





Kastas Sealing Technologies A.S. **ZOOM, 1/2017** 

Responsible under Turkish Press Law HAYDAR ATILGAN

Editorial Team BİRCAN ATILGAN ARZU BERK GAMZE BARIŞ

**Graphic Design** PARMA REKLAM HİZMETLERİ

**Printing** Metro Matbaacılık

Metro Matbaacılı İzmir, Turkey

#### Contac

Kastaş Sızdırmazlık Teknolojileri A.Ş. Menemen Plastik İhtisas OSB 1.Cadde No:4 35660 Menemen İZMİR

Tel: +90 (232) 397 60 00 Fax: +90 (232) 502 25 28

info@kastas.com www.kastas.com

#### **Dear Business Partners,**

It gives me a great pleasure to introduce to you this first issue for 2017. The first quarter has been very intense and busy, but our dedicated efforts have resulted in reaching two very important milestones for our company.

The first milestone was our move to our new Headquarters and Production Facilities. Following a year of project designing and 18 months of construction, in January 2017, we relocated to our new premises. Opening of our new plant, which has been the most significant investment in the company's history, does not only provide additional space for new machines and offices, but was also an opportunity for modernizing the entire infrastructure, building technology and equipment. In making these important changes, the aim was to ensure that these key elements would comply with the Kastas strategic targets, namely sustainable growth, along with enhanced quality, efficiency, and productivity. The new complex is one of the most modern seal production facilities globally. It also offers spacious offices and recreational spaces, conducive to a good working atmosphere, with the goal of enhancing creativity and productivity.

The second milestone we are proud to share with you pertains to the rebranding of our corporate logo. We are a dynamic company, striving for continued development and improvement in every aspect of our business. In response to this ambitious goal, we are constantly investing in human resources, organization, new production technologies, and R&D for better designs, as well as in high performance materials and value-adding services. As a conclusion of all achievements that we accomplished in the last decade, we recently took the decision to rebrand our corporate identity. The new logo not only reflects the modern face of Kastas, but also symbolizes our working principles and vision.

In addition to these changes, we are also proudly introducing XT200, Extrusion Resistant Rod Seal, which is a result of a two-year intensive research and development process. This new generation rod seal has been designed and developed to assure low leakage and low extrusion in even the most challenging conditions that can be encountered in practical applications. We are confident that this robust rod seal will be a great addition to our product range and that all our customers will be satisfied with its performance. Furthermore, along with FR200, XT200 will be another example of our ambition and motivation for offering innovative designs with best-in-class performance to all Kastas customers.

At the end of April, we will be exhibiting in Hannover Messe. We are looking forward to attending this year's show, as we are excited to introduce many innovations to our visitors, such as four new SmartSeal materials, new Low Temperature compounds, new Low Friction Pneumatic Range, and new guide rings. In addition to extending our product range, we have also invested into an e-service, which we are happy to introduce to our customers. The aim of this modern B2B platform is to provide our customers with much greater efficiency in the inquiry, ordering, and purchasing processes, along with improved logistic flexibility.

I hope that you will enjoy reading this issue of our magazine as much as we did working on its content.

Sincerely

Haydar **Atılgan**Chairman of the Board / General Manager





# Kastas has been awarded the second place in the R&D and Innovation Competition by IAOSB

For the FR200 Low
Friction Rod Seal
Design Project,
Kastas has
won the second
prize in R&D
and Innovation
Competition held
for the second
time by Izmir
Atatürk Organized
Industrial Zone
(IAOSB).

After two and half years of exhaustive work from design to FEA, lab to field tests, FR200 has emerged as a truly innovative proprietary design fully produced at Kastas premises. The project was also supported and rewarded by TUBITAK by 1501 - Industrial R&D Projects Grant Program.

FR200 is an environmental design aimed at increasing efficiency while reducing friction. It was awarded the second place by a jury of 20 members, which included presidents and vice-presidents of universities in Izmir, T.C. Ministry of Science, industry and technology representatives, managers of TUBITAK and Technology Development Zones, esteemed industry members and the local media representatives.

FR200 is a result of exhaustive efforts of an experienced and highly specialized team of engineers working at the Kastas Test Center. It was launched in 2014 in cooperation with related

departments and is a 100% internally developed design.

The R&D in Kastas is defined by the R&D Manager Ozan Devlen as "offering solutions for today's problems while working on tomorrow's needs." He further notes, "We focus on energy efficiency in our seal design and development of materials for advanced technology systems. We aim to produce highly efficient hydraulic systems with long service life, high performance and endurance. Our seals are a result of collaborative effort and expertise of our excellent R&D team."

Behind the FR200 success lies our trust in the process, the vision and leading brand responsibility of Kastas. This is aptly surmised by Devlen in his statement, "This award is an important motivation for us to strive for excellence in the design of our new product range, which will be introduced later this year."



# **Kastas Rebrands with new Logo**

# Operating limits of elastomeric seals at low temperatures

In many industries, elastomer seals are being used in increasingly arduous conditions,

whereby they have to sustain more aggressive media, higher pressures, and wider temperature

European Sealing Associatio

ranges. In such extreme cases, equipment manufacturers and operators are reliant on the seal suppliers' advice on compatibility of their products with these conditions, which is typically based on reliable and established tests. However, practical applications of elastomer seals at low (sub-zero) temperatures are very difficult to replicate, making the advice and quidelines far less clear.

of the test media prior to being subjected to low temperatures. This does not accurately

European
Sealing
Association

replicate the real applications in which, if the seal is kept at low temperature prior to being exposed to the pressurizing

media, it may be too stiff to energize and form a robust seal.

The members of the ESA Elastomeric and

Polymeric Seals Division are therefore

working together to develop and

these commonly encountered

extreme operating conditions. An initial draft of the

standard has been

prepared and

is currently

validate a suitable test method for

undergoing a rigorous validation process. As a part of this program, the members perform a series of round-robin tests on seals obtained from a single source. Each laboratory partaking in this exercise is testing seals and the collated results are compared for consistency and repeatability before refining the specifications.

This paper describes the test procedure in detail, while also providing the results obtained by testing a number of generic elastomer types. The aim is to produce, for the first time, an industry-wide accepted specification that all reputable seal suppliers will be able to adopt and recommend to end-users. This information will serve as a reliable guidance on the low temperature operating limits of elastomer seals and related compounds. It is anticipated that the test procedure can subsequently be put forward to the International Organization for Standardization (ISO) for development into a truly international standard.

Elastomeric materials become stiffer and lose resilience as the temperature declines due to which their sealing ability can be substantially reduced. There are numerous test methods aimed at investigating elastomer material properties at low temperature, such as those based on torsion modulus, brittleness, compression set and temperature retraction. Still, results yielded by these tests are insufficient for ascertaining whether a seal will continue to function during prolonged operation. Consequently, a number of manufacturers have developed proprietary sealing tests aiming to identify the minimum operating temperature capability; however, such approaches rely on the seal being energized by the pressure

Kastas Sealing Technologies rebranded its logo, replacing the old design with a new contemporary symbol and wordmark. The new logo and identity are only the start of our rebranding initiative, which will also include extensive improvements to our website and other media.

At the brand strategy workshops, Kastas key strengths and competitive advantages were analyzed. Our decision to rebrand our identity was motivated by our need to convey to our customers that Kastas is a "global brand" that offers reliable products and solutions. We also wanted to reflect the key characteristics of our production, quality, R&D and service,

customer expectations and changing trends. This new identity also incorporates the brand vision for the future and aims to convey to all our business partners, suppliers and customers that Kastas is an innovative, lean and strong company with highly skilled workforce and excellent products and services.

## ISO27001- Information Security Management System

Kastas is currently implementing ISO27001 Information Security System and we have applied for Authorized Economic Operator license.

Adopting an Information Security
Management System is a strategic decision
for our company, which was influenced
by the organization's requirements and
objectives, as well as the need for enhanced
security measures, risk elimination from
the organizational processes, along with the
organizational size and structure.

The information security management system preserves the confidentiality, integrity and availability of information by applying a risk management process that gives the interested parties confidence that risks are adequately managed.

#### Benefits of ISO 270001:

- Awareness of information assets: The organization is aware of the value and classification of its information assets and establishes control measures to identify and prevent risks.
- Business continuity: In case of a disaster event, the organization guarantees business continuity through seamless operations of all units.
- · Being in agreement with the interested



## International Organization for Standardization

parties: As the information is protected by the suppliers, this increases trust of the interested parties.

• Legal compliance: Adoption of this standard prevents legal issues arising from unauthorized data access or security breaches, thus limiting the risk of litigation and reputational loss.

#### What is Authorized Economic Operator?

Authorized Economic Operator (AEO) is defined by the WCO SAFE Framework of Standards as a party involved in the international movement of goods, in whatever function, that has been approved by, or on behalf of, a national Customs administration as complying with WCO or equivalent supply chain security standards. Companies certified as an AEO can use the rights of "Customs Clearance from the Location," "Permitted Sender" or "Permitted Receiver."

Moreover, by signing Mutual Recognition Agreements, AEO is eligible to operate in 46 countries worldwide.

#### **Convenience of Simplified Procedures:**

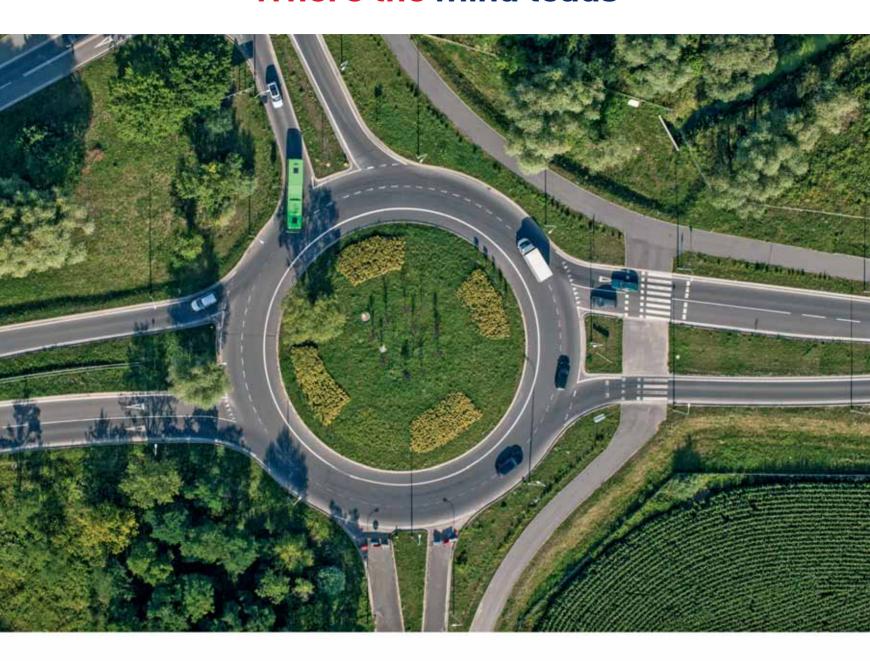
- Authorized sender is able to dispatch the transit without presenting it to the customs authorities
- On-site customs clearance (the goods designated for export and/or import can be processed from proprietary premises without presenting to the customs authorities)
- In collateral transactions, instead of separate collateral for each transaction, it is possible to provide a predetermined indefinite and undefined collateral amount within the scope of the collateral application.
- Irrespective of the type of goods being transported, legal document, analysis, A.TR and EUR.MED notification and follow-up declaration comprise the required documentation.
- Providing summary declarations of reduced compulsory information, Less subject to customs controls on security and security based on summary statements or summarized documents or used as summary statements,

#### What are the conditions for becoming an AEO?

Turkish Customs and Trade Ministry declared that, along with meeting the EU AEO Criteria, applicants must be Trustworthy, Reliable, and Documented, Financially Qualified, Safe, and Secured



### Where the mind leads





### Kastas Sealing Technologies Europe assures easy access to Kastas products and services.

- Complete Range of Hydraulic and Pneumatic sealing elements
- Express Deliveries all over Europe
- Engineering Services & Project Development

#### Kastas Sealing Technologies Europe GmbH

Robert-Bosch-Str. 11-13, 25451 Quickborn / Germany europe@kastas.com • www.kastas.de



# We were at IFPE/CONEXPO 2017, Las Vegas



To Fabulous

The International Fluid Power Exposition (IFPE) is organized every three years, allowing manufacturers to showcase the latest innovations and expertise in the fluid power, power transmission and motion control industries.

IFPE is co-located with CONEXPO-CON/AGG 2017, the largest international gathering place for the construction industries.

Having been an approved supplier of many global OEM in North America for more than a decade and having the reputation of a reliable supplier to several well-known distributors in the country for more than 20 years, we are

now increasing our market presence in the American fluid power market.

As a result of this new initiative, we are presently working toward expanding our dimension range, as well as enhancing our product availability both through our local distributors and via direct supply from Kastas Europe, Germany.



## We were at WIN EURASIA 2017

We are proud to state that our active participation in WIN EURASIA 2017 exhibition, held on 16-19 March 2017, at the Tüyap Exhibition Centre, İstanbul, Turkey, was well received.

This year, our focus was on the latest investment into the new Kastas Headquarters and Production Facility. All visitors to the stand could obtain preliminary information on the specifications and capacity of the new plant, which will be operational in the first half of the year.

In addition, we were proud to introduce all our customers and visitors to our new products, solutions and services and discuss their characteristics and advantages. Analysis conducted on a wide range of our products, along with the features of FR200-Friction Reduced Rod Seal, modified design of new generation K501 Heavy Duty Piston Seal and new K79 Guiding Elements were among the innovations we showcased at the fair.



#### We were also at MECSPE 2017

We recently took part in MECSPE 2017, which was held on March 23–25, 2017 in Parma, widely considered a meeting point for general industry, including fluid power and hydraulics, in Italy.

Co-exhibiting with our Italian distribution partner STS S.r.l. we had an opportunity to present new sealing solutions to the market and a great pleasure to meet with our Italian customers.

## UPCOMING EVENTS

Event	Date	Place	Hall/Stand
IFPE	07 - 11 March 2017	Las Vegas, USA	South 3-4 / S-82605
WIN EURASIA	16 - 19 March 2017	Istanbul, Turkey	Hall 6 / Stand C-110
MECSPE	23 - 25 March 2017	Parma, Italy	Pad 5 / Stand L31
HANNOVER MESSE	24 - 28 April 2017	Hannover, Germany	Hall 20 / Stand C38
KONMAK	27 - 30 April 2017	Konya, Turkey	Hall 3 / 338-A
KOMATEK	03 - 07 May 2017	Ankara, Turkey	Hall K / Stand KD-14
6th IRON & STEEL SYMPOSIUM	25 - 26 May 2017	Izmir, Turkey	IB-01
СТТ	30 May - 03 June 2017	Moscow, Russia	Hall 13 / Stand 13-410
PTC ASIA	31 October - 03 November 2017	Shanghai, China	
HPKON	22 - 25 November 2017	Izmir, Turkey	A-Floor / Stand 349























HANNOVER MESSE, 24 - 28 April 2017, Hannover





- 55,000 m² total area
- 30,000 m<sup>2</sup> construction area
- 20,000 m<sup>2</sup> production facility
- 4,200 m² warehouse space
- 4,000 m<sup>2</sup> office area



We are proud to announce that the construction of our new HQ and production facility complex is now complete and that we relocated to these new premises in January 2017. The new plant, which has been the most significant investment in the company's history, will serve as a production base, with sufficient capacity for meeting the future targets of our organization.

The new complex is now one of the most modern sealing elements production facilities globally, while also serving as a new home for Kastas, thus signifying our ambitious future strategies.

Parallel to our continuous growth that has not abated for decades, several years ago, we took the strategic decision to invest in a new modern building to accommodate our administration and production units. Our investment plan did not include additional space for new machines and offices only, but also focused on modernizing the entire infrastructure, building technology and equipment, thus ensuring that these key elements would comply with the Kastas strategic targets, namely sustained growth, along with enhanced quality, efficiency, and productivity.

Following a year of planning and project designing, the work started in 2015, and the construction of 30,000 m² complex was completed in only 18 months. The new building covers a 55,000 m² area, allowing all Kastas production units to be finally consolidated under one roof.

#### Production:

All production lines and units are now designed and are repositioned internally for increasing efficiency, while also benefitting from the areas designated for capacity increase in the future. Compounding, Injection and Compression Molding, Tooling, Machined Seals and other production units are now operating under restructured work flows. Moreover, we have invested into new production lines and equipment, some of which are already operational, while others will be implemented in the near future.



- New compounding line
- New Compression Molding Press 1.2 m
- New Injection Molding Machines 400 tons
- New CNC Lathe

#### Warehouse

The space designated for warehouse does not only provide  $4,200~\text{m}^2$  for operations, but is also equipped with the best in class storage systems and equipment, thus fully innovating and streamlining our logistics operations, including:

- Full Automated Warehouse System
- New Intralogistics Software

#### Research and Development

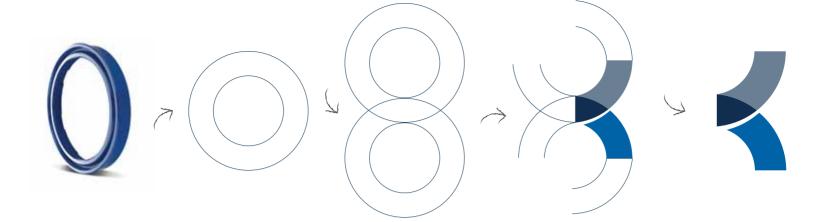
Owing to the opening of the new plant, the R&D department is also provided modern facilities separately from the production. Specifically, the Test Center, R&D and

Production Laboratory have been given designated areas and additional equipment.

#### Offices

The new HQ building, located separately from the production plant, unifies all administrative, sales, marketing and technical departments, while offering modern office space conducive to a good working atmosphere, with the goal of enhancing creativity and productivity. Moreover, the building offers indoor and outdoor recreational spaces, modern IT structure, and various meeting and conferencing facilities, as outlined below:

- 12 Meeting Rooms
- Seminar Hall with 100 person capacity
- 2 Gym
- 3 Cafeterias
- Indoor Parking



# The Story Behind our new Logo

As a company that is continuously growing and strives to extend its market penetration and customer base globally, the Kastas team is dedicated to developing every aspect of our operations. We are investing in organization, people, products, materials, services and more.

We want our customers to know that our company is evolving. This transformation was the main motivation behind the decision to restructure our brand and redesign our logo.

The new logo was envisaged as a way to visually depict the key Kastas characteristics, as we are known as a reliable and innovative company that designs, produces and supplies state of the art sealing technologies to help our customers create value.



#### Wordmark

Our wordmark describes who we are. It shows our brand name, written in a font that is human and conversational in our technology-oriented environment.

KASTAŞ

Our wordmark font is intended to be modern and inviting, as well as streamlined and reliable

#### **Symbol**

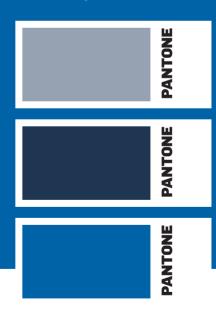
Our symbol describes what we do and how we operate. The two intersecting quadrants, derived from the circular form of sealing elements, illustrate an abstraction of the letter "K" and symbolize the combination of expertise and experience.



The arrow form at the intersection of these pillars of success conveys our progressive and innovative corporate culture and our global vision for the future.

#### Color

The color choice in our new logo aims to reflect reliability, integrity, sustainability and responsibility—the core values constituting our company culture and organization.



### XT200, product of 2 years of Research and Development, is an extrusion resistant rod seal that is designed and developed for challenging applications that require both extrusion resistance and low leakage.

In many fluid power applications, hydraulic rod seals are exposed to high pressures, which can exceed 250 bar, or even higher peak pressures due to operational conditions. Customer expectations from a rod seal are increasing with a target of producing cylinders that can handle higher pressures, together with low leakage, without compromising from friction and service life. From excavators to cranes, platform-lifts to injection-molding-machines, rod seals that can provide extrusion resistance together with longer service life, low leakage are required.

In order to achieve this ambitious goal, a Kastas team of experienced engineers with expertise in design, material sciences and testing started to work on XT200 from scratch two years ago. XT200, as they named this high-performance rod seal, should have a design that meets the demands for advanced leakage, extrusion and friction behavior and at the same time should be produced from a material characterized by the required

compression set values, temperature range and extrusion behavior. The initial project target was to design and develop a rod seal that improved the leakage and extrusion performance of the existing rod seals offered by Kastas and the key competitors by 15-25%.

Innovative grooved ring design

optimized sealing edge

- increased extrusion resistance
- innovative undercut profile

#### **The Key XT200 Design Features:**

- ► Special Lip Geometry
- ▶ Optimized Sealing Edge
- ► Innovative Grooved Ring Design
- ► Reduced Contact Surface
- ► Innovative Undercut Profile
- ► Increased Extrusion Resistance
- ► Excellent Static and Dynamic Tightness

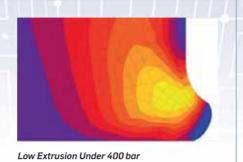
#### **Key Material Features:**

- ► Advanced Mechanical Properties
- ► Wide Temperature Range
- ► Low Compression Set
- ► Abrasion and Extrusion Resistance

Thus, in the design phase, XT200 development team provided several designs that would meet this aim. Using advanced Finite Element Analysis software, all alternative designs were simulated in a wide range of operating conditions that would be likely encountered in practice. The design that exhibited the best performance in terms of extrusion, leakage and friction was selected for further refinement, aiming to optimize friction, sealing edge and static tightness.

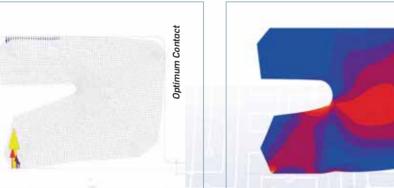
Parallel to this initiative, members of the Design and Tool Department worked on the most efficient and reliable tool design to ensure a smooth production of the new design along with long-term production efficiency. Following the development of several prototypes, 11 months after the project started, the first test sample of XT200 was produced. It was subjected to a yearlong intensive dynamic and static testing, conducted on test rigs. These tests aimed to simulate real life applications, while also determining the operational limits of the seal. After a total of 1800 km long testing in our R&D Test Center, which resulted in several design improvements, the final version of XT200 was ready for field tests. For the next four months, XT200 was tested against two competitor rod seals internally, as well as externally in the field, aiming to obtain reliable leakage and extrusion values, as well as preload losses.

While a seal performance is highly dependent



on the design, choice of material is critical for both performance and service life. Material properties such as temperature range, compression set, and hydrolysis resistance, along with many other highly influential mechanical properties, must be carefully selected, in addition to chemical structure and media compatibility. All these factors should comply with the seal performance targets in relevant applications, as well as outperform in bench and field tests those already available in the market.

New generation PU9401 is the thermoplastic polyurethane chosen for standard XT200 production, owing to its superior mechanical properties necessary for optimal extrusion and abrasion behavior. Moreover, it has compression set values below the industry benchmark, thus ensuring the desired preload and leakage performance. Moreover, PU9401 operates in a wide temperature range, which makes it suitable for use in all targeted applications.



XT200 is designed to offer optimum contact with the counter-surface for advanced friction, extrusion and leakage behavior.



XT200 also benefits from an innovative grooved ring design and special lip geometry, which was verified through extensive testing to provide optimum preload and low-leakage.

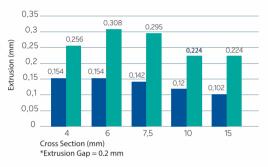


XT200 incorporates an innovative undercut profile specifically developed to provide optimum dynamic sealing edge, thereby ensuring lower friction and lower extrusion under pressure.

#### **Extrusion Resistance**

- ▶ High and peak pressures are the factors carrying the highest risk for rod seals especially in construction machinery. XT200 is designed specifically for such high-risk cases. Special design geometry and premium TPU material used in XT200 ensure superior extrusion resistance compared to its competitors.
- ► At 400 bar pressure, with the same extrusion gap, XT200 exhibits 60% less extrusion relative to that measured for other currently available designs.

#### Extrusion at 400 bar



#### Lower Leakage

► XT200 underwent a 300 km long test using the same test rig as that at which two other competitor seals were evaluated as a benchmark. XT200 resulted in 50% lower leakage in comparison to its competitors.

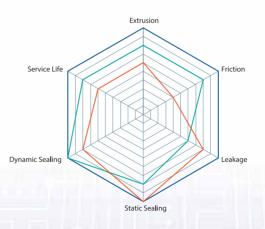
#### Total Leakage (ml/100m)



XT200 will be introduced to the market by the end of April, 2017. The Design and Tool Department has already completed the tooling process for the initial 85 dimensions, with 20–250 mm diameter range. The current dimension range was chosen to correspond to the dimensions and cross-sections that are















## New K79 Guide Ring

Low Friction

· High Load Bearing Capacity

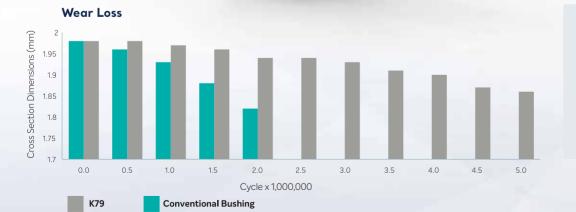
Chemical Resistance

• Compatibility with Pneumatic Applications

K79 Guide elements are designed for dry applications where high compressive strength is required. Hard-fabric body strengthened by polyester resin is graphite filled, for self-lubrication, while decreasing friction.

Besides wide usage in pneumatic applications, it can be safely used in various hydraulic applications. Its key characteristics are:





**Material**: Graphite reinforced synthetic fiber / polyester resin

Compressive Strenght: 290 N/mm<sup>2</sup>

Tensile Strenght: 50 N/mm<sup>2</sup>

Coefficient of Friction:  $0.10\text{-}0.14~\mu$ 

Temperature Range: -40 /+120 °C

**High Temperature Resistant TPE** 

**JTP 5501** 

The most recent addition to our SmartSeal material range, JTP5501, is a TPC-ET based thermoplastic polyester elastomer with advanced properties suitable for operation at high temperatures.

It combines good resilience, temperature and chemical resistance with strength and durability. JTP5501 has a wide application range in sealing elements and can be used as wipers, back-up rings and rod seals, pre-loaded with elastomer O-rings.

Temperature Range: -30°C to 120°C

Color: Orange

- High temperature resistance
- Extrusion resistance

We are continuously expanding our material range for SmartSeal. Our target is to serve as the single source for our customers from various industries that have sealing requirements for a wide range of applications, such as chemical, temperature, and extrusion resistance. JTP5501, as a high temperature resistant TPE, will allow us to serve many of our customers, from mining to steel-mills, who are looking for instant solution for their systems.

Ahmet PINARLI Domestic Sales Manager



# Kastas launches new B2B portal



www.seal-link.com



In our continuing efforts to make it easier for our current and prospective customers to conduct business with Kastas, we are proud to announce the launch of our new B2B portal, seal-Link.

As a state of the art technology, seal-Link provides a one-stop shop for Kastas customers to search for the products they need, check stock availability, place orders, retrieve product documentation, and track their order history all within one seamless digital experience.

Kastas has always been valued for continued stock availability. Keeping a vast stock in 7 locations in Turkey and Germany for all standard products, as short lead times are critical to our growth and for maintaining positive relationships we have built with our

partners, we have invested into our new B2B portal seal-Link, through which we aim to blend stock availability with salesforce efficient purchasing experience. By offering this comprehensive digital platform to our clients, we will be able to provide timely and continued service to our global customer base from across 20 time zones, to operate their business day or night.

The new B2B portal is a tailor-made solution, designed and built for Kastas using SalesForce platform. SalesForce is a CRM-

rce platform. SalesForce is a CRMbased solution provider recognized

as the market leader globally.
Flexibility and stability of
the SalesForce platform
were the key factors in our
decision to base seal-Link on
this technology. Moreover, the
potential for fully integrating
the B2B portal into CRM software

is critical for us, as it ensures 360-degree efficiency and control of our sales processes. For Kastas, seal-Link is the first step on the path toward a much greater digital engagement, which is planned to be fully effective by 2019.

# % seal-Link











Flexible Logistics



Time Efficiency

"We have a diverse customer base in terms of market segments, business fields and geographic distribution. In response to their unique needs, we are offering our products and solutions to continental distributors, local dealers, global machinery manufacturers, cylinder producers, engineering companies, and many more.

All these customers have one thing in common; they are in search for time-efficiency. They want to find the product they need easily, place their order instantly, check delivery conditions and receive their shipment as soon as possible. Furthermore, as a dynamic company introducing several new designs and adding hundreds of new dimensions to its product range, it is very important for us to offer these for sale immediately. Through seal-Link, our customers will be able to access these new additions as soon as they become available in stock." said Bircan ATILGAN, International Marketing Manager of Kastas Sealing Technologies.

<sup>\*</sup> seal-Link portal will initially be available for purchases from Kastas Europe, Germany, during May, 2017 and is planned to be fully operational globally by the end of Q2, 2017.

innovative grooved ring design

optimized sealing edge

# **XT200**eXTrusion resistant rod seal

**XT200** is an extrusion resistant rod seal that designed and developed for challenging applications.

- eXTrusion Resistance
- Low Leakage
- Long Service Life

- increased extrusion resistance
- innovative undercut profile

