



MAPLAN News

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Summer 2017



MAPLAN at the centre of the rubber industry for two days

Days of Technology

EDITORIAL



Dear readers,

The last few months have been very intensive and exciting:

For two days, MAPLAN stood at the centre of the rubber industry. Over 450 visitors from 26 countries attended our Days of Technology 2017 from 31 May to 1 June. Our goal was ambitious: We wanted an exclusive trade fair with a focused offer as well as a perfect mix of theory and exhibition.

The feedback indicates we were successful! We have summarised the highlights for you on the following pages. The previous months were also eventful: The switch to our production line went faster than planned; the proportion of machines produced in cycles is already at 60 percent. This success has increased demand, and we have now achieved the best order situation in our history.

But we are not resting on our laurels; quite the opposite. We are on course for expansion and finalising our launch on the Asian market. Because growth comes only through new technologies and investments!

You can read about the opening of our plant in this issue. What we can tell you is that we will be opening our plant in China on 22 September. But does this mean we are cutting back on our investments in Europe? No, because we're hiring new employees and making new investments. These will amount to €20 million by the start of 2018. Keep reading to find out what added value it will bring our customers.
I wish you a pleasant read and a great summer!

Yours, Wolfgang Meyer

IMPRINT

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Big rush in the MAPLAN technical centre.



A warm welcome to the new MAPLAN site in Kottingbrunn. Philippe Soulier welcomes his guests personally.



Wolfgang Meyer talking with Alexander Wolf, CEO of PETA Formenbau.

At the centre of the rubber industry for 2 days

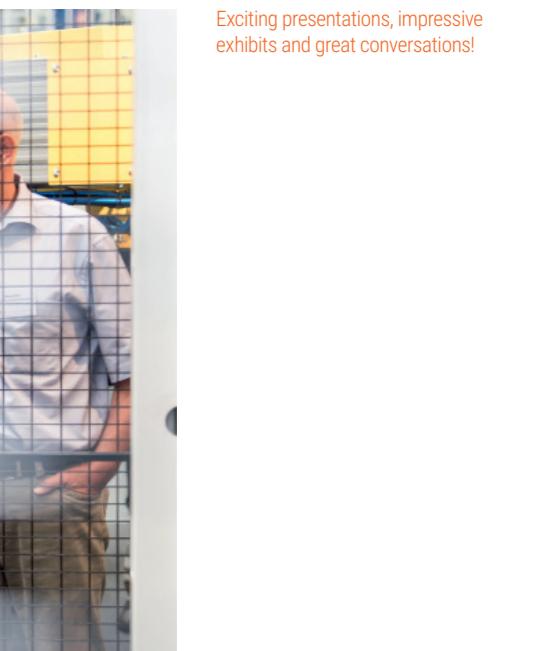
MAPLAN DAYS OF TECHNOLOGY 2017

You can't talk about an automated production process, you have to experience it. You can't talk about visions, you have to feel them. Personal relationships don't grow on online platforms but in conversations. Presentations should not be PR, but must be a source of information. That was the goal of our technology fair – and our expectations were surpassed.

Before planning our third technology fair, we asked ourselves why we find visiting trade fairs so exhausting and sometimes even boring. It is the excess number of presentations offered and an overdose of PR that has so fatigued us during many trade fair visits. And this is exactly why we wanted to organise something different for our customers and visitors. We had an exclusive trade fair in mind, with a focused offer and an inspiring platform. In our view and according to the large amount of positive feedback received from 450 visitors from 26 countries, we can say that we were successful, and are looking to repeat that success during Days of Technology 2020!

Comprehensive package on the topic of rubber production

Usually, there is no real networking between competing companies during trade fairs and industry get-togethers – even though they have identical interests and there are good reasons to exchange views. That is exactly what was so different in Kottingbrunn from 31 May to 1 June! Our Days of Technology were a meeting point and not just a collection of brand stands. People didn't just distribute business cards but actually talked to each other. Our customers were able to discuss their experiences with their colleagues in the industry, and we provided the exclusive setting and catering.



A strong MAPLAN team from left to right: Leo Heidegger, Oswald Steinbauer, Philippe Soulier, Ingrid Soulier, Wolfgang Meyer und Clemens Bauer



A simultaneous translation allowed all participants to benefit equally from the specialist presentations.

Short, concise presentation on elastomer injection moulding machines in the setting of Industry 4.0 conveyed information between the breaks. The limitation to twelve top speakers ensured a pithy offering. Because each and every presentation we attend must be worth it!

Aside from specialist input, we naturally also wanted to present our company's progress. And where better could we present MAPLAN's success and achievements than in our new production hall? Presentations are nice, but ultimately abstract. Forty MAPLAN machines with 20 different models in production are not theoretical but a technological experience!

Mechanical engineering in eleven cycles

By moving from Ternitz to Kottingbrunn, we have switched our production from a single workstation to clocked production. This allowed us to double our capacities to 500 machines a year and reduce throughput times by 30 percent. We are proud of our achievement, and it benefits our customers. To allow visitors to experience this automated production process, we opened up our production hall during Days of Technology. Our experts and technicians led our guests through the new production area and explained the technological spectacle in eleven cycles.

MAPLAN: First rubber injection moulding machines produced in cycles

Machines roll on rails cycle by cycle to the different manufacturing areas. Precise production planning ensures that manufacturing takes place in sync and does not get out of cycle. The work involved depends

on the model and the design. Special custom-made products are still built individually or run through the clocked production and are then compensated in individual production. To avoid jams or idling on the line, the cycles are set to every eight hours. The cycle time is given by a computer system and the smooth flow of material is ensured by an ERP system. It is in any event a small sensation, as there was no real series production in our sector until now. The rest is almost history: Our success accelerated the order situation, which in turn accelerated the switch to line production.

After only nine months, the proportion of MAPLAN machines produced in cycles has already reached 60 percent!

Trends, Brands und Know-how!

A good host does not shine alone, but also lets his guests step under the spotlight. Over 20 trade fair partners were able to present their service portfolio. A total of 29 companies and research institutes informed visitors about current state-of-the-art technologies in rubber production. And our two-day in-house fair concluded with a party! And what setting would be better than imperial Vienna in summer? A great evening in Belvedere Palace rounded off Days of Technology.

At the end this intensive technology fair, an entirely new feeling came over us: too bad it's already over. But you know us, we're already working on the planning for Days of Technology 2020 and look forward to seeing you there.

- 450**
Besucher aus 26 Ländern
- 29**
Unternehmen und Forschungsinstitute
- 12**
12 Top-Vorträge in Simultanübersetzung
- 40**
Maschinen in 20 Modellen in Produktion als Leistungsschau
- 120**
kg Schnitzel wurden verspeist
- 22h.25m**
dauerte die längste Anreise eines Teilnehmers zur Veranstaltung



“ An all-around successful event that has almost established itself as a sort of “industry get-together” and offers lots of room to exchange views on technical solutions and trends.

Mrs. Verena Schmell, SKF Sealing Solutions GmbH, Germany



Days of Technology 2017: The Evening Event at the

Belvedere



“ It is a genius concept to exchange knowledge, know-how and experiences

Mr. Bartłomiej Boruta, Takoni Sp. z o.o., Poland



“ The organization of the event was first class

Mr. John James, G Bruss GmbH, Ireland



“ We particularly enjoyed the gala evening - the food was fabulous and the beer kept coming!

Mr. Glenn Hoffmann, Baker Hughes, Germany

No progress without vision. Our vision is:

GROWTH THROUGH TECHNOLOGY AND INVESTMENT

If you want to be successful on the global market, you have to perfect production, decrease costs and be represented at locations around the world. If you do not want to lose your position as a leader in technology, you have to constantly invest in technological progress and create new services. This is what our Vision 2021 stands for, and is why we have the best order book in our history in 2017!

Economic forecasts for Austria recently had to be corrected upwards, and we can feel this drive in our figures. We are hiring new employees and making new investments. These will amount to €20 million by the start of 2018. Our current turnover of over €50 million is the highest we ever achieved and we are currently enjoying the best order situation in the history of MAPLAN. The new plant in Kottingbrunn and the switch from individual production to clocked production allowed us to double our capacity to over 500 machines a year and reduce throughput times by 30 percent. Our investments in the new clocked production facility have more than paid off: We can now assemble machines weighing up to 18 t and having a clamping force of 4,600 kN as standard. Due to the extremely positive order situation, the switch to series production had to be launched earlier than planned. Instead of the scheduled three years, we increased the proportion of MAPLAN machines produced in cycles to 60 percent in only nine months!

MAPLAN goes China!

But MAPLAN is not resting on the laurels of its high-tech production in Europe, as its 5-year goal is to achieve a turnover of €72 million! And to get there, MAPLAN is now investing in two new plants. In September, the company will start producing for the Asian market in China, and a new plant 130 kilometres from Kottingbrunn in Slovakia will in future produce components and assemblies. The plant located there was built two years ago and is now being expanded with a new facility. MAPLAN Kottingbrunn will also be expanded by hiring new employees. This means that we are course for expansion and are currently finalising entry into the Asian market!

“We have now established our production so that we can build top-quality machines via optimised methods and integrated processes. Because we aren't some one-shot company, our machines stand for long-term, reliable quality. This quality is now being transferred to Asia in order to build special machines for the Asian region with our know-how and local unit labour costs. Many Asian companies have long since made the shift towards quality and now rely on stable, durable machines in a quality that is made in Europe and made by MAPLAN,” explains Wolfgang Meyer, CEO of MAPLAN.

But quality alone is not enough. Companies producing for the Asian market in Europe must face a constant competitive disadvantage in terms of speed and service. Shipping from Europe by sea including customs takes six to eight weeks, and local producers have the advantage.

“The market for rubber injection technology is a global one. If you want to be successful in the long term, you have to perfect production and be represented with locations around the world. We are ideally positioned in this regard because we want to be based where our customers are. Our machines are constantly being

adapted from a technological point of view, documented and retrofitted, all of which requires short distances and close collaboration. If our customers require our support, we are there – and now, in China too,” says MAPLAN owner Philippe Soulier.

Chronology up to the end of the year:

March and April 2017: The choice of location has been made, MAPLAN Rubber Machinery Co. Ltd. is founded. Covering an area of 4,000 square metres, the plant has a production capacity of over 200 machines a year. The location in the Shanghai region offers perfect infrastructure, with customers and leading suppliers present locally at the Wujin high-tech and industrial park (Changzhou region).

May and June 2017: The first four employees are on site and coordinating preparations. All top executives come from the sector and bring proven experience with them. The first training sessions take place.

July and August 2017: The first machine parts from Europe arrive at the plant, the assembly of main types of vertical machines weighing 250 tonnes and other sizes up to 400 tonnes will follow. 80 percent of the parts still come from Austria. The first five MAPLAN machines will be produced by September.

September 2017: Grand opening on 22 September, presentation of the plant and the first machines!

October to December 2017: Twelve to 15 MAPLAN machines delivered by the end of the year. 50 percent of all machine parts already come from China, the plant is used more and more intensively. The goal is to produce 100 to 150 machines a year by 2021.

Growth in Europe too

“As a producer and supplier of highly modern machines, we serve customers on three continents – namely North America, Europe and Asia – with excellent quality and perfect service. This requires having a sales and service team on site, new strategic production facilities as well as continuous investments in our technological leadership. The goal of this mission is to increase our turnover (machines and after-sales) to €72 million a year by 2021. It's ambitious but feasible,” says Wolfgang Meyer.

However, growth in Asia and the US will not happen at the expense of MAPLAN locations in Europe, quite the opposite! An investment of €12 million has been made in the high-tech area in Kottingbrunn near Vienna. A supplier plant for assemblies is scheduled to go into operation in Slovakia at the beginning of 2018. The Malacky site between Vienna and Bratislava has already been prefabricating control cabinets for MAPLAN since 2015.



The modern MAPLAN location in the industrial park of Wujin offers every opportunity for a successful start in China.



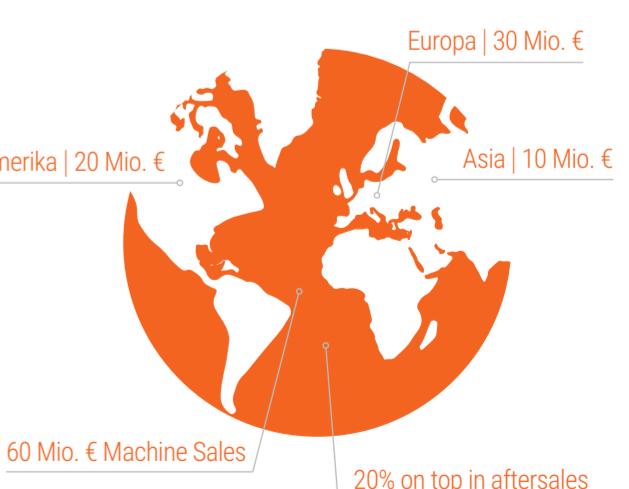
Our top executives bring a lot of experience with them.

Slovakia: Construction of the new plant begins

The plant in Malacky has been producing successfully for years, and construction work for the second facility will start in the summer. A 3,500 square metre workshop and a 400 square metre office building will be built on the 30,000 square metre site.

In addition to assembling control cabinets, the plant will in future start producing metal parts and prefabricated hydraulics. The new plant will open in the Malacky business park in spring 2018 – six months after the plant opens in Wujin!

THE MAPLAN MISSION ON THREE CONTINENTS:



A turnover of €72 million through growth, technology and investments on three continents.

NEWS FROM THE MAPLAN MACHINE PROGRAMME

During Days of Technology, everything revolved around the topics of Industry 4.0, automation and material technologies as well as research and simulation techniques. To make sure these contents did not remain abstract and purely theoretical, various exhibits of MAPLAN and other partner companies were presented.

Around 30 companies and research institutes presented their products and services during the in-house fair, thereby laying the foundation for an exciting technology platform.

During the MAPLAN exhibition, 20 different machines – from C-frame machines to complex 2-component machines with automation – were shown in various stages of production. Practical demonstrations were rounded off by a software information stand on the topic of "Experience industry 4.0".

Overview of the five examples from our machine programme:

Exhibit 1 was a horizontal injection moulding machine of type MHF 700D / 300 with an injection volume of 725 cm³ at up to 2,300 bar injection pressure and a clamping force of 3,000 kN. What was produced were ring seals with a 64-cavity mould, which was combined with a 16-cavity cold runner system from PETA.

Exhibit 2 was a vertical C-frame machine of type MTTP 85 / 30 C with 305 kN clamping force and the TPE plasticising and injection unit newly developed by MAPLAN, with 88 cm³ and up to 1,540 bar injection pressure, with which profile connections were demonstrated.

Exhibit 3 was another C-frame machine, but this time with a rubber injection unit. Using the machines with type designation MTTF 400 / 50 C, i.e. with 500 kN clamping force and an injection volume of 400 cm³ and 1,945 bar injection pressure, pencil holders were manufactured.

Exhibit 4 was a 4-axis vertical machine of the MTF 1500 / 250 with 2,500 kN clamping force and a vertical FIFO unit with 1,500 cm³ injection volume at 2,000 bar maximum injection pressure. Using a Euromap 67 interface, the machine was connected to an ABB 6-axis robot which, via a WEAsystec system, was able to remove the central plate and products from the machine and insert an empty one.

Exhibit 5 was a production cell based on a 4-axis vertical machine of type MTF 4000R / 460 g with a horizontal large-volume plasticising unit positioned on the upper machine plate combined with a vertical injection module. Before the clamping unit, a "Liftmaster" heavy duty stacker from HAHNAUTOMATION assumed the removal of the cylindrical engine mounts made from a metal/rubber combination, as well as the preheating and insertion of two metal inserts each into the 24-cavity plate of the injection mould.

The image shows exhibit 5 – **MTF 4000R / 460 G** – 4-axis vertical machine with a large-volume plasticising unit positioned on the upper machine plate combined with a vertical injection module.



1: **MHD 700 D / 300** the top seller for the manufacture of sealing ring.



2: **MTTP 85 / 30 C** – TPE processing using the proven MAPLAN C-frame technology.



4: **MTF 1500 / 250** – Ergonomics and efficiency – a perfect symbiosis.

„CU@“: THE MAPLAN FAIR CALENDAR

SEPTEMBER



26. – 29.09.2017
Iranplast
Teheran, Iran

OCTOBER



01.-06.10.2017
Equiplast
Barcelona, Spain

NOVEMBER



09.-12.10.2017
Rubber Expo
Cleveland, OH, USA MAPLAN Booth # 1133