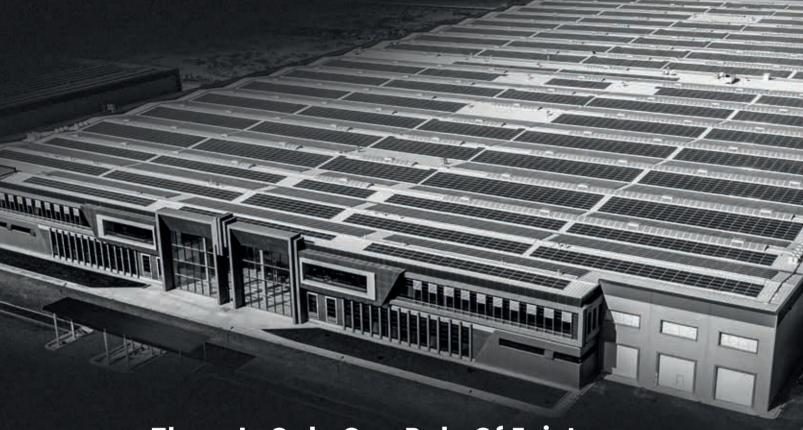
#### NOW VADENAGE

## Introduction **Brochure**

#always forward







# There Is Only One Rule Of Existence. Working Without Stopping.

In the story that started with human and labor, a new era has begun, blending technology and power:

Our company was established in Konya in 1968 by our honorary president İsmail ACAR under the name Yıldız Enjektör ve Rekor Pulları and has reached the experience, knowledge and technological power to work with world giants today.

Our adventure, which started with the production of washers and gaskets, has become capable of producing many parts of commercial vehicles and continues by adding new products and product groups to its production portfolio every year.

Yıldız Pul Otomotiv, with its modern facility spread over an area of 120.000 m2, hundreds of employees, wide and technological machinery, produces in different locations and manufacturing the products that the automotive industry needs. Our company has become a brand that provides stability in quality by incorporating the processes of all products, starting from the design and R&D department.

Our company, with the quality management system it has established, has ISO/TS 16949:2009 and TS EN ISO 9001:2008 quality certificates, which have an important role in the automotive sector.

Our company has created the VADEN ORIGINAL brand for the purpose of selling and distributing its products in domestic and international markets since 2007. Since 2018, it has been among the top 1000 exporting companies and among the top 1000 manufacturers in sales from production.

Our goal is to be a leading company in its sector and to supply products to OEMs with VADEN ORIGINAL brand.



R&D / Design Department Development

#### Design, employment and enterprise.

We have everything better.

Our company, which started its R&D studies in 2014, continued its activities systematically in the same year with its first project supported by TÜBİTAK. In 2019, we received the R&D center certificate and placed R&D at the center of all our work within the scope of the "R&D Centered Growth" strategy.

Our Center; It carries out joint studies by regularly exchanging information with universities, research centers and scientific institutions such as TÜBİTAK, as well as leading institutions of the automotive industry.

Yıldız Pul R&D Center strengthens its competent staff infrastructure day by day by encouraging master's and doctorate studies. Our R&D team, at local and international level related to their fields of work; They closely follow fairs, symposiums, workshops, notices and continuous publications and contribute to their development.

Property rights are given great importance in new product development and reverse engineering studies, and the process is meticulously examined. At the same time, we have patents and useful product documents for many newly developed products, and efforts are being made to increase them.

In our center; Software such as ANSYS Mechanical-HAD, Magma Casting, dynamic design specific to engine designs (FEV), DEWESOFT, NI Labview, NX Siemens CAD, SolidWorks are used.

Our R&D Center, which is constantly in search of innovation with its self-created research and improvement motives, develops itself. As a result of the projects completed and the investments made by the end of 2020, these studies have enabled our R&D Center to set higher targets for itself by ranking 296th among all R&D centers expenditures across Turkey.

As Yıldız Pul R&D Center, we continue with new projects with our structure that follows the technology and the world, in accordance with engineering principles.



Durableness

**Mould Production Line** 

### Everything fits to its mould.

Only our power doesn't fit into its mould.

Our company, which aims for uninterrupted production, has more than 20 CNC machines in the Moulding Department, which always aims at quality and sustainable production with our expert technical staff.

High pressure, low pressure, plastic injection, sheet metal moulds and trim moulds are designed and manufactured by using high alloy steels.

Moulds and models are designed with Siemens NX and Solidworks softwares, and are supported by MAGMA simulation software during the design of the moulds.

With our policy of continuous improvement, we ensure that the efficiency of production is increased by keeping the Mould Failure Downtime rates at a minimum.



Strong

Foundry

# There is a work from the master hands of a craftsman.

This is Vaden work.

Our foundry, which started production in 2011; In order to meet the increasing product variety and demand, it continues its production in its new facility with a closed area of 10.000 m² by accelerating its investments in 2021.

In our facility; There are 16 fully automated high pressure aluminum die casting machines 5 fully automatic low pressure aluminum die casting machines, and 4 gravity casting machines between 220 tons and 2500 tons.

To meet the raw material needs of these machines, there are 5 melting furnaces with a melting capacity of 1500/3000 kg and the melting capacity of the machines is approximately 3000 tons/year.

Non-destructive examination of the parts we produce is carried out with the X-RAY scanning device in our laboratory.

With the Industry 4.0-Real Time feature in our high-pressure aluminum die casting machines, parameters such as temperature, speed, pressure are continuously controlled during casting.

**Precision** 

**Metallography Laboratory** 

#### We produce precisely.

It requires this to be good.

In our Materials and
Metallography Laboratory,
product-based chemical
analysis is performed and all
metallographic processes
applied on the component are
determined. In our laboratory,
the most suitable raw material
is selected by making chemical
analyzes of the materials, and
the characterization of these
structures is determined by
examining their microstructures.

The heat treatment applied on the component and the hardness depth are analyzed on a micro scale.

The mechanical properties of the material are determined by applying the tension-compression test.

Components are meticulously examined in the laboratory by engineers who are experts in their fields, with an understanding of high quality standards. In the interpretation of the analysis results, minimum error and reliable results are aimed.

# Some of the studies we have done in our laboratory;

- ► Chemical analysis
- Examination of the grain size of the material
- Examination of microstructure
- Examination of residue(inclusion) type,
- Examination of residue(inclusion) type, dispersion, density
- Examination of the segregation status

- Crack control
- Hardness depth control
- Coating thickness control
- Examination of graphite type and dispersion
- ▶ Material life test
- ► Tension-compression test



# We design, shape and manufacture.

This is where we bring our dreams to life.

Our company has become a respected brand with the production of the products it exports to all over the world, with its professional approach and corporate culture, and with its big investments in technology. It supports this development with our experienced staff in the machining department and high performance precision CNC machines.

Our department; It has a young, dynamic staff with over 30 engineers/technicians/foremen and over 200 experienced operators. It has the largest and most modern machining park of the sector with its latest techology, high-performance CNC machining centers, and more than 100 other machines.

Production is controlled step by step with skilled manpower, modern hydraulic fixtures, special tools for high cutting regimes and parts, and appropriate production is carried out with the understanding of minimum error and maximum quality. Thanks to the wide machinery and equipment we have, efficient production can be realized at any scale and flexibility.

In order to minimize the unit cost per piece in the developing competition in the sector, we adopt the philosophy of continuous improvement as our principle and closely follow the technological developments.





Our metal stamping line, which forms the basis of our long production adventure that started with washers, is one of the departments that contributed the most in the formation of the VADEN brand and reaching its current awareness.

Today, our metal stamping line has a closed area of 10.000 m2, more than 40 eccentric and hydraulic presses with tonnages ranging from 10 tons to 600 tons, and drive systems that can be driven by straightening steel rolls from 0.40 mm to 4 mm.

Thanks to the progressive moulds used in these presses, mass production is ensured with high precision and accuracy by minimizing manpower and potential work accident risk.

Product sustainability is kept at the highest level with fully automated screen printing, assembled valve machine and vibration machines. The products produced within the scope of IATF 16949 and ISO 9001 certificates are given directly to the assembly lines of many of our OEM and main supplier customers.

Our production process is constantly developing and growing, and our priority is safe production, minimum waste and maximum quality in our work.

**Success** 

**Bursa Rubber Production** 

### Those who do not stand still, who constantly grow, succeed. Those who have strategy and production at every step,

succeed all over the world.

In our Bursa Rubber Production Facility, which we established in January 2021 to meet the needs of our products that we include in our product range; Activities are carried out in our Moulding Department, Machining, Rubber Press Line, Quality Control and Laboratory departments.

In our production facility, all processes from product design to final product are in-house, and there are more than 10 CNC machining centers, 24 station vacuum hydraulic rubber presses, rubber mixing mill, automatic vacuum precision rubber slicing machine and cold deburring machine.

For the sustainability of the quality of our rubber products, Rheometer Device, elongation-breakage test device, density measuring device, shoremeter device, contour scanning device, profile projection device, heat aging device, oil bath test device, abrasion resistance test devices are used. In this way, it is guaranteed that the products we produce are always of high quality and of measurable strength.

Since rubber parts are used in our products, our aim is; is to ensure that our products reach our customers in the highest quality by producing durable and flawless products.



Performance Testing Center

# Vaden. Tests its own power. It ocuses on the best performance in all conditions.

In our R&D center, performance data (pressure, flow, power, vibration, temperature, moisture, sound pressure level, torque data) up to 200.000 samples per second is analyzed with more than 40 sensors.

In addition, life and performance test devices are designed for newly developed products

As a test center, our goal is to ensure that our products are sent to our customers perfectly and to design our own technological test devices

> NOW AGE



**Dynamic** 

**Quality Control** 

### Quality is not a goal for us, it is the process.

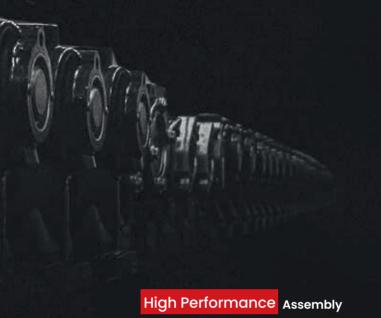
Quality means continuous improvement and change, not reaching a point.

As the Vaden family, the most important issue that our company does not make any concessions on is the quality control processes. We produce with the principle of "Every product produced within our company and received our quality assurance approval is our representative, our best reference" and we stand behind our products by giving guarantee periods to every product we produce, which cannot be given In addition, life and performance test devices are designed for newly developed products even in original products. The most important power behind our trust in our products is; quality raw materials, quality staff and always QUALITY CONTROL.

Quality Control is equipped with the best and most precise measuring instruments in its field and examines the smallest details with its qualified staff. In every investment and innovation we make, we ensure that the process proceeds in a healthy way by having quality control stations and staff in all flows and processes of production.

Before our products reach their final form, they undergo measurements, visual inspections and life tests on a batch basis, and at the last stage, functional tests and machine tests are carried out before reaching the customer





# A quality beyond the standards.

The world loves quality. Quality demands high performance

In our assembly lines, all products are prepared according to the assembly instructions, and all needs are met in line with customer special requests.

The working principles of all our products are determined by the R&D team, fully and semi-automatic test devices are designed and manufactured in-house. In these test devices; We test all product groups such as gearbox, suspension, clutch, cooling system, fuel system, exhaust system, brake system, compressor etc. and present them to our customers.

Our target in our assembly lines is to ensure the continuity of production even in minimum quantities in a wide variety of products and to meet the demands of our customers with the continuous improvements we make in our lines.

#### Think globally, work globally.

It focuses on the best performance in all conditions.

We started exporting for the first time in 2007 and as a company that exports its own manufactured products, we became one of Turkey's top 1000 exporters in 2018. Every year, we increase our export volume and rank at the top places. Our goal is to be among the top 500 exporters as soon as possible.

Having a worldwide distribution network and brand awareness, we continue to work with all our strength to be a pioneer in every field in the automotive industry. We are taking firm steps towards our goals with the TURQUALITY brand support program that we joined in 2019.

Since our production quality and our limits in the market are on a global scale, we raise our target not only with numbers, but also with national and moral values; It is our first priority to break the wrong perceptions against Turkish goods abroad and to protect the brand awareness. We know that this consciousness will carry us further.

A good team is the only way to achieve all goals. For this, we have a competent and reliable team that having forwardlooking training in the field of export, develops itself, can empathize with the customer, works hard to overcome the difficulties and gives confidence to the customer.

As Vaden Original, we aware that the exports are not just selling; We are also aware of the fact that it is to follow and manage all processes from production to reaching the customer and to overcome obstacles with knowledge. That's why today; We continue to grow and progress on this path with the belief and strength we have received from the past.







www.vaden.com.tr

