OESTNEWS



THE OEST GROUP INFORMATION MAGAZINE

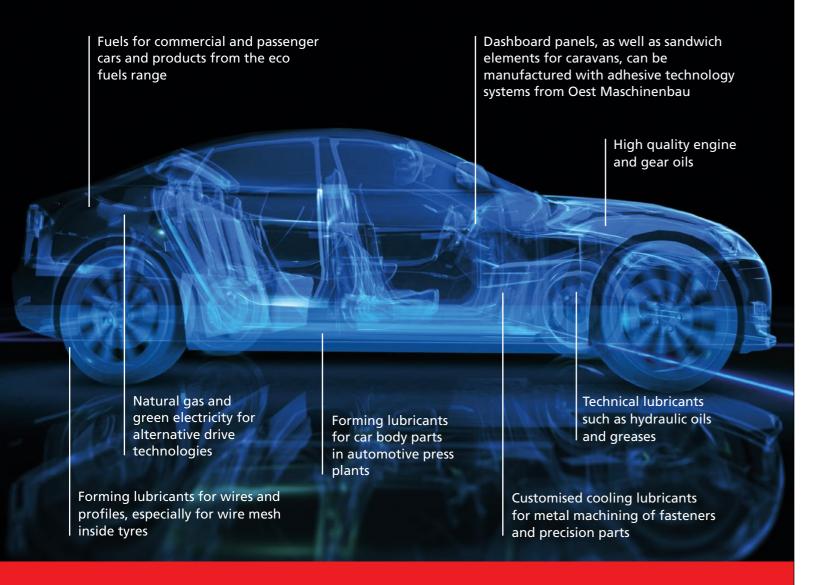


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OEST INSIDE.

With over 100 years of experience and strong specialist knowhow, Oest offers suitable technologies and innovations for many areas and application processes. The high standards for quality and sustainability are reflected in the products and services. This also applies to mobility.



www.oestgroup.com

Dear readers

The coronavirus pandemic still presents our social life and the worldwide economy with great challenges. Companies are increasingly faced with difficult conditions in the international procurement, service and sales markets, although not all industries are equally affected by the impact of the pandemic.

Once again it has proven to be of advantage that the Oest Group has a broad portfolio and supplies many different markets with innovative services and products "Made in Germany". This is one of the reasons why we are continuing to focus on the sustainable implementation of long term visions and objectives in all divisions, so we can sustain the successful momentum of the Oest Group in the future.

In difficult times, it is particularly important to have a positive outlook, to work together in meeting challenges with creative solutions and to continue driving important future topics. This is also reflected in the topics in this edition of Oest News, with many interesting projects, product innovations and new investments. Enjoy reading!

Sincerely

Alexander A. Klein Chairman of the Board





Östol Transporter in a local Black Forest setting.

DISCOVERING THE BAIERSBRONN CLASSIC WITH THE ÖSTOL VOLKSWAGEN TRANSPORTER

Sadly, the 8th edition of the Baiersbronn Classic had to be cancelled this year due to the coronavirus pandemic. This gave the Baiersbronn tourist information the idea to drive the route on their own this year so they could still show the many fans of the popular classic car rally a few highlights from the beautiful roads through the Black Forest. This resulted in the video clip "Discovering the Baiersbronn Classic" – with our Östol Transporter in the starring role.

The charismatic VW from 1970 has been an attraction at classic car rallies, trade shows and

events for many years. More than any other vehicle, it is immediately identified with the Baiersbronn Classic. This is probably also due to the fact that Östol has been supporting the rally as one of the main sponsors from the start.

For the video clip, a film team set out in the Östol Transporter along this year's route of the Baiersbronn Classic to capture some of the sights and the glorious scenery on film. The clip is available on the YouTube channel of the organiser "Baiersbronn Classic" and is making us already look forward to the next Baiersbronn Classic 2021.





PROFESSIONAL RACERS CHOOSE ÖSTOL

Oest can look back on more than 100 years of experience in the development and manufacture of first rate engine oils.

The oil and lubricant manufacturer has been active in motorsports since the 1920s, particularly at the nearby Solitude Ring near Stuttgart. Many vehicles in the races were supplied with engine and gear oils produced by Östol. Östol was also one of the main sponsors of the legendary first Ruhestein Hill Climb event in 1946. At the same time, drivers in Formula 3 also received sponsoring, such as the successful BMW driver Willi Zimmermann, who was supported by Östol Racing Team in 1952.



Östol already successfully supported racing teams in the early days of motorsports.

OLDTIMER OILS

Workshops, specialists and professionals are still fully convinced by the quality of Östol engine and gear oils for classic and modern classic cars. This also includes the legendary Kremer Racing Team, which has been making motorsports history since 1964 and is currently causing a stir at historical racing events such as the Oldtimer Grand Prix at the Nürburgring with its Östol Porsche 911 RS. Not only with the design, but also with excellent results and many wins – powered by Östol.

But it is not only the big, renowned racing teams who use Östol Oldtimer Oils "Made in Germany" for their classic cars. The number of racing events for historical vehicles is growing. Active participants like Nicolas Edel with his Hillman Imp or Frenchman Christophe Schwartz, who participates in international races with his Olympia Charger, rely on engine and gear oils from Östol. These are based on original formulations and are specially adapted to the requirements of historical vehicles with higher manufacturing tolerances and to the materials used at the time. For more power and a long service life of the engines.



The Kremer Racing Team celebrates great successes with the Östol Porsche 911 RS.





Östol offers the right engine and gear oil for any classic car.



CLT plant at the new Theurl factory in Carinthia.

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NEW HIGH PERFORMANCE BSP PLANT BUILT

Oest Maschinenbau delivered and commissioned the complete adhesive dosing and application equipment for the production of cross laminated timber (CLT) at Theurl in Steinfeld (Austria).

Theurl produce different timber products at three sites with over 300 employees. The new factory in the state of Carinthia was specifically built for the production of cross laminated timber elements. 3.5 m wide cross laminated timber with a length of up to 16 m can be manufactured on the newly installed CLT line.

The proven KONTITOP 2Z dosing system with a FACETAC FD 3.500 application head is used for surface application of the single component polyurethane adhesive. The Oest X-Y-Z portal, on which the application head is mounted, was prepared so another adhesive application table for a second press can optionally be supplied with adhesive at a later time. The adhesive is applied at a speed of up to 120 m/min.

A two component EPI adhesive is used for bonding the joints between the lengthwise and crosswise plies of the individual crosslaminated timber layers. It is applied with the HYDROMIX 2D400R dosing system and a CONTAC MSN application head. The automatic adjustment of the adhesive application height in each case using a specially designed valve unit is a unique feature. The automatic HYDRO-TOP 1D150R dosing system with a PROFITAC VN application head applies adhesive to the finger joints. This combination achieves contactless adhesive application, monitored by a special camera system. The overall process is configured for high speed and allows the production of up to 95,000 m³ of CLT per year.

Similar large projects for other customers are in the planning phase. In October 2020, Oest Maschinenbau recorded the highest order intake in the history of the company.



OEST MECHANICAL ENGINEERING ADDED TO THE LIST OF HIDDEN CHAMPIONS AS A GLOBAL MARKET LEADER

There is hardly any industry that does not use adhesive technology. It is regarded as an innovative and reliable joining technology for a large number of applications and materials, such as for solid timber construction products.

Since the 1960s, Oest has been continuously developing and influencing the state of the art for the different application methods such as finger joint application and surface application. Today, the company is one of the global market leaders for development and production of adhesive dosing, mixing and application systems

and had been added to the list of Hidden Champions by Prof. Dr. Dr. h.c. mult. Hermann Simon. The renowned scientist has been studying the successful strategies of medium sized global market leaders for many years and introduced

the term in 1990.



Oest Maschinenbau – internationally successful with specialist know-how.

MECHANI CAL ENGINEERING

PRODUCT DEVELOPMENTS WITH NEW FEATURES

New generation of application machines

Oest Maschinenbau has developed its **ECOTOP TM** application machine further for the separate application process to be used with two component melamine adhesives and hardeners. In addition to low wear dosing pumps with servo drive, it features magnetic-inductive flowmeters and a dry joint control with adjustable channels. The applied adhesive quantity and the mixing ratio are adjusted and monitored automatically. A feed speed of up to 350 m/min is possible.



ECOTOP TM application machine in action.

Low maintenance application head

Multi component adhesives are often used in the production of sandwich elements. For this application, Oest Maschinenbau has developed a new, reliable, low maintenance application head.

The new application head from the **PROFITAC** range is equipped with a material valve for each component. The materials are then mixed in the connected static mixer with injection unit. The application head itself can be manufactured in different widths to meet customer requirements. The adhesive beads are applied with a nozzle bar in parallel using a 12 mm grid. Each adhesive bead comes from an adhesive valve which opens the outlet holes in the nozzle bar individually. This allows different application widths to be achieved. The entire application head is optimised for cleaning and can be flushed with solvent from a dedicated connection.

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PROFITAC

application



Hedelius Maschinenfabrik in Meppen counts on Oest cooling lubricants.

SUCCESSFUL CHANGE OF COOLING LUBRICANTS AT HEDELIUS MASCHINENFABRIK

With its high performance machines with three, four or five axes, Hedelius Maschinenfabrik is one of the leading manufacturers of moving-column machining centres in Germany. Around three years ago, Hedelius contacted Oest based on a recommendation from one of their customers.

"At the time, we were not very happy with the cooling lubricant from our supplier, especially with respect to the service life and the too frequent re-application of corrosion protection," remembers Managing Director Reiner Korte. "One of our longstanding customers told us about their good experience with the Oest Colometa lubricant, which they used in their Hedelius machines to achieve top results. That led to the initial contact."

"It was rather unusual for a new customer to inquire about a specific product," recounts Oest Regional Sales Manager Stephan Tippmann. "Usually, we first identify the specific requirements and parameters from a potential new customer and then work with our

Applications department to offer the optimum cooling lubricant. It was a little different in this case, because Hedelius already knew from their customers which lubricant would be ideal for the machines and processes."

The water miscible cooling lubricant Oest Colometa EPA 48 P was initially tested in one machine for several months and then used in other machines based on the good results. Employees were trained and instructed in how to handle the maintenance schedules and additives.

"Continuous cooling lubricant monitoring and detailed documentation of all quality parameters are of course an important aspect here," emphasises Stephan Tippmann, who looks after Hedelius on site as the Regional Sales Manager for Oest. The Applications department at Hedelius appreciates knowing that support is available from Oest if any of the parameters should show significant deviations. Regular preventive monitoring also allows corrections to be made early on

if necessary – the cooling lubricant properties remain continuously constant and the service life increases.

In addition to the improvements with respect to biostability and longer service life, the change to the Oest Colometa cooling lubricant also showed a positive impact on the work environment — both for the formation of odours and oil mist and with regard to skin compatibility and health. This was a very important aspect for Hedelius and another reason for subsequently changing to a reformulated product from the Colometa range — Oest Colometa EPA 48 PN.

for excellent cutting performance. This is due, among other things, to active EP additives (extreme pressure additives) which often even permit a reduced concentration for use.

Almost all machines at Hedelius have now been successfully changed over to the product innovation EPA 48 PN. "Since working with Oest, we have been able to significantly improve the service lives. In the end, reliable process stability means higher productivity and lower costs," Managing Director Reiner Korte praises.

ING LUBRICANTS

Oest Regional Sales Manager Stephan Tippmann regularly visits the Hedelius factory.

This specially formulated product innovation is free from bactericides, monoethanolamine, benzotriazole and critical amines and therefore sets standards for environmental compatibility and health. At the same time, it is highly stable, has long change intervals and allows



NEW SYNTHETIC HIGH PERFORMANCE OILS FOR METAL MACHINING

With Meba S, the Oest Meba series includes new powerful synthetic products on GTL or PAO basis. No mineral oils are used in the production of either of these alternatives. This is the result of the sustainable research and development at Oest.

Oest Meba S is not made from refined crude oil, but using synthesis processes on specially defined starting substances. The gas-to-liquid (GTL) process uses synthesis on cleaned methane. Polyalphaolefins (PAO) oils are primarily manufactured using oligomerisation of ethyls.

This produces high purity, colourless and odourless oils with significant advantages for numerous metal machining processes, which are particularly important for low viscosities.

An information brochure which can also be called up on the homepage complements the customised personal consultation with the Oest regional sales managers in coordination with the Applications department.



IN-HOUSE DEVELOPMENT AND MANUFACTURING IN FREUDENSTADT – 25 SUCCESSFUL YEARS IN THE MARKET



The fact that Oecomix 2T® and Oecokraft 4T® are produced by Oest in-house and the traceability resulting from this allow maximum transparency in quality assurance. Every manufactured batch since 1996 has been subject to careful quality control going beyond the official independent test procedures. Oecomix 2T® and Oecokraft 4T® carry the seal of the KWF (German Governing Body for Forestry Work and Technology) and comply with the German DIN 51641 for special fuels, the Swedish SS 155461 and the Swiss SN 181163 standards.

SPECIAL FUELS

A reliable partner for specialist dealers for decades

Oest sales partners benefit from comprehensive service, intensive cooperation for sales promotion and public relations as well as our personal support. The focus is always on the profitability for the trade partners, combined with fair pricing, targeted sales support and a service friendly sales and logistics concept.

Oecomix 2T[®] and Oecokraft 4T[®] are special fuels developed by Oest specifically for 2-stroke and 4-stroke engines. Oest carried out pioneering research and development work in Germany in the 1990s and launched its special fuel in 1996.

The Oecomix 2T[©]

container family.

02St

Modern laboratory equipment and the use of high quality raw materials from Germany still form the basis for the mature formulation today. Modern production processes, highly developed containers and state-of-the-art filling machines ensure consistently high quality. The manufacturing processes are subject to the highest safety standards of the environmentally certified company.



Oest Oecomix 2T® has been used successfully in forestry and landscaping for many years.



NEW INVESTMENT FOR OPTIMUM PRODUCTION AND LOGISTICS PROCESSES

Oest does not only invest in research and development with pioneering formulations and high quality raw materials, but also in the continuous further development of production and logistics. The new filling system for special fuels in the converted and modernised workshop for hazardous goods combines maximum safety and high process efficiency.

With the automated filling system for 5 and 20 litre containers, up to 9,600 litres per hour can be filled and collated into shipping units. This is a 300 % performance increase compared to the previous system. Scales integrated into the filling line with automatic diverting of overfilled or underfilled canisters as well as detailed, system controlled documentation of all containers ensure smooth processes and maximum safety. The modern safety standards also include permanent gas monitoring and electric process monitoring which can partially disconnect the system from



 $New {\it filling system in the Oest hazardous goods workshop}.$

the power supply in case of malfunctions. The combined safety and quality equipment also achieves a 100 % monitoring of the cap placement process. In addition, the filling line offers integrated labelling with printing of individual batch numbers, which also allows private label projects to be implemented.



Hydrogen fuel cell in the laboratory.

E-FUEL ALLIANCE FOR ALTERNATIVE DRIVE TECHNOLOGY



The hydrogen strategy set out by Peter Altmaier, German Federal Minister for Economic Affairs and Energy, with the declared objective of making Germany "number one" in this technology indicates a certain paradigm shift in politics - away from all-electric towards more openness for new technologies and increased use of synthetic, CO, neutral liquid and gaseous energy sources.

Oest as a founding partner of AVIA Germany and owner of a large network of fuel stations in southern Germany has also been involved in this topic for many years. The promising product innovations from Oest include the 100 % renewable Oecopower D diesel fuel, which is made from biogenic waste and reduces greenhouse gas emissions by up to 90 % compared to fossil diesel fuel.

These successes contribute to increasing pressure on politics to consider the opportunities for synthetic fuels and e-fuels more strongly. In light of the new EU Climate Target Plan 2030, the newly founded "E-Fuel Alliance" also demands more openness to new technologies for achieving the EU climate targets.

The E-Fuel-Alliance is a consortium which advocates for synthetic liquid fuels from renewable energies. For road traffic in particular, with more than 1.3 billion vehicles worldwide. e-fuels are the climate-neutral alternative to conventional liquid fuels and therefore ideal for crucially reducing CO₂ emissions in an affordable manner – all the way to climate neutrality. The fuelling infrastructures are already available and can be still be used in the future in the usual manner, without conversion costs.

E-fuels will make climate protection affordable for consumers as well. The discussion of a politically agreed end to internal combustion engines announced in the EU Climate Target Plan, however, is regarded as the wrong path to climate neutrality by the E-Fuel Alliance. It believes that the targets for 2050 can only be achieved by recognising and supporting the different technologies for the reduction of greenhouse gases. "There is no question that we have to move away from fossil fuels. Like many experts, however, I take a very critical view of a sole focus on electromobility," agrees Alexander A. Klein, Chairman of the Board of the Oest Group. "Electromobility certainly has its justifications, but not always and everywhere. I also believe that important



Synthetic fuels reduce CO, emissions quickly, sustainably and affordably.

aspects are left out of the debate about electromobility too much, for example the negative impact on the environment from the production of raw materials for manufacturing batteries, the associated working conditions for mine workers in Africa and South America as well as the unresolved issue of battery disposal. In the future, we will have to focus on driving additional alternatives such as synthetic fuels, e-fuels and hydrogen in order to meet the EU climate targets effectively and sustainably."

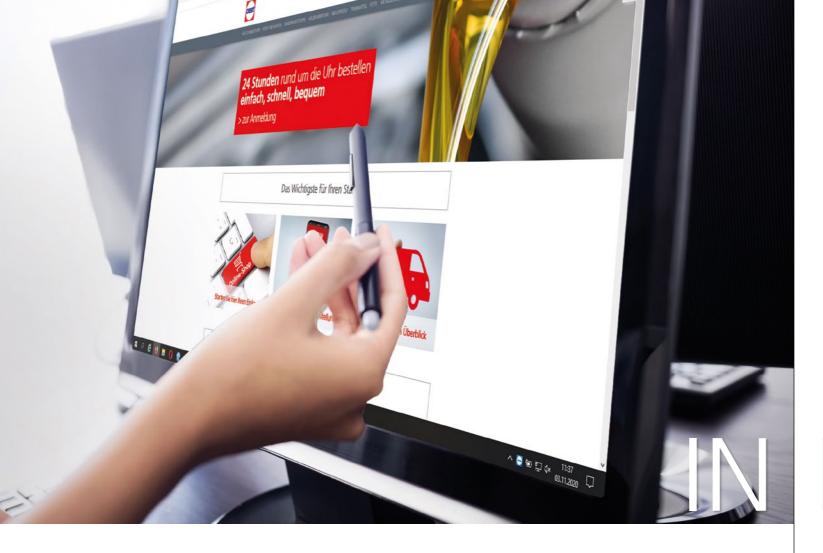
NEW CONTAINER WITH HIGH RECYCLING CONTENT

Sustainability and ecological responsibility at Oest are reflected not only in the use of high quality raw materials and product innovations but also in the entire added value process, including the further development of resource friendly containers.

Many Oest special fuels and lubricants are available in user friendly, high quality cans. In the future, products such as the easily biodegradable BIOSYNT chainsaw oil will be filled in 1, 5 and 20 litre containers with a high recycling content. This represents another important innovation in terms of resourcefriendly product design and logistics.



New Biosynt 5 litre container with high recycling content.



NEW B2B WEBSHOP FOR LUBRICANTS, SPECIAL FUELS AND ACCESSORIES

The new Oest B2B webshop offers commercial users additional convenient ordering options – but initially only as a pilot project in Germany.

This is by no means intended as a replacement for the support provided by the Oest customer service advisers. On the contrary – the shop offers customers more flexibility, efficiency and service as well as more intensive support and more time for individual consultations.

The reduced administrative effort for order processing increases customer service capacities. More than ever, our experienced Oest team is available for advice over the phone and in person.







The simple ordering process, the fast processing and the automatic, clear documentation are only a few of the advantages. The shop also offers different convenient features which reduce work and costs and eventually save a lot of time for commercial users.

Once registered, users can place orders in the shop with their personal login information around the clock, without worrying about regular office hours. It is also easy to register different users from the same company with different rights, e.g. stockroom employees, apprentices, purchasers. The registered users can create shopping carts and even forward these to other departments if



The direct link to the modern Oest logistics concept ensures high delivery reliability

necessary. Searching for products in the shop is much easier because the customer's own article numbers can be stored as an option.

FOCUS

INTRODUCTORY DAYS STRENGTHEN THE TEAM SPIRIT

Three introductory days for the new apprentices and degree apprenticeship students at the Oest Group were held again this year.

After the official welcome, the three day program started with introductions, presentations, guided tours and a company rally. This provided an insight into all departments and divisions – the mineral oil division with research and development, production, administration and logistics as well as the fuel stations and energy divisions and the neighbouring Oest Maschinenbau. The highlight was the team day together with the second-year apprenticeship buddies. The task was to overcome a challenge together, e.g. crossing a river, for which each team developed its own concept beforehand. The schedule also included a tour of the Glashütte Kulturpark open air museum followed by an activity workshop where the

apprentices had the opportunity to make tea light holders and lamps out of glass bottles. All in all three exciting introductory days that also gave the apprentices and degree apprenticeship students an opportunity to get to know each other.





Teamwork was required during the introductory days for apprentices and degree apprenticeship students at the Oest Group.



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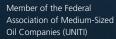














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