

POLAT *life*

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POLAT GROUP HAS A PRESENCE
ALL OVER THE WORLD.

Issue 21 | Free of Charge

PGR[®]
DRIVE TECHNOLOGIES

**WE ARE THE COMPANY WITH THE WIDEST
RANGE OF PRODUCTS IN THE WORLD
IN THE REDUCER INDUSTRY.**

We export to over 80 countries
across 5 continents, shaping
the power of machines
everywhere in the world.



 **POLAT**[®]

WITH POLAT ACADEMY

We support women's employment
with our welding operator
training program for women.

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Let's Get to Know PGR R&D and P&D Team Closer

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DEAR POLAT LIFE READERS,

My father, honorable İbrahim Polat, the founder of Polat Group, laid the foundations of Polat Group, whose borders would cross the country, 45 years ago in a 4.5m2 workshop. His possibilities were limited but his dreams were limitless.

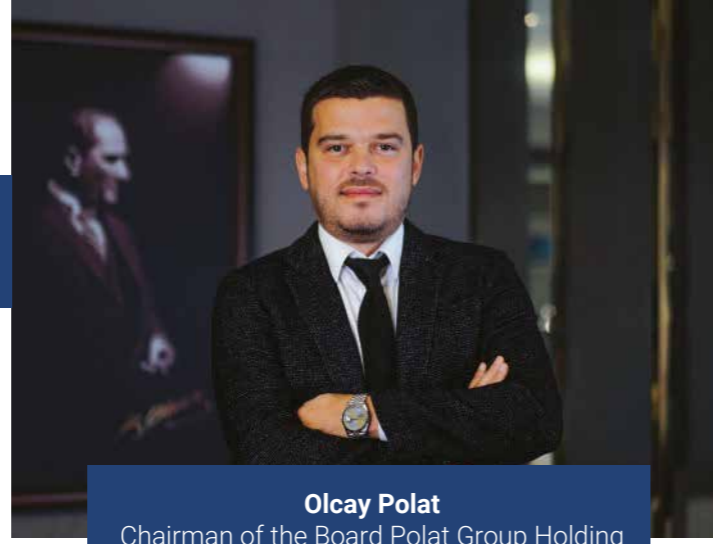
Under the leadership of İbrahim Polat, Polat Group has grown by signing important projects and many firsts in the sector with our companies in different sectors such as machinery, reducer, agriculture, chemistry, agriculture and has become an internationally recognized and trusted brand.

I am looking forward to carrying the flag, which I took over from my father İbrahim Polat, full of success, even further with the valuable employees of Polat Group.

Our company has grown with its commitment to business ethics, team spirit, quality service understanding, sustainability and belief in the principles of closely following technology and applying them to business models.

Polat Group's success is based on the dedication and team spirit of our determined and talented employees working in line with our corporate vision and goals. My primary goals are to further strengthen this team, to develop the talents of our employees and to increase and improve the team spirit. This success would not have been possible without the support and contribution of our employees. I am grateful to them and hope to achieve even greater success together in the future.

As Polat Group, we are delighted to provide the highest level of service to our customers and work to exceed their expectations. We adopt a customer-oriented approach and strive to build



Olcay Polat
Chairman of the Board Polat Group Holding

long-term and trust-based relationships with our business partners. In the future, we will adhere to these values and continue to offer you better and more innovative services.

Recent government support in the field of technology and industry, such as the Technology-Oriented Industrial Move, also reinforces our motivation for growth. With this motivation, we will continue to strengthen Polat Group's growth strategies in the new period. We will take steps to further expand our presence in every sector we are in. We will continue to produce with our production culture inherited from Anatolia, compete with national companies and aim for leadership. At the same time, we will work to contribute to our society and the environment by leading in sustainability and environmental responsibility.

In this very important period, when our Republic surpasses its 100th anniversary, we are determined to become a global leader in our sector with the strength we derive from our past and to continue to do so by building on new achievements every day. In this important period, inspired by our Republic, the foundations of which were laid under the leadership of the Great Leader Mustafa Kemal Atatürk, just like our Republic, we will grow without getting older, we will always maintain our youth and energy, and we will continue to realize projects based on innovation and technology.

We will provide you, our esteemed readers, with more information through Polat Life magazine to convey Polat Group's achievements and projects in the new period. Your support and interest gives us strength and increases our motivation. As Polat Group, I believe that we will grow even more and build a successful future together.



WE SHAPE

THE FUTURE

INSPIRED BY OUR ROOTS.



We talked about Supercritical with İlker YILDIRIM, R&D Manager of Polat Makina, one of our Group Companies, which is the first company to bring the use of Supercritical Technology from Laboratory Scale to Industrial Scale in our country, and we received information about the usage areas and the solutions we offer.

What is supercritical? Where is it used?

Supercritical fluid extraction (SAE) is an extraction method using a supercritical fluid as a solvent. Supercritical fluid refers to a phase in which a substance at a certain temperature and pressure conditions exhibits a combination of gas and liquid properties. In this phase state, the substance has low viscosity and high diffusion properties like gases, but also high density and solvent properties like liquids. The most widely used supercritical fluid is supercritical carbon dioxide (SC-CO₂). Supercritical carbon dioxide is considered an environmentally friendly solvent as it is non-toxic, non-flammable and easily recyclable, a property that preserves the quality of the extracted substance. Furthermore, the critical point of carbon dioxide is at an accessible temperature and pressure, which makes it usable in a variety of applications.

Supercritical fluid extraction is used in various industrial and laboratory applications. Some of the uses are as follows:

Plant Extraction: SAE is widely used for the extraction of bioactive components from plants. Supercritical carbon dioxide is an effective solvent for dissolving valuable components such as essential oils, flavorings, phenolic compounds and other bioactive components in plants.

Pharmaceutical Industry: SAE is used as a solvent in pharmaceutical production, enabling purification and separation of desired components.

Food Industry: SAE is used to extract substances such as aroma, caffeine, fatty acids and color compounds from foodstuffs. SAE is a frequently preferred method for caffeine extraction in products such as coffee beans, chocolate and tea.

Environmental Applications: SAE is used for the extraction or separation of environmental pollutants. For example, in the petroleum and petrochemical industry, SAE is applied to extract various pollutants from water or waste gases with supercritical carbon dioxide.

What is the customer feedback on supercritical technology?

Polat Makina is the first company in our country to bring the use of supercritical technology from laboratory scale to pilot and industrial scale. We receive positive feedback from our customers in our studies. Businesses are interested in this technology by evaluating the many advantages of supercritical fluid extraction. In this context, with our 20-liter unit that we use in R&D activities, it makes a very important contribution that we can show the advantages and real performance of the equipment before offering products to our customers.



İlker YILDIRIM
Polat Makina Ar-Ge Müdürü

What are the advantages of Supercritical over traditional methods?

We can summarize the advantages of Supercritical as follows;

Environmental Advantage: Supercritical fluids are considered an environmentally friendly solvent. In particular, supercritical carbon dioxide is non-toxic, non-flammable and does not harm the atmosphere. Thus, it minimizes negative impacts on the environment and supports environmental sustainability.

High Efficiency: Supercritical fluids have low viscosity and high diffusion properties. These properties can more quickly and effectively dissolve targeted components and penetrate into the core. This results in higher extraction efficiency and better retrieval of the targeted components.

Low Temperature Operation: Supercritical fluid extraction reduces the risk of thermal degradation because it takes place at low temperature. This helps to preserve temperature-sensitive components. At the same time, low temperature operations save energy and optimize material handling processes.

Solvent Recovery: Supercritical fluids can be easily recovered by changing pressure or temperature conditions. This allows the solvent to be economically reused again and again. The recovery process lowers operating costs and reduces environmental impact.

Solvent Selection: Supercritical fluid technology enables the use of different solvent options. This offers the flexibility to choose from a variety of solvents to suit the application needs. Various extraction results can be achieved using different solvents.

Product Quality: Supercritical fluid extraction reduces the risk of thermal degradation as it takes place at low temperature, ensuring higher quality preservation of the components. This ensures that the extracted components have more pure, natural and bioactive properties.

Supercritical Extraction is a product that we care about for a sustainable future because it is an environmentally friendly application, natural and healthy products can be obtained in the food industry, and it provides high efficiency in the pharmaceutical industry.

What is the importance of Supercritical Extraction for the future of Polat Makina?

As a product portfolio strategy, Polat Makina focuses on high technology, high added value and equipment that will be the first in Turkey in the field of extraction.

How did you decide to invest in supercritical technology?

As Polat Makina, our main field of activity is separation technologies, we continuously research innovative and sustainable products in these technologies and offer our solutions to our customers. In this context, supercritical technology was identified as a high-tech product that has remained at the laboratory scale in our country but has very wide usage areas abroad. After completing our supercritical extraction project in our R&D Center, the Ministry of Industry and Technology called for the "Technology-Oriented Industrial Move Program". As a company, we started the necessary work by transforming our interest and experience in sustainable, environmentally friendly applications and products into an investment decision within the scope of this call, and we were among the first 10 projects supported in Turkey with the production of supercritical fluid extraction and centrifuge systems within the scope of the Technology-Oriented Industrial Move Program. We continue our work on this subject by taking customer feedback into consideration.

"Polat Makina has taken its place among the first 10 projects supported in Turkey with the production of supercritical fluid extraction and centrifuge systems within the scope of the "Technology Oriented Industrial Move" program."



Supercritical Fluid Extraction Systems

NEWS FROM US

DISCOVER THE HARMONY

in Nature

Polat Supercritical Fluid Extraction Systems has been designed to **provide high-extraction efficiency** and products of high purity. The carbon dioxide used at high pressures as a solvent helps to **obtain natural extracts enriched** with bioactive compounds.

Centrifuge & Extraction Technologies

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PG Solutions, the newest brand of our Group, continues to offer solutions in Process Design and Engineering. We listened to PG Solutions' solutions in the Aseptic Filling Group from PG Solutions' Business Unit Director Mr. İsa ŞANLITÜRK.

What is Aseptic?

Aseptic is the opposite of the word "septic", which is used to express the environment where microorganisms harmful to health are present. Aseptic means an environment free from microorganisms.

Aseptic technique and technology enables the long-term preservation of food without the need for a cold chain and (or) preservatives, while maximizing the benefits of food. Throughout the production cycle, food must be handled under sterile conditions. This includes food processing, filling and preservation in the desired packaging conditions.

Barrel filling with aseptic bags is one of the most frequently used methods in the world today for aseptic packaging and the ongoing preservation process. Barrels can be produced in various types, from plastic to steel and fiber;

- An inner aseptic bag to maintain food hygiene,
- Strapping for security purposes, barriers, pallet stacking, etc,
- Labeling for each barrel, and a series of labor operations are required to carry out these operations.



İsa ŞANLITÜRK
İsa ŞANLITÜRK PG Solutions
Business Unit Director

All this results in a significant reduction in material and labor costs.

In addition, **about 50% more liquid food can be transported with a flexitank in a 20' container compared to the use of steel drums, which are commonly used in the industry.** Thus, flexitanks reduce logistics costs and offer an alternative way of transporting cargo, especially over long distances.

Despite all these advantages, finding equipment capable of filling high-volume tanks such as flexitanks in aseptic conditions becomes challenging. At this point, PG Solutions provides solutions to companies with its aseptic filling group.

At PG Solutions, we recognize the importance of product safety in food production, and we make sure that the product that you are sure of its safety up to the moment of filling is also sure of its safety at the end point.

Our Aseptic Filling Group;

- Aseptic Flexitank,
- Aseptic Steel Tank/Container
- Designed for the filling of portable volumes such as IBCs with aseptic bags under completely safe aseptic conditions.

The unit and the mobile filling head can be completely sterilized, CIPed and emptied.

Before filling, the unit is sterilized and filling is started. During filling, sterile conditions are controlled and filling is stopped in case of any negative situation.

“Our Aseptic Filling Group is specifically designed for the filling of portable volumes such as Aseptic Flexitank, Aseptic Steel Tank/Container and Aseptic bagged IBCs under completely safe aseptic conditions.”

-İsa ŞANLITÜRK

New Aseptic Filling Group

Maintain product sterility and shelf life

It is specially designed for high volume filling options **(such as flexitank)** with its easy-to-use and space-saving system.

www.pgsolutions.com.tr

Visit for detailed information



Why should PG Solutions Aseptic Filling Group be preferred?

First of all, I would like to briefly mention the advantage of flexitanks. There are 40 flexitank manufacturers in the world and some of them also provide supply and placement services. In other words, these manufacturers not only deliver the flexitank but also deliver the flexitank in the desired container. Similarly, this advantage is also available for aseptic tanks. This way;

- No forklift operation is needed for filling and emptying the liquid food,
- Pre and post preparations for the filling operation are considerably reduced compared to barrel filling.



We are scrutinizing the R&D and P&D Department of Polat Group Redüktör, one of our Group Companies, which is the Reducer Company with the Largest Product Range Worldwide. We talked about PGR R&D and P&D Department's Innovation and Technology-Oriented Approaches, Processes and Innovative Projects in the Sector with Ahmet DEMİR, PGR R&D and P&D Manager.

Mr. Ahmet, could you briefly introduce yourself?

I was born on January 1, 1987 in Aydın. I completed primary and high school in Aydın and then went to Denizli to complete my undergraduate education and graduated from Pamukkale University, Department of Mechanical Engineering in 2010. During my high school life, I always wanted to be a Mathematics Teacher, but during the university preferences period, I met Necdet DEMİR, General Manager of PGR, and after having the opportunity to talk to him about the future of the company and the projects they will do, I turned to Mechanical Engineering. It was a risky decision to turn to a profession that was never in my mind, but; I think that sometimes risks should be taken in life.

Throughout my university life, the Polat Family has always supported me both financially and morally. During my education life, I started to spend time at PGR not only during semester or summer holidays, but also on weekends in order to learn something. At a time when I had to go to school less during my university years, I worked as Production Personnel in the vertical machining and horizontal machining centers in the Machining Department. I would also like to express my thanks to all the machining employees who supported me during this period.

After graduation, I started working as an R&D engineer in the PGR R&D department and after working for about six months, I had to take a break for a year for military service. After my military service, I returned to my duty as an R&D engineer again. I am married and the father of two boys and a girl.



Ahmet DEMİR
R&D and P&D Manager

Could you tell us about your position here?

Since January 2023, I have been working as R&D and P&D Manager in the PGR R&D and P&D department. In addition to the targets we set at the beginning of the year, the priority of our department is to respond to product needs that arise in line with customer demands, to improve existing designs, to create project tracking mechanisms and to ensure that internal demands are met quickly. I can summarize my duty as providing my team with the support they need while fulfilling these priorities, providing leadership and ensuring that the team can achieve success by maintaining the team spirit within the team.

What does the R&D and P&D department do at Polat Group Redüktör, can you tell us a little about the functioning of the department?

The R&D and P&D department consists of a team of 16 people and R&D, P&D and Molding units.

Our R&D unit performs tasks such as 3D-2D designs of products, creating the product tree list and performing system analyzes in line with the set targets or demands that may arise instantly. Our R&D team consists of 3 R&D engineers, 1 Process engineer, 3 constructor draftsmen and 1 graphic designer.

Our P&D unit performs tasks such as developing existing designs, analyzing technical questions from different departments within the company, evaluating special customer demands and making 3D-2D designs in line with these demands, creating the product tree list, performing system analyzes, creating promotional and product catalogs. Our P&D team consists of 2 P&D engineers, 2 constructor draftsmen and 3 graphic designers.

Our molding unit is the unit where the approval system is managed by following the model making and commissioning process of the products designed and the first sample controls are carried out. There is 1 Control Engineer working in our molding unit.

"We are the Gearbox Company with the Largest Product Range Worldwide."



PGR R&D and P&D Team

What is the importance of R&D and P&D in gearbox production?

R&D and P&D design activities determine the feasibility and success of reducer production, since creating a product only by design does not mean the success of the project. During the product design phase; it is necessary to evaluate the feasibility of the product in our existing machine park, to make quality measurement planning, to check the feasibility of assembly and disassembly, and to make an evaluation by communicating with the relevant department.

In the design phase of the product to be made, it is necessary to evaluate the feasibility of the product in our existing machine park, to make quality measurement planning, to check the feasibility of assembly and disassembly, and to evaluate it by communicating with the relevant department if necessary.

When you set out by considering all these criteria, the rate of encountering surprises will be quite low. As the R&D and P&D team, we always take these criteria into consideration.

How do customer needs shape R&D - P&D activities?

Here are some of the gear groups available on the market;

- Helical gear groups
- Bevel gear groups
- Planetary gear groups
- Worm gear groups
- CYCLO type gear groups

Many gearboxes are usually created by integrating these gear groups with each other.

The demands of our customers are usually that they want an equivalent product to the gearboxes they already use in their existing machines. Since we shape our product range according to customer demands, we are the gearbox company with the largest product range worldwide.

In order to ensure the control of such a large product range, we have entered into a new formation in our R&D and P&D department as of January this

year, and we have taken steps to group the work done and to develop a project tracking system. In order to group the work done, R&D was divided into 3 main departments, the SOLIDWORKS Manage system was established for project tracking, and the PGR P&D Support Desk Program project was studied for the evaluation and follow-up of department requests. We plan to implement this project in the first quarter of 2024.

What is the importance of R&D and P&D in maintaining competitiveness?

I believe that in order to maintain competitiveness, we must always be open to development as a team. For this, it is necessary to set out with a team that is open to development and to follow and analyze the market from every angle. Unfortunately, some companies that once led the market are not known by new generations because they did not do this. I think we need to act with this awareness for the sustainability of our brand. When you look at the companies that have achieved sustainable success in the market, you see that they are companies that both follow their competitors and are followed by their competitors. When you look at the designs of world-class companies, you see that these companies also follow PGR, which is one of the things that shows that we are moving in the right direction. In order to further improve this situation, we ensure that our teammates participate more in domestic and international fairs, receive technical competence trainings, and plan programs to increase supplier visitors. I think the most important factor that will bring us to the forefront in the future is the alternatives we offer to our customers in terms of technical aspects.

How do you find the development in the gearbox sector?

Efforts to minimize energy consumption have gained momentum worldwide. The gearboxes that will come to the forefront in the future will be those that offer us the opportunity to do more work with the same power value per unit time, or more compact designs with the same work or power value. We continue to follow the technology closely with our CYCLO type gearbox designs, which stand out with their compatibility with compact structures and are safe against high shocks. In today's world, where robotic controls are increasing, we continue our studies and researches on HARMONIC DRIVE ZERO BACKLASH and MAGNETIC GEAR in order to have a say in the market.

How do our current gearboxes address the world market?

We have started our efforts to increase the share of our gearboxes in the world market and to ensure that our gearboxes can be easily used in countries that use the inch system (USA, Canada, UK). The inch data of our PAF-PDM-PKD-PSH-AF-DM-K series have been completed. We plan to complete the remaining series in 2024.

What are the last things you would like to share?

I am one of those who think that in addition to professionalization in our work, the sense of belonging to the company we work for should be very strong. Because teams with a solid foundation are structures that can survive not only in good times but also in difficult and painful days. We can achieve success on this path by acting with the awareness that we are members of the same team.

On this occasion, I convey my respect and greetings to all my teammates who have contributed to our company and shed their sweat.



PGR R&D and P&D Team

PGR CONTINUES TO OFFER SUSTAINABLE SOLUTIONS

Polat Group Redüktör, one of our Group Companies, Contributes to the Sustainability of Companies, Reducing Their Negative Impact on the Environment and Energy Efficiency with the Gearboxes It Produces.

We interviewed Serkan DEMİREL, Technical and R&D Director of Polat Group Redüktör, about the contributions of our gearboxes to the sustainability of companies.



Serkan DEMİREL
Polat Group Redüktör
Technical and R&D Director

How many types of gearboxes are currently in Polat Group Redüktör's portfolio and in which areas are they used?

We are proud to be the company with the highest product diversity in this sector both domestically and internationally, with 24 different types of gearboxes and a total size of nearly 300 gearboxes. We will continue to maintain this leadership with our 3 different reducer series, which we have planned for the coming years and are still in the design phase. Our products, whose design has been completed and mass production has been realized, are used in every field of industry. There are also gearboxes that we have specially designed for sectors. To give an example of these; our PCS product is used only for load lifting systems in the crane industry. Our PYK product is used only for feed mixers in the agricultural sector. In addition, we are able to offer a project to our customers as a package from start to finish by calculating, designing and manufacturing special gearboxes according to customer requirements.

Energy Efficient Products that Reduce Your Electricity Costs with Saving IE3 and IE4 Type Motors

PD/PM SERIES

Parallel Shaft
Assembled Reductors

A/F SERIES

Helical Geared
Gearboxes



In our designs, we use recyclable materials (steel, aluminum, iron, etc.) as much as possible when choosing materials, while at the same time reducing the amount of waste by preventing the use of excess materials.

How does PGR contribute to companies in terms of sustainability and reducing their impact on the environment with the gearboxes it produces?

We are all familiar with the concept of sustainability in today's world and it has become a necessity to take initiatives in this regard. It is human nature to consume, but it is important to use resources in an effective and balanced way in order to meet the needs of both the present and future generations. As PGR, we are aware of our responsibility from the design to the delivery of our products and we continuously make improvements in both economic, environmental and social areas.

In the user maintenance manuals we prepare, we emphasize that regular lubrication and maintenance will extend the life of the gearbox and we try to help reduce the negative impact on the environment. We also strive to contribute to sustainability by improving our production processes.

How is the gearbox used to increase energy efficiency? What solutions does Polat Group Redüktör offer in this regard?

We achieve energy savings by prioritizing efficiency in our new projects. We minimize energy losses with new generation high efficiency gearboxes. In addition, we provide a high advantage in costs by using high efficiency electric motors in our motorized reducer assemblies. As PGR, unnecessary energy consumption can be prevented by selecting the gearbox suitable for the workload with the configuration selection program we have specially designed for our customers and dealers. In addition, we aim to reduce the carbon footprint indirectly with special gearboxes used in renewable energy sources, the design of which is ongoing and will be released in the coming years.

Finally, I can say that leaving a sustainable world to future generations is the most important task of today. The small steps each of us takes in this regard will make a big difference.

WITH OUR WIDE PRODUCT RANGE, WE SHAPE THE POWER OF MACHINES ALL OVER THE WORLD.

**We export to more than 80 countries on
5 continents and shape the power of
machines all over the world.**



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DRIVE TECHNOLOGIES



Walking Together

On Saturday, May 13th, we organized a trekking activity with our employees in touch with nature. Under the leadership of our Polat Makina COO L. Mutlu ŞAHAN, who is a professional trekking instructor and has been interested in trekking for many years, our Polat Group Trekking Club walked from Karahayit village to Gölyaka and immersed themselves in the beauty of nature with a view of Lake Bafa. At the end of the route, our employees relieved their tiredness in a village café, showed their dancing skills and ended the day with a spectacular Zeybek show.



Aydın Efeler District Governor Mr. İlker ARIKAN visited our site

On Tuesday, June 13, Aydın Efeler District Governor Mr. İlker ARIKAN visited our Founder and Honorary President Mr. İbrahim POLAT and Chairman of the Board of Directors Mr. Olcay POLAT.



Hygienic Design and Engineering Regulation and Certification Training was given to our employees

On Wednesday, May 24, Prof. Dr. Onur DEVRES trained our employees on the Hygienic Design and Engineering Regulation and Certification for EHEDG food safety. GFSI J1 and J11 sub-headings were mentioned in the training.



OHS Themed Theater Plays were Staged for Our Employees during Occupational Health and Safety Week!

During the Occupational Health and Safety Week, we organized an educational and instructive event to raise the awareness of our employees on Occupational Health and Safety. Our employees participated in the interactive theater show and other entertaining activities prepared by a professional team.

Before the event, Rıza Korkut ÖZDEMİR, General Manager of Polat Group Holding, and L. Mutlu ŞAHAN, our COO for Polat Makina, emphasized the importance of Occupational Health and Safety with concrete examples and underlined that Occupational Health and Safety is an issue that cannot be compromised.

Selahattin ALAGÖZYAYLASI, Occupational Safety Executive of Polat Group Redüktör, one of our group companies, and Ayşen ÖZDEN, Occupational Safety Specialist of Polat Makina, underlined the situations and actions that we should pay attention to with their presentations.



Petrol Ofisi Provided Gear Oils Training to PGR Employees

Oktay EKER, Technical Training Consultant at Petrol Ofisi, provided training on gear oils to PGR employees on Thursday, June 8. During the training, general information about lubricants, the use of gear oils and the environmental hazards of used oils were discussed.



PG Kimya Wins Award at International PETZOO Eurasia.

PG Kimya participated in Turkey's largest pet products fair, International PETZOO Eurasia, which hosted over 200 companies from 16 countries. At the award ceremony organized by Turkey Business World Magazine and the Organizing Committee, PG Kimya was honored with the award in the Best Design, Innovation, and Development category.



Our Occupational Safety Unit has Started Tool Box Meetings.

We have taken a significant step towards increasing awareness and fostering behavioral changes regarding the health and safety of our employees. Our Occupational Safety unit has initiated Tool Box meetings, held before starting work. During these meetings, discussions about occupational health and safety take place with our employees, and awareness training is provided regarding potential accidents and risks at the workplace. We are committed to continuing this important initiative regularly, aiming to create a safer working environment together. Occupational health and safety is not just a legal obligation for us; it is a fundamental value.



Great Success from the Robotics Club We Sponsor

At the 15th International Robot MEB Competition held in Bursa, one of the robots created by Söke Vocational and Technical High School Robotics Club, supported by Polat Makine, achieved 3rd place in Turkey, while another robot placed 6th. We congratulate these young talents on their outstanding achievements!



We Produce Sustainable Solutions for Green Energy.

PL/PLB SERIES Planetary Gear Reducers



NRW[®]
DRIVE TECHNOLOGIES

**POLAT GROUP
OVERVIEW**

THE STORY OF A JOURNEY FROM AYDIN TO MANY PARTS OF THE WORLD

In this issue of Polat Life, we wanted to introduce the story behind the products produced by our Group Companies and shipped to different locations around the world. We asked the employees of our Group Companies Polat Makina, Polat Group Redüktör and PG Solutions about their work and how it feels to be a part of Polat Group.

I am Bircan Kara. I was born in 1970 in Aydın. I started working at PGR in 2008. I have been working as a Motor Assembly Operator for 15 years. I assemble the motor parts coming from the PGR warehouse in accordance with the work order and assemble them into the reducer. I am very curious about who uses the reducer I assemble and where it goes in the world. I am proud to be a part of such a process. It is very nice to see that the PGR brand, of which I am a part, has a great reputation among people.



Bircan KARA
PGR Motor Assembly Operator

I am Cenk Kocaçoban. I was born in 1992 in Aydın. I started working at PGR in 2013. At PGR, my first workplace, I still work with the enthusiasm of the first day. My job here is Assembly Operator. I assemble the products coming from PGR Warehouse according to the given work order and make them ready for the reducer. These parts go to the end of the world and represent us there. When I think with this awareness, I do my best to do my job cleanly and smoothly. I am very happy to work with my managers and teammates and to be part of such a team.



Cenk KOCAÇOBAN
PGR Assembly Operator

I am Ender Baştürk. I was born in 1989 in Aydın Çine. I am a Metal Works Welding Operator. Polat Makina is my first workplace. Since 2006, I have been working here. We combine the materials coming from material preparation by welding according to the technical drawing in a way to make them ready for production. The machines we produce go to many parts of the world and it is very proud that there is a piece of me in these machines.



Ender BAŞTÜRK
Polat Makina Welding Operator

My name is Eyüp Pektaş. I was born in 1995 in Aydın. I graduated from Industrial Vocational High School as an electrical technician. I have been working as an Electrical Operator at Polat Makina for 7 years. I make the automation panels of the machines produced. From time to time we go abroad to make machine assemblies, getting to know different cultures in different countries is a great opportunity for your development. It is very nice to see the panels we produce in Turkey in different parts of the world.



Eyüp PEKTAŞ
Electricity Operator

My name is Fatih Çevik. Since 2007, I have been working at PGR, this is my first workplace. In this journey, which I started as an operator, I became a CNC Programmer by taking advantage of development opportunities. I make the bodies that come to us suitable for reducer assembly according to the technical drawing. It makes me proud that a part touched by my hand goes to various parts of the world.



Fatih ÇEVİK
PGR CNC Vertical Machining Operator

INTERVIEWS WITH OUR EMPLOYEES

I am Gökhan Tuncer. Born in 1983 in Adana, I have been working as an Assembly Operator at PG Solutions for five months. I can say that PG Solutions has a special place in my heart. The strong solidarity among the employees and the supportive attitude I see from my managers make our working environment more valuable. Since I am a part of production, I can say that it is the most hygienic working environment I have ever seen. Although I have worked in different countries such as Germany, Egypt and Georgia and seen many different working environments, this is the place where I feel the happiest and proudest.



Gökhan TUNCER
Assembly Operator - PG Solutions

I am Muharrem Eroğlu. I was born in 1995 in Aydın. I have been working at Polat Makina since 2007. I worked in the machining unit for the first three years, and I have been working as a Quality Control Operator for seven years. We carry out dimensional and dimensional control of the materials produced in the machining unit. The first processed parts are approved by us, and production starts after approval. I am proud to see that the products that pass through my control are used by companies in Turkey and abroad.



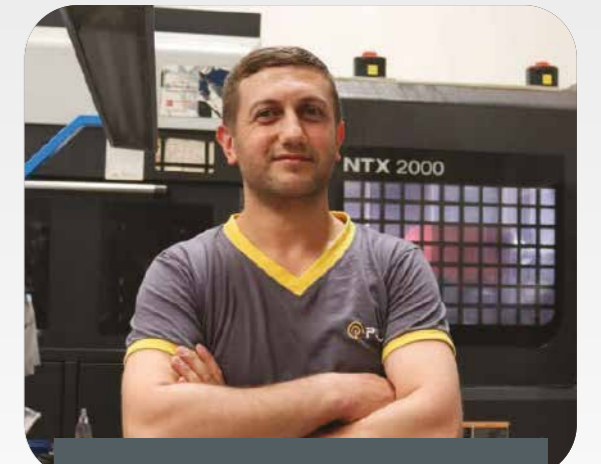
Muharrem EROĞLU
Polat Makina Quality Control Operator

I am Hilmi Ölkü. I was born in 1981 in Aydın. I have been working as a Horizontal Process Operator at Polat Group Redüktör for 10 years. I process the incoming raw material in accordance with the technical drawing and tolerances and make it suitable for reducer assembly. We produce for different sectors and it is very nice to think that these parts are used in places such as airplanes, ships, cranes, and to be a solution to someone's problem. I am very proud that Polat Group is growing every year.



Hilmi ÖLKÜ
PGR CNC Horizontal Process Operator

I am Mustafa Erdur. I was born in 1988 in Sultanhisar, Aydın. I am a CNC Operator at Polat Makina, my first workplace, where I have been working for nearly 10 years. I process the parts that come as raw materials so that they are ready for assembly. We also measure the resulting product. The materials we produce go abroad, sometimes even to countries whose locations we do not even know, and this makes us very proud.



Mustafa ERDUR
Polat Makina CNC Operator

I'm Mutlu Akçay. I was born in 1984 in Aydın. I am an Assembly Operator. I have been working at Polat Makina since 2007. We create decanters by combining the parts coming from production. It is very meaningful and proud for me that these parts, which I am involved in the production process, are going to different parts of the world.



Mutlu AKÇAY
Polat Makina Assembly Operator

I am Selda Demir. I was born in 1977 in Aydın. I work as a Profile Grinding Operator at PGR. I grind between the gears coming from production before assembly and make them suitable for the reducer. I would like to break the prejudices that women cannot do this job. There is no job that women cannot do. Maybe it will be a different point of view, but I think that women should be more in this sector because of their meticulous and attentive working style. It is a very nice feeling to know that the gears I process are used in important jobs in different sectors around the world.



Selda DEMİR
PGR Profile Grinding Operator

INTERVIEWS WITH OUR EMPLOYEES

I am Sezgin Ece. I was born in 1985 in Aydın. I work as an Assembly Operator at Polat Makina. I have been doing sheet metal-based assembly at Polat Makina for seven years. We assemble the parts coming from the relevant departments of production and ensure that they reach the final stage. The products go to quality control after us. It is a very nice feeling that the parts, which I have also worked on, reach all over the world.



Sezgin EVE
Polat Makina Assembly Operator

I am Veli Çökmüş. I was born in 1981 in Aydın. I have been working at PGR since August 2009. I have worked in different sectors before, but Polat Group Reducer has become my favorite place to work. I am a CNC Operator. The CNC Operator processes the incoming raw materials according to the given technical drawing and makes them suitable for reducer assembly. Reducer is used in many different places. Sometimes when I am traveling on an airplane, I wonder if a reducer made by my hands was used in the airplane I am on, and this makes me very proud.



Veli ÇÖKMÜŞ
PGR CNC Operator

I am Vecdiye Yıldırım. I was born in 1976 in Bulgaria. My husband was working here and through him I started working at PGR ten years ago. I work as an Assembly Operator in the Endless Assembly Department. I was a housewife, doing housework, and I found myself here using a drill. People around me are still surprised how you can do it, but I am very happy and proud of this situation.



Vecdiye YILDIRIM
PGR Assembly Operator

I am Volkan Kızıl. I was born in 1985 in Aydın. In 2014, I started my first job at PGR. Since then, I have been working as an Assembly Operator at PGR. We combine the parts coming from the warehouse according to the work order and produce gearboxes. Most of the gearboxes we produce go abroad and I am very curious about which gearbox goes where. I feel proud when I see the gearboxes that I have a share in the production of in the places where we go for service.



Volkan KIZIL
PGR Assembly Operator

ATHENS

In this new page, we will travel to different cities where Polat Group's signature is found. In this issue, we are traveling to Athens, where our Polat Group A.E. Trade Machine Factory is located, and we are listening to the story of Polat Group A.E. Trade Machine from our Polat Makina Regional Sales Manager Erkan SERTOĞLU.



For what purpose was Polat Group A.E. Trade Machine opened? What is the field of activity?

Polat Makina wanted to move its activities to Greece and for this, a former business partner in Greece, who had previously supplied machinery from Polat Makina, was preferred. In 2012, Polat Makina acquired the company of this former business partner and started its activities in Greece. Since then, we have been supplying olive oil machines in Greece.

Which countries does Polat Group A.E. Trade Machine work with?

Polat Group A.E. Trade Machine works with Albania and Cyprus.

What kind of volume has Polat Group A.E. Trade Machine reached since its opening?

Polat Group A.E. Trade Machine started its operations in 2012 and has managed to multiply its customer portfolio 20 times since the day it started its operations. When it started its operations, it was working with 10 olive factories, now it works with over 200 factories. The capacity and efficiency of the machines we provide have enabled this increase and the fact that they are preferred by more and more customers every day.

At the same time, our general approach to sales is to win friends, not customers, and to be with our friends in their slightest troubles. Within the framework of this approach, Polat Group A.E. Trade Machine's easy accessibility not only before sales but also after sales was a factor that increased the customer portfolio in a short time.

Did you know that famous Ancient Greek philosophers such as Plato, Socrates and Aristotle were from Athens?

Not only its philosophers, but also its culture and places to visit are just as interesting. Let's explore the must-see places and culture of Athens, which, as John Milton said, is the eye of Greece and the mother of art.



Sintigma Square and the POWs

One of the first places you will be interested in when you arrive in the city is Sintagma Square and its surroundings. Sintagma, the most central place and the biggest square of Athens, is between the Greek Parliament and Ermou Street, which is closed to traffic. The word Sintagma means "constitution" in Greek. The square was so named because Otto, the first king of Greece after independence, proclaimed the first constitution in this square (1843). Sintagma Square is the square where protests and demonstrations take place in Athens. A tourist attraction in Athens that attracts tourists even more than the Acropolis is the changing of the guard. Their red caps camouflage the blood shed in battles; their black tassels, the mourning of the people; the horseshoes on the bottom of their shoes, the horses they ride in battle; and the pom-poms at the end of their sandals, the knives they wear on the tip of their shoes to wound the enemy with a kick.



“Our general approach to sales is to win friends, not customers, and to be with our friends in their slightest troubles.”
-Erkan SERTOĞLU
Polat Makina Regional Sales Manager



Acropolis

The Acropolis of Athens is at the top of many people's itineraries. No matter where you look from in the city, you can see the Acropolis. Acropolis, which means "High City" in Turkish, is the main reason why there are no other tall buildings in the city. In order not to block the view of the Acropolis, the city was planned accordingly. If you are interested in ancient architecture, the Acropolis is a must-see. More than 20,000 tons of marble were used for the monumental buildings inside.



Acropolis Parthenon Temple



Herodus Atticus Theater

Acropolis Museum

If the ancient Greeks were to visit modern Athens, this would be their favorite place. You will see fascinating architecture, art and stonework unearthed during the excavation of the Acropolis museum. Royalty, aristocracy, tyranny and finally democracy; built on top of a neighborhood that has been inhabited since 4000 BC, you'll discover history and see the architecture, art and stonework unearthed during excavations.



Culinary Bridge between Turkey and Greece: Delicious Similarities

Dolma/Dolmades: The food culture of both countries draws attention with their similarities and offers us a journey full of flavor. If you are ready for the journey, our first stop is "Dolmades". Dolma in Turkish and dolmades in Greek. Stuffed with ingredients such as grape leaves and cabbage, this delicious dish is very similar to our dolmades.

Meze/Mezethes: Appetizers, which we can define as pre-dinner snacks in both Turkish and Greek cuisines, are known as "Mezethes" in Greece. There are also options such as stuffed vegetables with olive oil, eggplant salads and flavors with feta cheese. Compared to Turkish mezzes, it is quite difficult to distinguish them.

Kokoreç/Kokoretsi: While kokoretsi is one of the first famous dishes that comes to mind when you think of Turkey, our research revealed that it is also very famous in Greece. The names and presentation techniques are very similar.





Ekin ERBAŞ
Corporate Communications Assistant Specialist
Landscape Architecture Master Student

CRAPE MYRTLE (LAGERSTROEMIA INDICA): NATURE'S GRACE IN CITIES

In this article, I would like to talk about one of the hidden heroes of landscaping projects, the crape myrtles. These plants, which contribute greatly to the magic of the landscape, play an indispensable role in many projects with their visual appeal and technical features.

The visual attraction of the oya trees starts with their eye-catching beauty. They create an almost magical atmosphere with their graceful branches, drooping and arch-shaped growth and their structure decorated with flowers. They create a natural point of attraction, making parks, gardens and public spaces attractive. Not only a tree, but also a work of art, they add a fascinating touch to spaces.

When it comes to technical specifications, oya trees can be found in different sizes and growth rates. You can choose depending on the needs of your projects. With their average growth rate, they are ideal for balancing the needs of scale and proportion in landscaping. Small dark green leaves of 2-8 cm absorb pollutants from the air, providing us with fresh air. With the shade provided by their height of up to 5-7 meters, they offer people the opportunity to rest and cool off, while reducing the heat island effect in the city. They also support biodiversity by hosting birds and other living creatures.

Crape myrtles offer a feast of color and texture unique to each season with their seasonal changes. This brings layers of diversity and texture to landscape designs, adding vibrancy to spaces. It is important to remember that the protection and sustainability of oya trees is a great responsibility; they need plenty of soil, necessary vitamins and fertilizers. These trees need to be regularly checked and maintained. In landscaping projects; this tree, which needs plenty of sunlight, should be positioned in such a way that it does not remain in the north view.

As a result, oya trees are a real magic touch in landscaping projects. With their aesthetic beauty and technical features, they re-create spaces and add serenity and peace to your soul. They are an important option for those who want to create a unique style and atmosphere in every project.

I hope this article has provided you with a new perspective on crape myrtles. Have a pleasant reading!



COLOR CODE

OYA PINK

MDE037B

RGB 222 3 123

FROM INSIDE
NATURE



Pol Art

COMBINING ART AND ENGINEERING

What distinguishes a PGR brand gearbox from other gearboxes? The Polat Group team knows the answer to this for sure... After all, it is their duty to infuse Polat Group DNA into every product they touch...

While different disciplines such as art and engineering produce unique and impressive works in their own fields, magnificent products are sometimes born at the points where these two disciplines meet. Helical gear reducers are a successful combination of engineering and art. The subject of this issue is PA/PF series helical gear units, PA/PF series helical gear units offer an aesthetically designed version of helical gears that are successfully used in their field. These gearboxes offer an ideal solution for many industrial applications.

Features of the PA/PF Series:

Durability and Reliability: PA/PF series gearboxes are made of high quality materials and have a robust construction. This ensures a long service life and increases their reliability. They also operate with low noise levels and you can be sure that they have been rigorously tested.

Aesthetic Design: The PA/PF series has an eye-catching design, not only in terms of technical performance but also aesthetically. Excellent workmanship and carefully designed details make these gearboxes look like works of art. This aesthetic design offers a visually appealing appearance even in industrial areas.

Flexibility: The PA/PF series offers a wide choice of models and ratios to suit different applications. These gearboxes are designed to suit various torque and speed requirements. This makes them ideal for meeting a variety of needs in different industries.

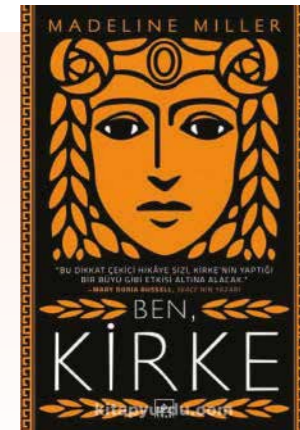
High Efficiency: The PA/PF series is known for its high efficiency levels. Thanks to their helical gear structure, they minimize energy losses and provide a higher output with less energy. This is a great advantage for industries looking to save energy.



FILM & BOOK RECOMMENDATIONS

John Wick 4

John Wick 4 tells the story of John Wick, who must face a new enemy while trying to defeat a major criminal organization. John Wick discovers a way to defeat the criminal organization known as the High Table. But before he can gain his freedom, he must face his new enemy, The Marquis, who has forged powerful alliances around the world and turned John's old friends into enemies. John must push the limits of his abilities if he is to survive.



Ben Kirke (Madeline Miller)

If you are interested in mythology and find reading classic novels difficult, Ben Kirke is for you. Author Madeline Miller blends the stories of mythological characters such as Odysseus, Icarus, Minotauros, Prometheus and Zeus that have been heard for thousands of years with a completely different perspective. As you read about the adventurous life of our protagonist Circe since childhood, the book has already drawn you in. First published in 2019, this book is just now getting the recognition it deserves. It was selected as the best book of the year in magazines such as Time, Amazon, Newsweek.

Fahrenheit 451 (Ray Bradbury)

In a dark world dominated by television and technology, digital screens have become the only light for people. Our protagonist Guy Montag is a firefighter who loves his job. When he is not working, he spends his time in the same room with his wife Mildred, who is addicted to television, and in the evenings he burns illegal books, his profession. Montag's life changes when he meets his new neighbor Clarisse, and the adventure that begins with Montag's understanding of the value of books will make our protagonist question everything he knows.



Do You Know This?

Did you know that we are the **first company** in the world to produce 100% natural cat litter from olive pits?



OLVACAT



The Scientific Board of PG Kimya, one of our group companies, explained what we should pay attention to and the precautions that can be taken to prevent hair loss, one of the most common problems experienced by our pawed friends.

A Healthy Solution to Reduce Hair Loss and Revitalize Pets' Coats; Biotin When living with our pets, one of the most common problems is excessive hair loss. Under normal conditions, the hair of every living creature changes at certain periods. Especially in furry animals, this change increases during the warmer months. However, this increase not only affects the aesthetics of the animal, but can also cause various discomforts in the home.



We can use biotin, also known as vitamin B7, to cope with hair loss and revitalize our pets' coats. Biotin, when given to our pets in the appropriate amount, not only stops shedding but also promotes healthy hair regeneration and shine.

Especially in long-haired dogs, biotin supplements can help us achieve a more pleasing appearance. It also improves nail quality and improves skin rashes.

The most natural cause of hair loss in cats is seasonal transitions. Cats shed less during the summer and winter months, but significantly more in the spring and fall. This is due to cats' desire to protect themselves by preparing their bodies for the seasons. In spring, cats shed their thick, dense coat from winter and replace it with a finer coat. This way they are less affected by the heat in summer. In the fall, the fine and sparse hair is shed intensively and replaced by thick and dense hair that adapts to winter conditions. This hair change helps to stabilize their body temperature and maintain a healthier coat.

In most dogs, shedding is at its peak, especially during the fall and spring seasons. Dogs have a double-layered coat. The top layer is the one we can see and touch from the outside. The bottom layer is the second layer with softer and shorter hairs. Dogs shed with the change of seasons. When the weather warms up, dogs shed their winter coat and grow thinner hair instead. When the weather gets colder, dogs shed their fine coat and grow thicker hair that will keep them warm during the cold winter months.

Biotin is an important nutrient for our pets and is naturally found in many foods. It is especially abundant in foods such as eggs, milk and bananas. Biotin helps the

body convert carbohydrates, fats and proteins into energy. Biotin also helps metabolize the amino acids that make up the protein needed for hair and nail growth in our cats and dogs. Therefore, it is important that our pets get enough biotin to maintain a healthy coat and nail structure. Although foods that naturally contain biotin are included in our pets' diets, sometimes they don't get enough. In this case, biotin supplementation plays an important role. We can give 2.5 mg of biotin for every 5 kg of our pet's body weight. For example, if our dog weighs 20 kg, a daily supplement of 10 mg of biotin would be sufficient.

Biotin is a safe water-soluble vitamin. Thanks to this property, it is excreted in our cat or dog's urine when taken in excess, which reduces the risk of overdose. Biotin helps to break down and process carbohydrates and fatty acids. Therefore, when our dog encounters an allergic reaction, it will be better equipped to deal with it.

In conclusion, biotin is essential for our pets to have healthy skin, coat and nails. Biotin supplementation helps to keep the coat shiny, healthy and strong, while contributing to healthy skin regeneration and protection. It is important to create a balanced diet with biotin and other appropriate nutrients to deal with hair loss problems in the home and to ensure that our pets have a healthy appearance. In this context, PG Kimya's VetNaCare's Vetnavit Biozinc Series is a very useful and convenient product for pet owners.



We had a short conversation with the Scientific Board of PG Kimya, one of our Group Companies, about VetnaCare and OlivaCat and listened to the journeys of these two pioneering brands.

How is people's interest in both VetnaCare and OlivaCat? For which reason do you think the products of these brands are preferred the most?

Both VetNaCare and OlivaCat attract a lot of attention from pet owners because they are produced using environmentally friendly and natural products.

We offer special, environmentally friendly solutions for the needs of our pet friends and that is why pet owners prefer our products.

Our pawed friends all have unique palates and the mineral and vitamin supplements they may need for their health are often in solid form or difficult for them to consume because their taste and smell are not appealing to pets. VetNaCare offers easy-to-consume products for pets with practical and rich flavored options. Thanks to their gelled form and delicious flavors, our products allow our pets to enjoy their health support products as if they were treat food, while we offer our products in single-use packages to prevent the natural ingredients from losing their effectiveness due to contact with air.

OlivaCat, another brand of PG Kimya, is a first in the world with its 100% natural cat litter produced from olive pits. Cats are part of our families and adopt the living spaces of our homes. Therefore, ensuring that our cats live a healthy and comfortable life is also important for our health.

OlivaCat attracts the attention of especially environmentally conscious pet owners due to its high suction power, fast clumping and dust-free.

We can say that the mission of both VetnaCare and OlivaCat is to support the happiness and health of our pets and us and to offer special solutions while remaining environmentally friendly.



**INSPIRED BY OUR ROOTS,
WE DEVELOP ENVIRONMENTALLY
FRIENDLY, SUSTAINABLE AND INNOVATIVE
TECHNOLOGIES IN INDUSTRIAL
ENGINEERING.**





POUAT *life*