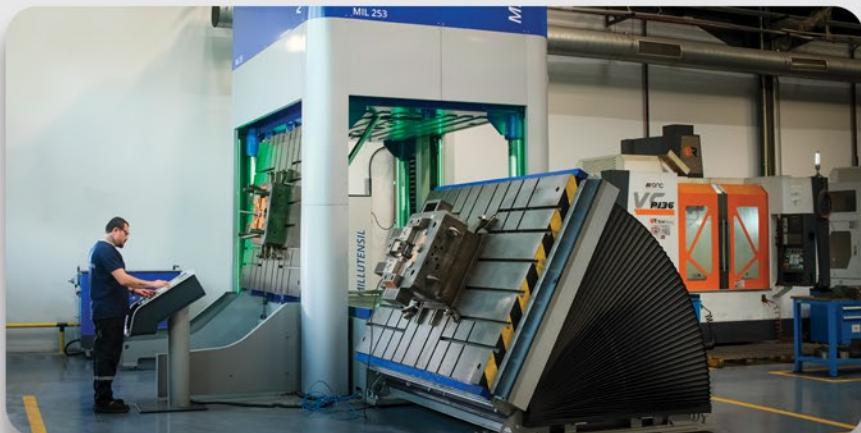
TOOLSHOP

Precision Engineering, Reliable Performance

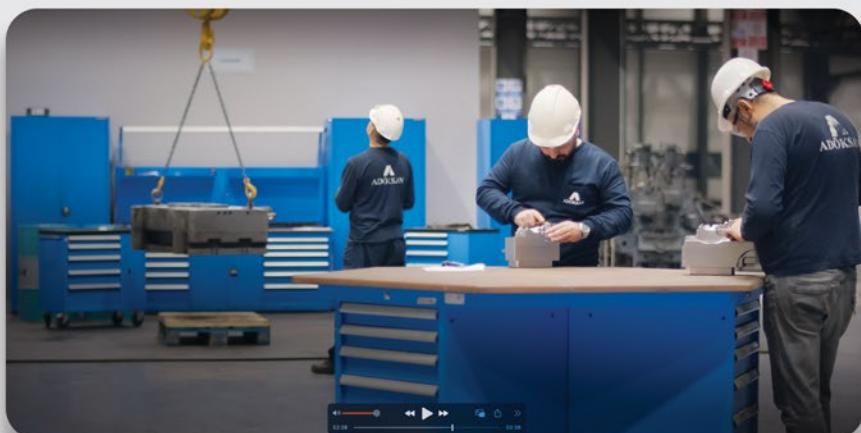
The Tool Manufacturing Department of Adöksan Die Casting provides **high-precision mold production services** with its modern machinery and experienced engineering team. We specialize in quality, consistency, and efficiency for delivering **innovative tooling solutions** for the automotive and die-casting industries.

Our Capabilities

- Die casting mold manufacturing
 - Mold repair and maintenance
 - Machining of mold components
 - Fixture manufacturing
 - Spare part manufacturing
 - New core manufacturing



	Machine Type	Quantity	Description
Vertical Machining Center (CNC)	CNC Lathe	2	Precision turning operations
EDM (Electrical Discharge Machine)	Vertical Machining Center (CNC)	4	3-axis high-precision machining
Surface Grinder	5-Axis CNC	1	Surface machining with high accuracy
Spotting Press		1	Surface processing for difficult geometries
Manual Lathe		1	Surface finish and dimensional accuracy
		1	Mold surface fitting and adjustment
		1	Repair and auxiliary part machining





MELTING

Melting is the first and a **highly critical step** of die casting.

Our **energy efficient furnaces** and meticulous **metal handling procedures** ensures the highest quality of molten aluminum.

To ensure best quality, Adoksan supplies a **large portion of aluminum ingots from Italy**.

The ingots are molten in **8 furnaces**:

Model	Capacity About
3 MARCONI	2.000 kg/h
2 MARCONI	1.500 kg/h
2 STRIKO	1.500 kg/h
1 CIFE	500 kg/h

Degassing is an **important step** of die casting as air trapped in the molten metal should be kept to a minimum to avoid porosity.

Instead of degassing in the individual pots, **aluminum is degassed centrally**, which increases **effectiveness** of the process while increasing **efficiency**.



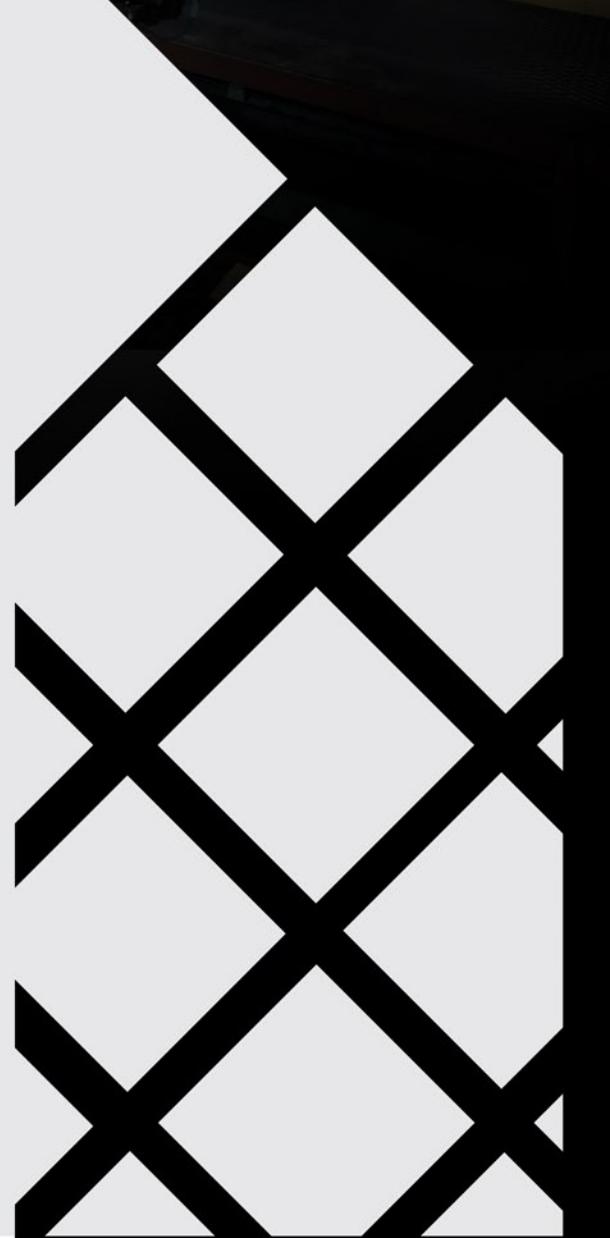
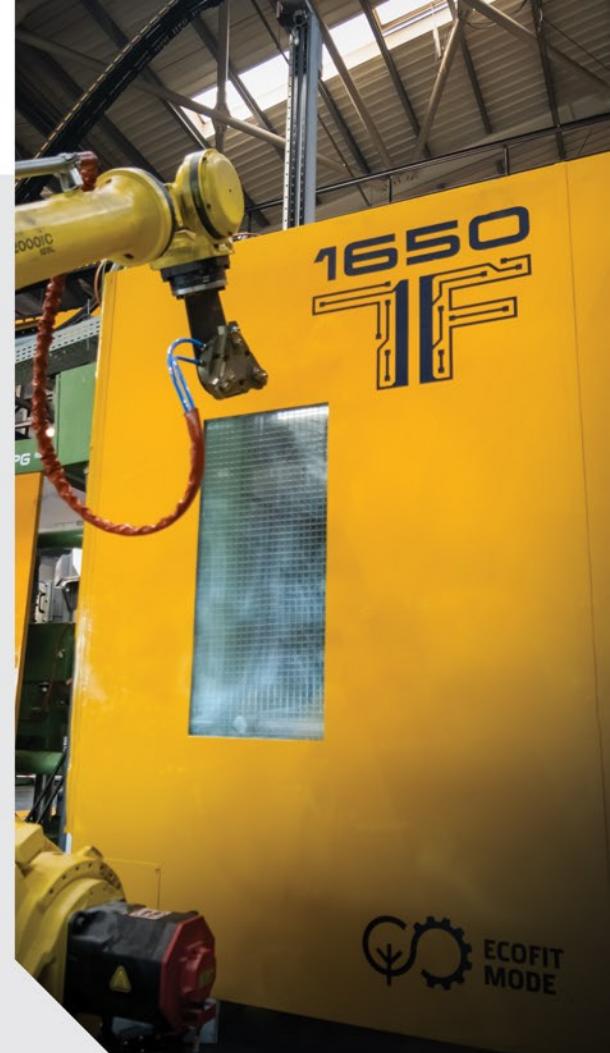
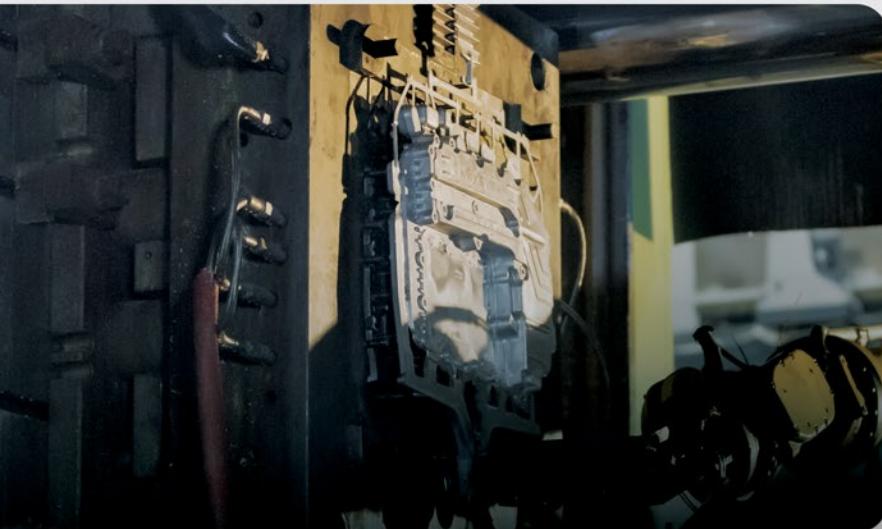
DIE CASTING

Adöksan's die casting machine park is composed of **27 machines** within two plants (17 in the first plant, 10 in the new plant) in the range of **160 tons** to **1650 tons** clamping force enabling Adöksan to cast parts with weight ranging from **30 gr** to **20 kg**.

The new plant will include **5 additional die casting machines** up to **3300 tons** clamping force. Thus, the maximum weight of die casted products will increase to **45 kg**.

Use of **state of the art machinery** (Italpresse) enables excellent process control and casting of most complicated parts.

Fully automated casting cells, offer the advantage of unparalleled process consistency, precision, efficiency and reduced labor cost.

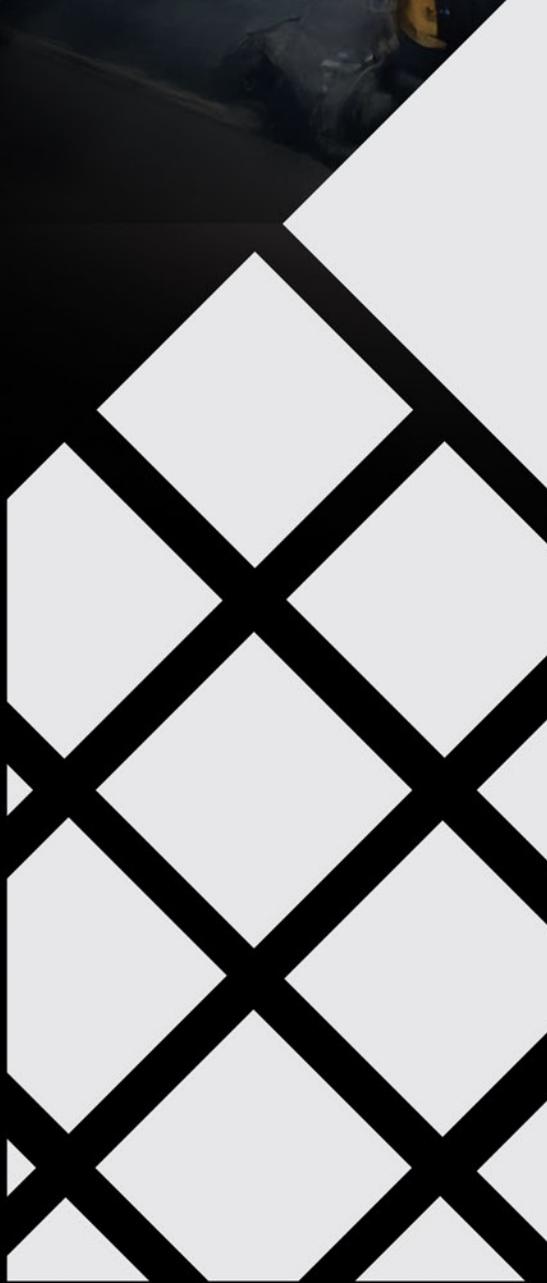


SURFACE TREATMENT

DEBURRING – POLISHING – SHOT BLASTING

A multitude of techniques such as **fully automated vibrating deburring, polishing, shot blasting** are used for surface treatment.

In addition to traditional methods, Adöksan applies Thermal Deburring as requested by a special customer project. **Thermal Deburring** is a **unique process applied only by a limited number of manufactures globally**. Thermal blasts are used to remove the smallest burrs in the unreachable inner areas of the parts.

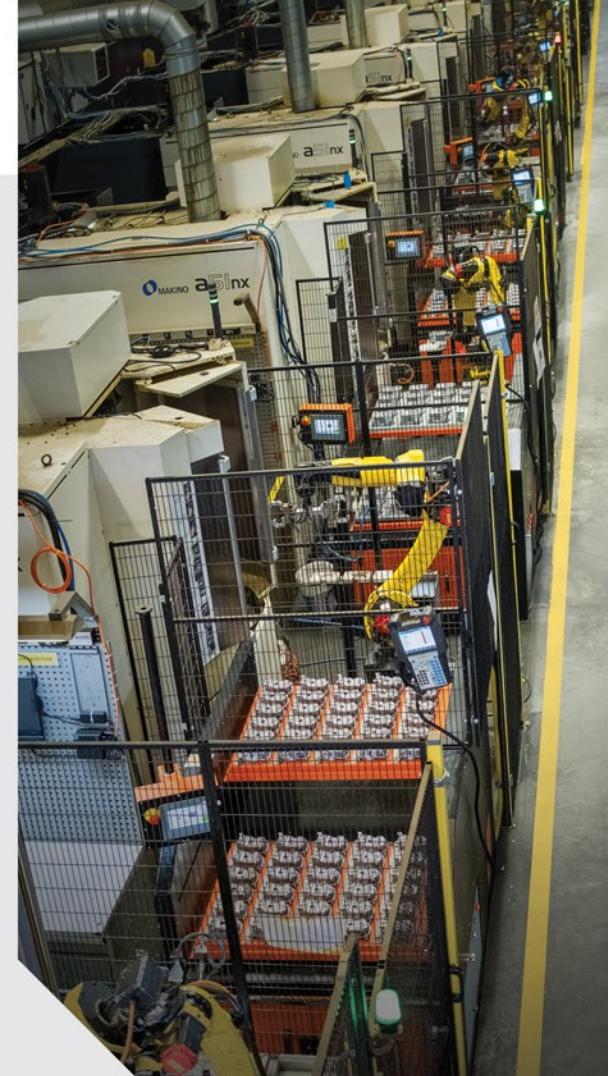


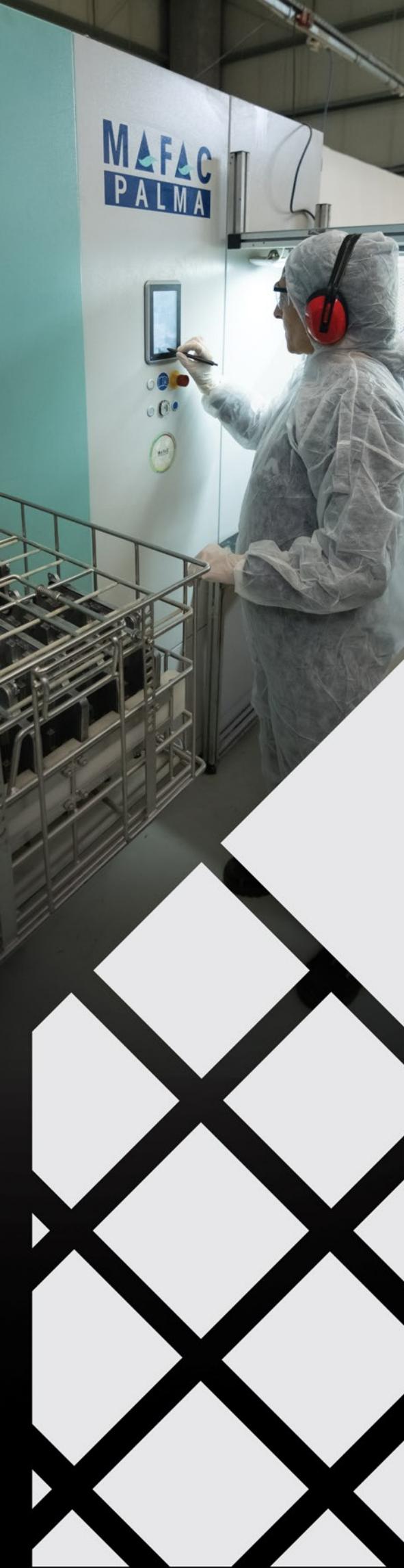
MACHINING

Adöksan's machining park consists of **60 machines** including **fully automated Horizontal and Vertical CNC Machining Centers, Multi-point Drilling, Tapping, Milling, Boring, Lathe and Grinding Machinery** to process the raw parts most efficiently as per the customers' requirements.

Adöksan increases **machining capacity continuously**. As a result, **second plant focusing on machining** and other value-added services was established in **2013**.

The **machine park** is planned to be **extended significantly** in the upcoming years according to the new projects. **Hungary plant** will be used **for extra machining capacity**.





WASHING

WASHING

Adöksan washing and cleaning lines deliver measurable and effective cleanliness, high process reliability, sustainability, and full compliance with automotive standards. At Adöksan, cleaning is an integral part of final product quality.

MAFAC CLEANING LINE

MAFAC cleaning line is designed to fully comply with automotive OEM quality requirements through a multi-stage and controlled process structure. Washing, rinsing, and drying stages are optimized according to particle size, particle amount, and surface residue limits.

High process repeatability ensures functional and cosmetic cleanliness before final assembly.

BELT CONVEYOR TYPE CLEANING LINE

Belt Conveyor Type cleaning line provides a stable, traceable, and efficient cleaning solution for high-volume production. Operating with a continuous flow principle, the system maintains customer-required cleanliness levels while optimizing cycle times.

It ensures standardized cleaning quality, process continuity and sustainability in serial production environments.



ULTRASONIC CLEANING LINE

Ensures High-precision cleaning for aluminum die-cast and machined parts with complex geometries. Ultrasonic waves effectively remove oils, chips, and micro-particles from blind holes, narrow channels, and hard-to-reach areas.



The process is validated according to customer-defined cleanliness specifications, ensuring stable and repeatable performance under serial production conditions.

COATING

CHROMATE COATING LINE

The Chromate Coating line provides a thin, uniform, and controlled conversion coating for aluminum parts. The process is primarily applied to enhance paint adhesion, provide temporary corrosion protection, and ensure surface stability before further finishing operations.

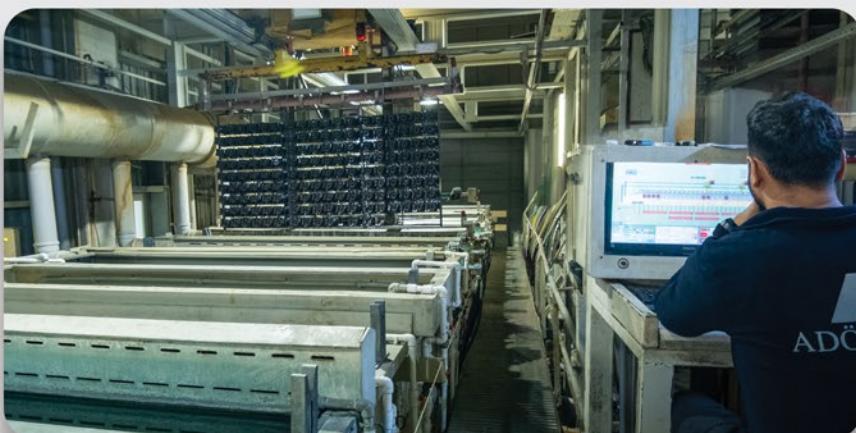
Chromate layer characteristics such as film weight, surface integrity, and process parameters are controlled and validated in line with customer requirements and automotive OEM standards.



POWDER COATING LINE

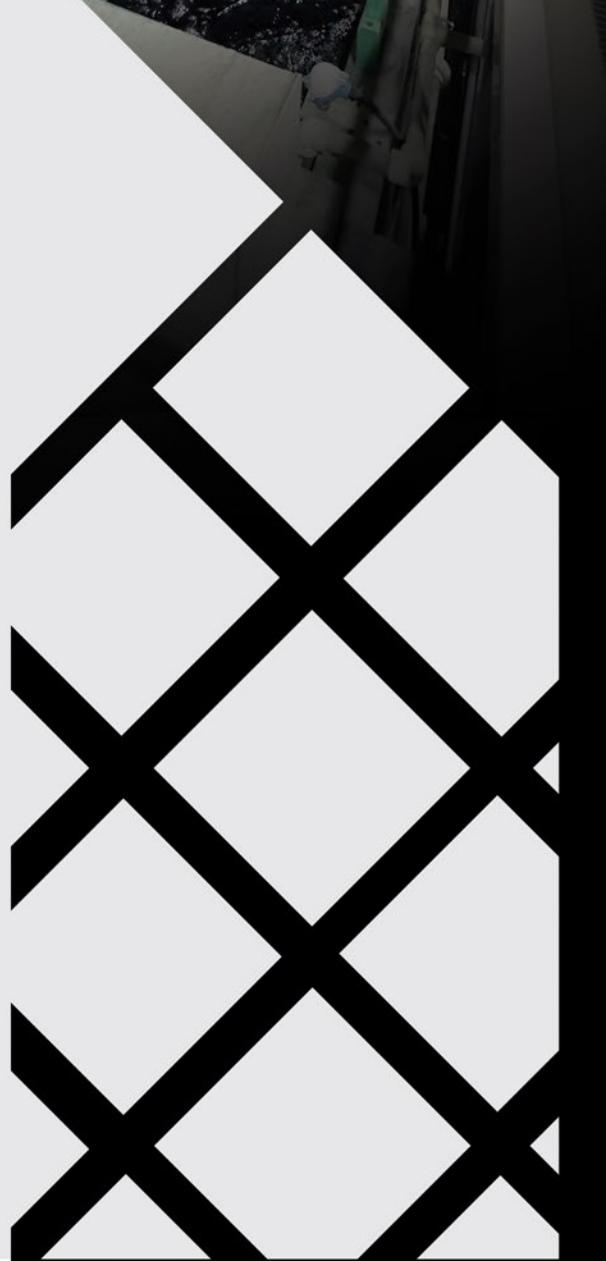
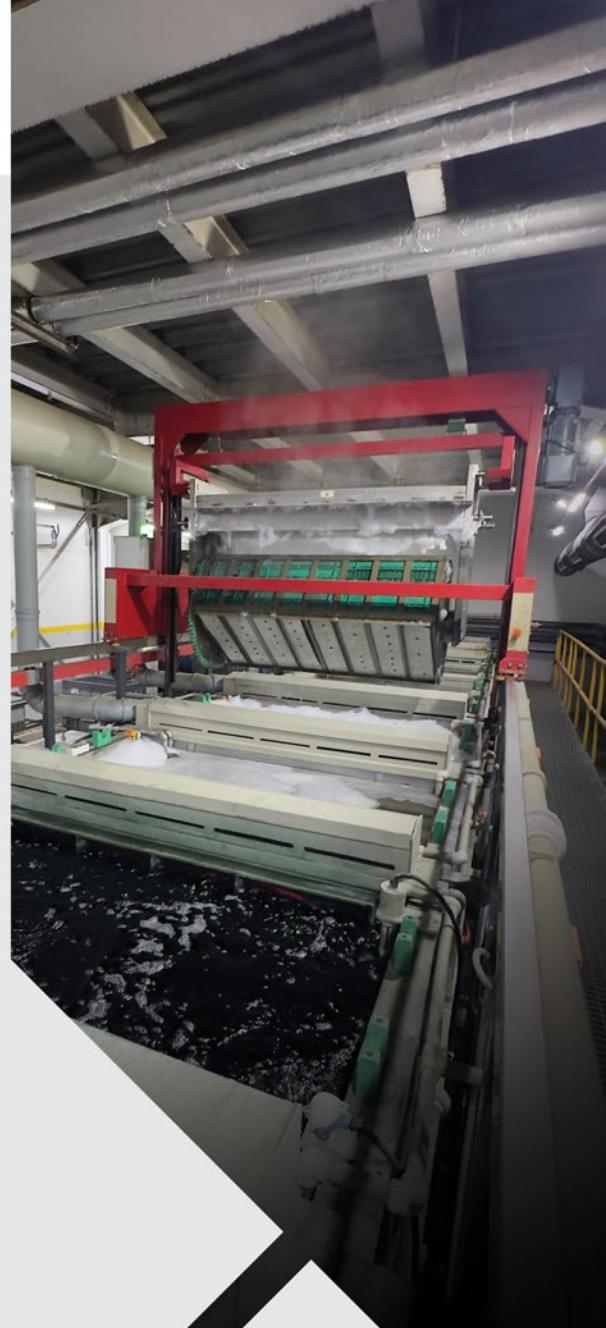
Powder Coating line provides high surface durability, corrosion resistance and aesthetic quality for aluminum die-cast and machined parts. The process is controlled in accordance with customer technical specifications, including surface preparation, coating thickness, and curing parameters.

Coating thickness, adhesion, and surface integrity are validated to meet automotive industry standards, ensuring repeatable quality in serial production.



ANODIZING LINE

Anodizing line creates a controlled oxide layer on aluminum parts, delivering superior corrosion resistance and surface stability. The process is managed in accordance with customer requirements, including layer thickness, pore structure, and sealing stages. Both functional and visual anodizing requirements are ensured based on final application conditions and OEM expectations.



SUB-ASSEMBLY

Another service Adöksan may offer upon customers' request is **sub-assembly**. Customers prefer this for cost reasons and streamlining their in-house production processes. As an example, an assembly line is established for a customer to **assemble** and **leak-test millions parts per annum**.

As per customer requests and agreements, **various levels of sub-assembly** or even **full-assembly** is possible.

For a high technology application,
Friction Stir Welding and **Robotic Assembly Line**
with the following high precision operations were implemented:

*Plasma Cleaning
Glue Micro Dosing
Electro-Press Performed Riveting
LASER based Dimension Control
Part-by-Part Identification by DATAMATRIX
Computer Controlled Interlocked Process
Part Flow Over Multiple Work Stations*

Adöksan also complies with the **cleanliness requirements** of customers. An **assembly line in semi clean room** already exists to achieve requested cleanliness requirements. Adöksan has **invested in Full Clean Room** according to the requirements of the projects.

Furthermore, Adöksan has a **cleanliness laboratory** to control cleanliness value continuously during the process.



QUALITY

For Adöksan, **quality is not limited to meeting technical specifications.**

It is **the key fundamant of what we stand for.** Achieving seamless and continuous quality is the determinant of all our decisions and actions. Adöksan's commitment to customer satisfaction starts with the first and lasting impression.

Adöksan applies rigorous product development management that emphasizes **Process Failure Mode & Effect Analysis (PFMEA).**

Our day-to-day process management approach is a **systematic, methodical** and yet with **basic team problem solving approach** which ensures outstanding quality of the products. We have reaped the benefits of this by the growth confidence on our customers' side and their grant of increasingly challenging projects.

Adöksan is certified by **IATF 16949, ISO 9001, ISO 14001, ISO 27001, TISAX** and **45001** standards. **VDA trainings 6.2, 6.3, 6.5** are continuously running for Quality, Production and Management Divisions.

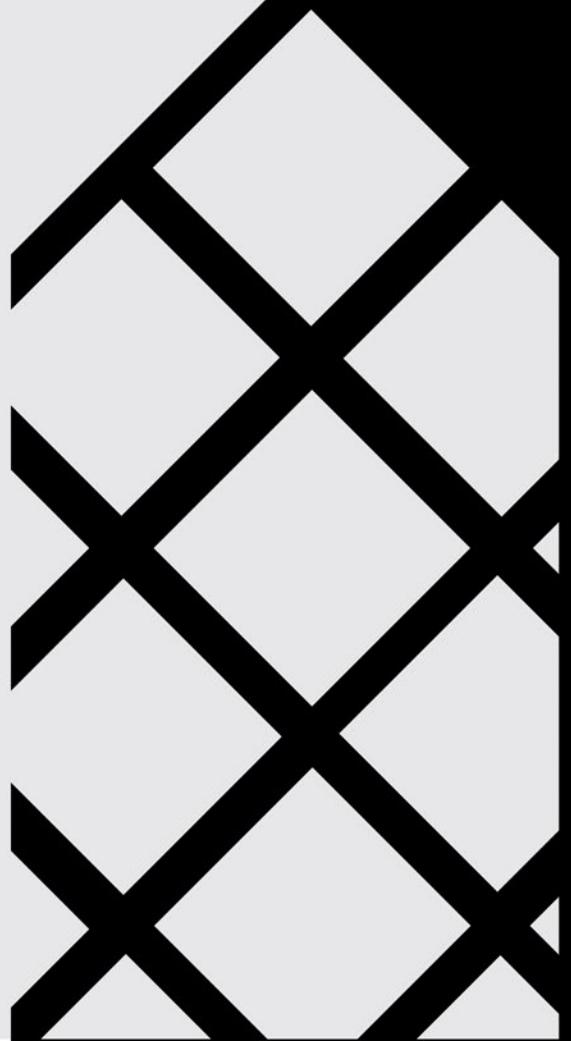
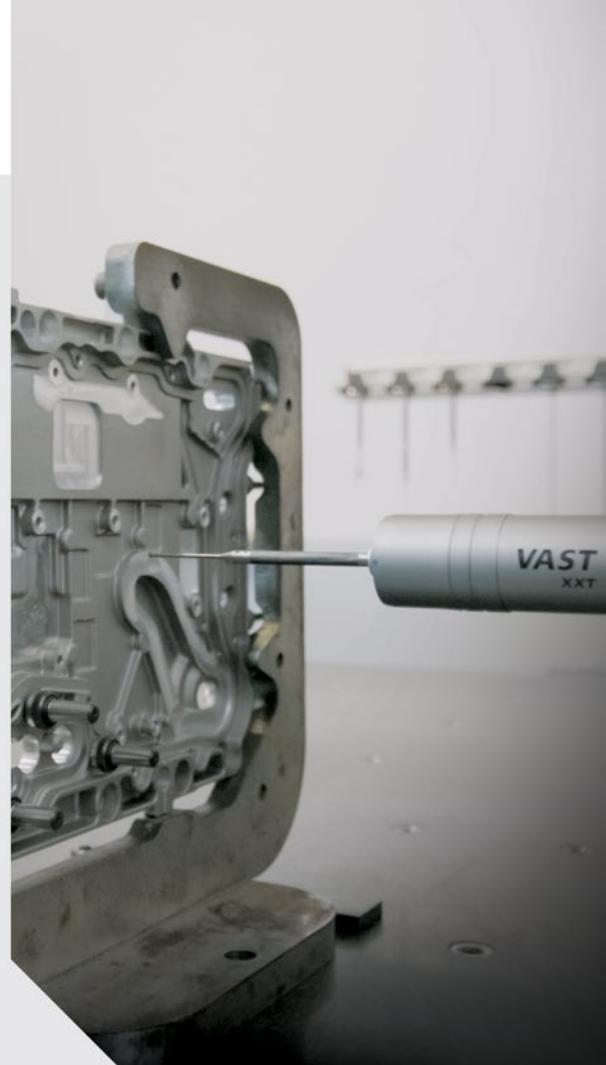


Due to the nature of Adöksan's business, **advanced measurement capability** is a necessity. Around **80%** of our products have **leakage criteria.** Adöksan designs and manufactures leak test devices with **"ATEQ" Pressure Decay Tester** for multiple circuits to check the parts according to given specifications.



The quality measurement equipment we use include:

Spark Spectrometer
X-Ray
3D CMM (Zeiss, Mitutoyo, DEA)
Hardness test device
Roughness test device
Contour measuring device
Different types of microscopes
Multiple Leakage test devices
Tool Presetter (EZ Set)
Computerized Technical Cleanliness
Laboratory
Computer Tomography (CT)
3D Laser Scanner





DIGITALIZATION

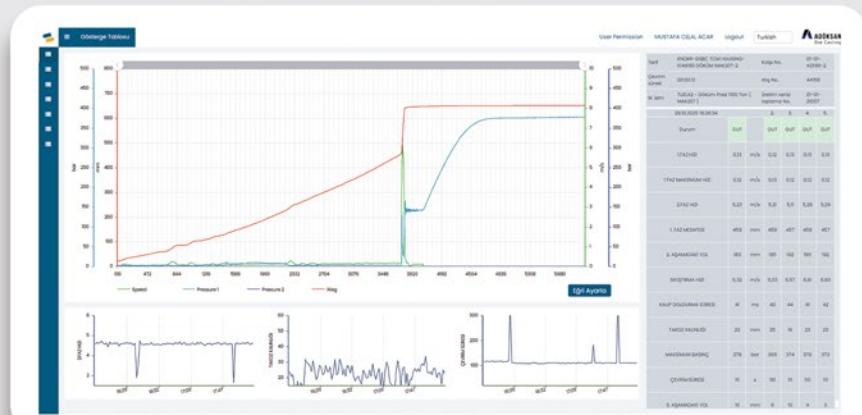
Adöksan aims to digitally mirror its physical production environment by placing **Digital Twin Technology** at the core of its manufacturing operations.

Real-time data is collected from production lines through advanced sensors and analyzed in a **digital environment**. This approach enables continuous monitoring of **production quality, predictive maintenance** and **enhanced** operational excellence.



Key focus areas include:

- Real-Time Monitoring
- Real-Time Data Collection & Flow
- AI-Driven Quality Adjustment
- AI Applications & Predictive Analytics
- Vision for Fully Automated and Human-Free Line Management
- Predictive Maintenance and Quality Control
- Simulation-Based Process Optimization
- Energy and Material Efficiency Enhancement



SUSTAINABILITY

Fully aware of the **importance of sustainability** issues, Adöksan has already been working in this field for several years and has made **significant progress**.

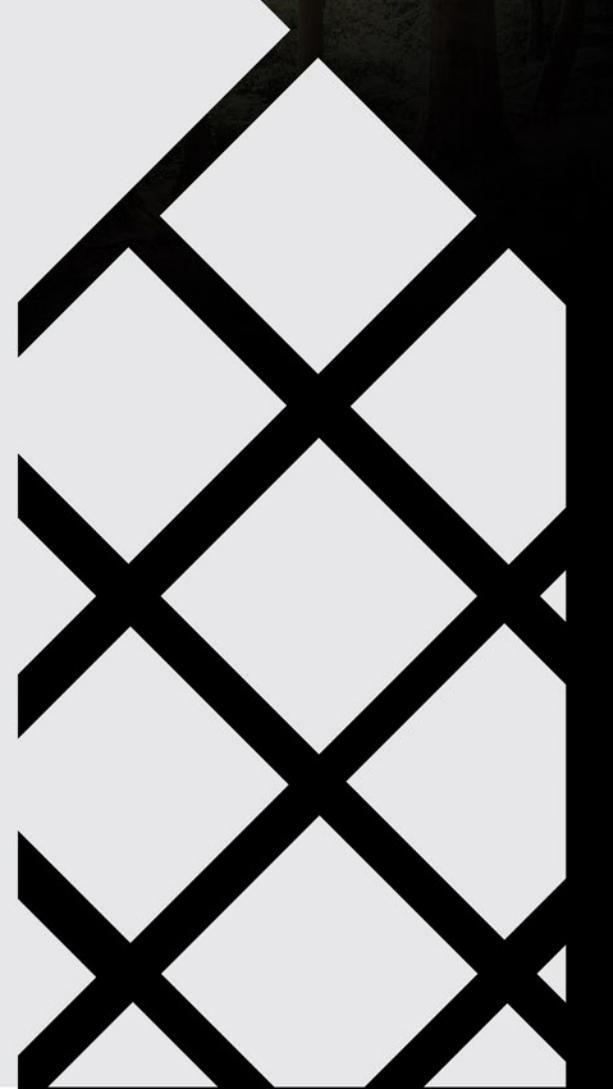
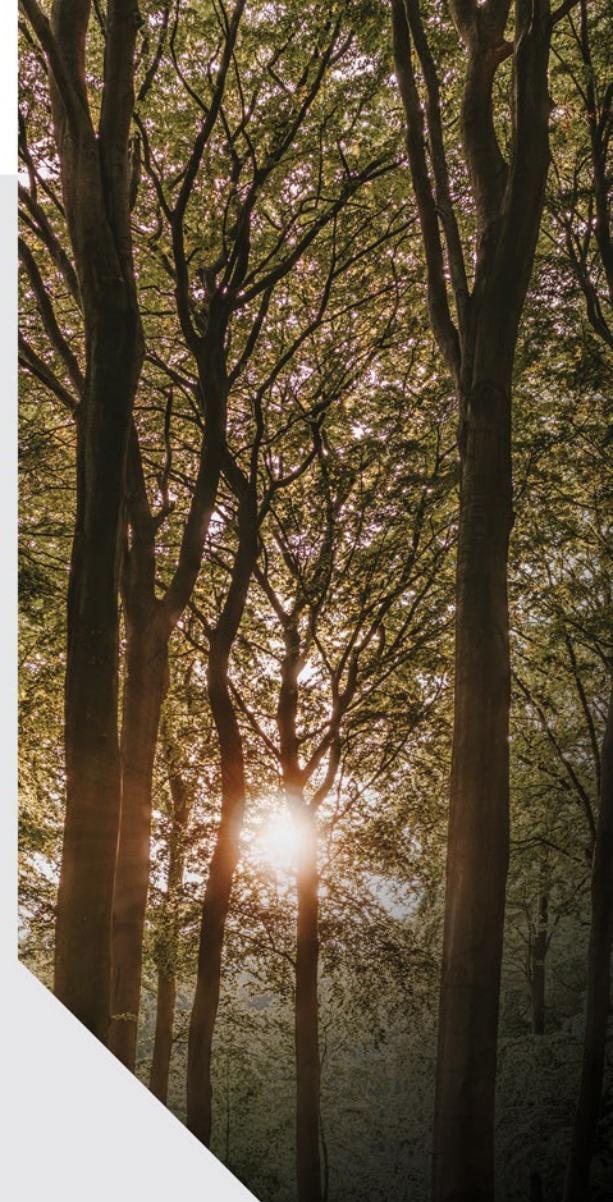


Adöksan's **sustainability strategy** was defined and **published in 2022** and the **GHG** (Green House Gas) based **carbon footprint** was calculated.



Based on this, Adoksan's first **GRI** (Global Reporting Initiative) compliant **sustainability report** was **published in 2023** with the goal of **reducing emissions by 30% by 2030** and **becoming a carbon-neutral company by 2050**.

In order to achieve these ambitious targets, Adöksan is not only working to **modernize its machinery in combination with energy management systems**, but has also launched its **Solar Power Plant Project** which, when completed, will **reduce electricity based carbon emissions by up to 50%**.



REFERENCES

AUTOMOTIVE



Volkswagen



SCANIA

DAIMLER



BORGWARNER



ebm papst



MAGNA



ThyssenKrupp



NON-AUTOMOTIVE



Endress+Hauser

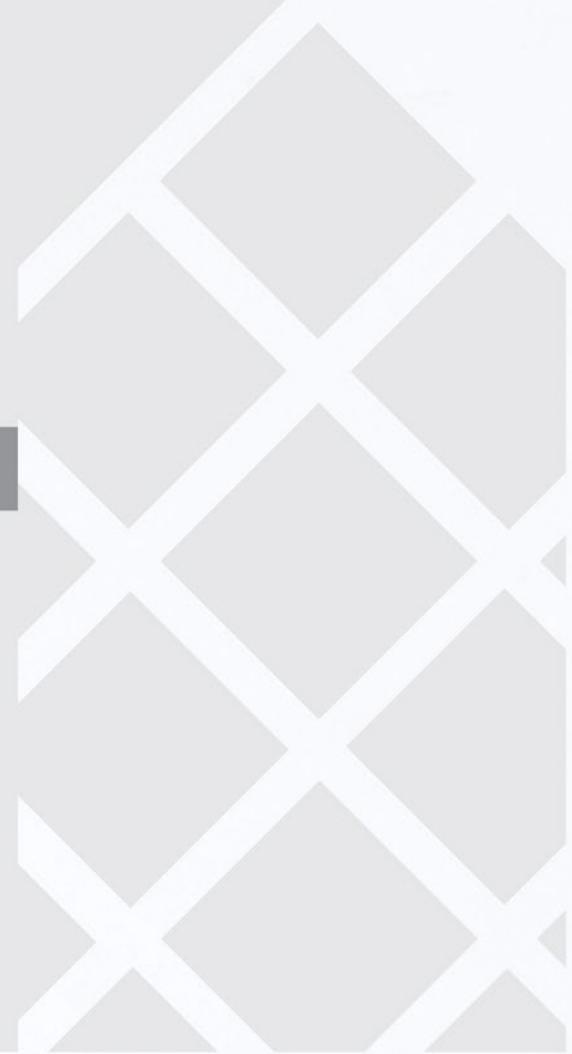
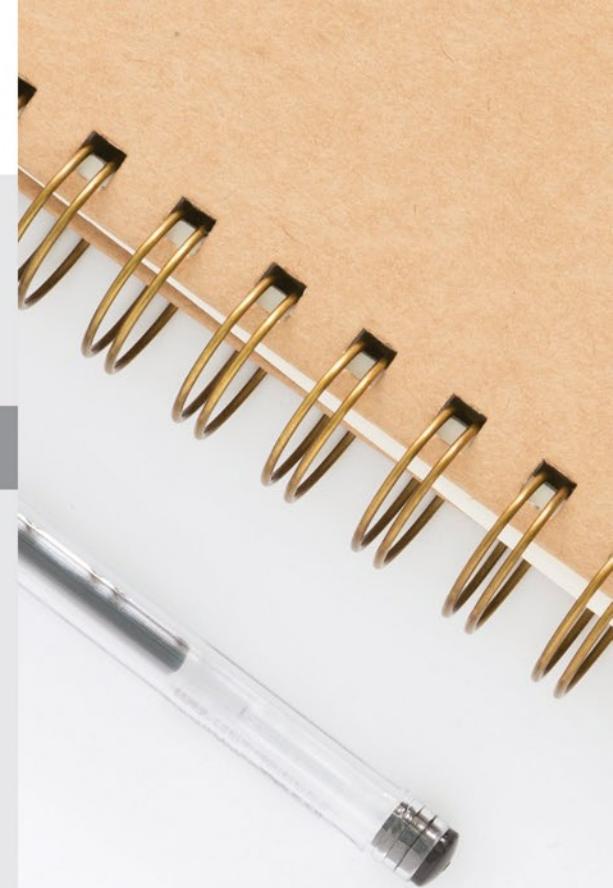


Rexroth
Bosch Group

zollner

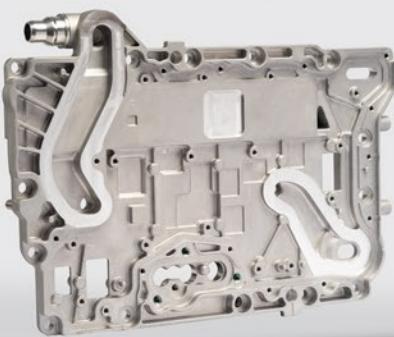
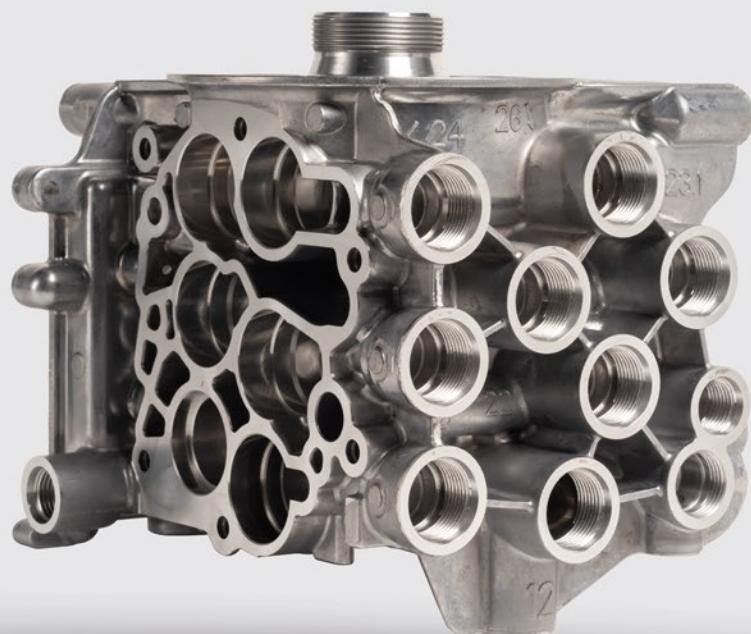
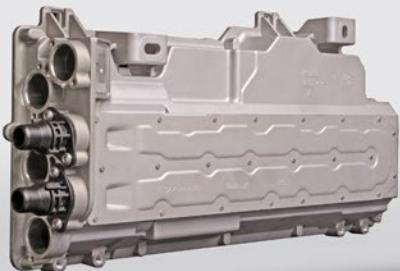


Tefal



PRODUCTS

AUTOMOTIVE



PRODUCTS

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- 📍 **plant 2** İstanbul Endüstri ve Ticaret Serbest Bölgesi Aydınılı SB Mah. Atatürk Caddesi No:11 34957 Tuzla / İstanbul / TÜRKİYE
- 📍 **plant 3** 3516 Miskolc, Gábor Dénes Utca 4, HUNGARY
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