

Maplan News



The Elastomer Injection Technology Report

April 2015



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Editorial



Dear Reader,

In 2013, we created and distributed our first newsletter. We now are up to a circulation of 3,500 copies, distributed all around the world. The positive feedback we have received encourages us to continue to inform you about news at MAPLAN in this way. The newsletter is all about people, innovations, developments, market trends, trade shows and much, much more.

Our readers are not only MAPLAN customers but all the partners we work with, including suppliers, universities, etc. As you may have noticed in the last few issues, we always try to cover a wide range of topics – so that there is something interesting for everyone.

Among other articles, this issue includes a report about working with our southern German customer KNORR & MACHO - we hope you enjoy this fascinating look behind the scenes.

I hope you all enjoy reading our latest newsletter and I look forward to welcoming you (again) soon at our MAPLAN headquarter in Ternitz, Austria.

Wolfgang Meyer, CEO

MAPLAN DKT/IRC 2015 Highlights

Trend-setting technologies - made by MAPLAN

200 kN C-frame Top Dropping - Top Injection range

MAPLAN is showcasing a C-frame Top Top machine, the MTTF100/20C which boasts an ergonomic, fully hydraulic clamping unit. Optimised operating height and excellent accessibility from three sides enables an ergonomic insertion and removal process.



200 kN C-frame Top Top machine

3,200 kN vertical machine

The vertical MTF1500/320editionS machine features extra-large heating plates with an optimal working height for operator benefit. Together with PETA Formenbau (Germany), MAPLAN is presenting an ICM process combined with valve gate nozzle cold runner technology. In the ICM process (Injection Compression Moulding) the compound is first injected in a partially opened mould before being clamped. This process is mainly used for the manufacturing of multiple cavity rubber parts. The moulded parts are then gathered in a pad, from where they can be punched out. This process is cost efficient and very suitable for the mass production of small, high precision rubber parts. The highlight of the 2 pads moulded by valve gate nozzles and cold runner technology from MAPLAN and PETA, is to successfully avoid any backflow of the compound material during the injection compression moulding.



3,200 kN vertical machine

2,000 kN horizontal machine

One great feature among many of the horizontal MHF700/200editionS is its reduced footprint/space-saving design. When compared with similar machines on the market, this machine is 50% smaller for the same closing force and the same equipment.

The machine provides excellent accessibility: the hydraulic as well as the control unit elements are easy to reach, for the quickest repair in case of a breakdown. Together with ELASMO (Austria) and ROBOTIX (Austria), MAPLAN is showing a complete automated production of pencil holders. These rework-free, flash less and sprue less parts are injected with valve gate nozzle cold runner technology, they are then automatically picked and placed on a conveyor belt facing the right direction.

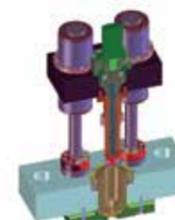


2,000 kN horizontal machine

Customer Service

The customer documentation system VMV (Visual Machine View) provides the rubber parts manufacturer with significant advantages. By assisting the visual search for spare parts, it allows for better and faster trouble-shooting. VMV – a solid tool to reduce downtime and increase the productivity of MAPLAN machines.

DKT/IRC 2015, Booth 12-117 – We look forward to showing you our special exhibits, trend-setting technologies all backed up with highly trained personnel on the MAPLAN stand!



FiFo injection unit viewed in VMV

MAPLAN Performance

MAPLAN – Fit for the future

Optimisation at MAPLAN - processes and personnel

Review of 2014

2014 was one of the most successful years in the history of MAPLAN. New machine sales grew by 30%, with more than 20% of total sales going to new customers. We are particularly proud of this achievement, as it is not only our wish to serve our existing customers the best we can, but also to acquire new customers and enter new markets with our sales activities and thus be more broadly positioned internationally.

More staff

To handle this significant increase in orders, some changes were necessary. One of the challenges was to provide training and acquire the necessary staff. In total, the

team at our factory in Ternitz has grown by an additional 22 people. On top of this, our existing manufacturing team worked extra hours to complete orders in a reasonable time. We managed to integrate our new employees into the MAPLAN team well and by doing so have achieved the extra capacity to deal with all the new projects.

Furthermore, we have adapted our organisational structure in our mechanical design department to facilitate the increased requirements. Our engineering staff, Stefan Himmelsbach and Dieter Zoeger - both long-time and experienced design engineers at MAPLAN - have now taken on leadership roles. Since the introduction of our restructu-

ring measures, the efficiency of the mechanical design department has been significantly increased.

Expanded factory space

New space had to be created in our factory. We achieved this by moving all ancillary activities out of our main production area. Preassembly and subassembly work has also been relocated to other areas to free up space for final assembly. This has enabled us to create some additional 30% assembly capacity. Logistic processes have been streamlined and the delivery window for suppliers scaled down to reduce stock levels and thus save space in our own factory. These steps, coupled with reduced throughput time, have enabled us to increase overall capacity of our existing site by approximately 50%.

Improved software & optimised customer service

We have implemented new software in our engineering design department which makes simplified 3D modelling of injection moulding machines possible.

This facilitates the flow of information to our manufacturing teams. Last but not least, this 3D model is also available on CD to our custo-

mers, as a spare parts catalogue and for better visualisation of MAPLAN machines for service personnel.

Finally, I would like to mention that we have increased our staff in our customer service department, in order to meet the changing requirements of our business.

I am fully aware that the changes I have described above did not all go as smoothly as we would have liked. Unfortunately there were occasions where our customers were faced with slower reaction times and longer delivery times than usual. We shall continue to work hard on further optimisation of our manufacturing processes in order to serve our customers better and provide you with both further production benefits and thus competitive advantages with our MAPLAN product range.

I would like to take this opportunity to thank you for your continued confidence in our staff and the MAPLAN company and I look forward to continuing our successful partnership with you in the years to come.

Wolfgang Meyer, MAPLAN CEO



MAPLAN production hall

MAPLAN Team

New engineering design management



Head of Mechanical Design

- Stefan Himmelsbach, 35 years
- Engineering background: mechanical and automation engineering

Employed at MAPLAN with a short interruption for the last 8 years.

Mechanical Design Engineer: 2007 – 2014.

Head of Mechanical Design since January 2015.



Head of Project Engineering

- Dieter Zoeger, 39 years
- Engineering background: mechanical and automation engineering

Employed at MAPLAN for the last 12 years.

Technical Sales Support Manager: 2003 – 2014.

Head of Project Engineering since January 2015.

MAPLAN in numbers

1 headquarter

in Ternitz, Austria

5 branch offices

in Germany, France, USA, Russia & China

25 representatives

worldwide

More than 600 flights

flown by MAPLAN staff in 2014

+30%

increase in sales of new machines in 2014

20% new customers

20% of turnover in 2014 was generated by new customers

14 trade fairs

MAPLAN exhibited at 14 trade fairs worldwide in 2014

+30%

more final assembly line capacity

+50%

increase of overall capacity

1.300 visitors

came to MAPLAN in Ternitz in 2014

MAPLAN International

MAPLAN Germany

MAPLAN's subsidiary in Germany – an introduction



Horst Schmidtke, Steffen Kriemelmeyer, Rainer Dürr, Klaus Vogel, Gerald Kemper, Andrea Klumpp

MAPLAN's subsidiary in Germany is located in Murr, a small Swabian town near Ludwigsburg close to Stuttgart.

The subsidiary has its origins in the rubber injection moulding business division of WERNER & PFLEIDERER Stuttgart, a long-established Swabian mechanical engineering company.

In 1993, the owner of the STARLINGER group of companies, Franz X. Starlinger-Huemer, unfortunately now passed away, made a decision that was to be of great significance for MAPLAN. He bought WERNER & PFLEIDERER's rubber injection moulding division.

The first members of staff of the newly founded Germany subsidiary, MAPLAN Deutschland GmbH,

had already been employed at WERNER & PFLEIDERER for many years before 1993. With their experience, they were able to contribute a great deal to the technological development of MAPLAN injection moulding machines.

With the purchase of the rubber injection moulding machine division of WERNER & PFLEIDERER by Franz X. Starlinger-Huemer, MAPLAN became a leading company in the production of injection moulding machines for the manufacture of all kinds of moulded rubber products. The company has continued to secure and indeed expand its position in this business during the last few years. Today, IPSO Industrie GmbH, led

by Philippe and Ingrid Soulier (Ingrid, daughter of Franz X. Starlinger-Huemer), is responsible for the strategic decisions at MAPLAN.

MAPLAN Deutschland is the subsidiary with the highest turnover and is a mainspring for the expansion of worldwide customer contacts at global player companies. In addition, MAPLAN Deutschland is constantly driving forward the development of machines and systems at MAPLAN through its realisation of highly sophisticated projects for its customers.

Horst Schmidtke, managing director of MAPLAN Deutschland since its establishment, has very successfully led the growth of the subsidiary. He is, in one person, not only the managing director but also responsible as head of sales for southern Germany and enjoys an excellent reputation in the business as an extremely knowledgeable partner.

Customers in northern Germany are in the capable hands of Gerald Kemper. Mr. Kemper has been with MAPLAN Deutschland since the company was founded and many of his customers are rubber part manu-

facturers who have known him since he started working at WERNER & PFLEIDERER in 1987. Today Gerald Kemper is without doubt one of MAPLAN's most experienced sales representatives. Many younger members of staff have benefitted from his extensive know-how and are now much appreciated partners in MAPLAN's international business.

Rainer Dürr and Andrea Klumpp make up our dependable sales office team in Murr. Rainer Dürr is first and foremost responsible for spare parts, both for MAPLAN and for WERNER & PFLEIDERER injection moulding machines. In addition, he also organises the schedule for both customer service technicians, Klaus Vogel und Steffen Kriemelmeyer.

Apart from "newcomer" Steffen Kriemelmeyer, all members of the team mentioned above have been working for MAPLAN since the company MAPLAN Deutschland was established in 1993. Steffen Kriemelmeyer joined in 2011 and is already an "old hand".

MAPLAN Deutschland – your partner for rubber injection moulding machines.

MAPLAN Technology

Cure1 - an alternative to Cure²

Cure1- a low-cost variant for process optimisation

Cure²/ Cure1

In 2005, MAPLAN, together with CAS, developed the process optimisation system Cure². Along with its outstanding performance, the unique selling point of Cure² is the ability to **directly** change process data in MAPLAN's 5th generation control units in real time.

"A particularly attractive price"

By developing Cure1, MAPLAN has responded to calls from many of its customers and prospective customers. Cure1 has been streamlined compared to Cure², which has resulted in a particularly attractive sales price. The

Cure1 hard- and software will be showcased for the first time at the DKT 2015 in Nuremberg, Germany.

Technical features

Hardware installations by the customer are not required; all the necessary features are part of the machine's basic configuration. In operation, the relevant process variables are sent to the Cure1 computer and heating time is regulated within a given range. Possible batch fluctuations may result in a change in injection energy, which is automatically considered by the program. The moulded part geometries are

entered in a very user-friendly way using simply the critical part-thickness. All material, article and mould-specific data settings are stored in local databases and are immediately available when production for a part is restarted.

Integration into the customer's IT network and storage of data on a customer's server or removable storage device is possible.

The „3D“ model is available as a further option, which provides advanced geometry input for moulded parts.

This way it is possible to calculate complex moulded parts.

All process input variables as well as the results of calculations are visualised on the MAPLAN display.

"Cure1 from MAPLAN/CAS - a low-cost and user-friendly option to optimise your processes."



Cure1 by MAPLAN and CAS

MAPLAN Customer Report

KNORR & MACHO

Interview with Joachim Macho, CEO of KNORR & MACHO
A strong commitment to “Made in Germany”

M: *Mr. Macho, who is KNORR & MACHO?*

K&M: KNORR & MACHO has been in business for almost 30 years and has 60 employees. KNORR & MACHO develops, produces and sells rubber articles. Some information for you: we currently have 18 rubber injection moulding machines from different companies in our factory, the last 5 are from MAPLAN.

M: *Could you please explain your Slogan: A strong commitment to “Made in Germany”?*

K&M: Our greatest strength is our flexibility. Because of our reasonable size we are able to quickly implement specific customer requests. We are able to start delivering a product series in sometimes less than 4 weeks after the initial order placement. This would not be possible if we had our development or our production plant in for example Asia. Even with other locations in Europe, I think it would also be more compli-

cated. In order to work so efficiently, you need highly motivated staff, very quick decision making and flexible partners, as well as highly flexible mould makers who share the same philosophy as we do.

M: *Which kind of rubber article is your specialty?*

K&M: Our strength are bushes and bellows, including complicated shapes, in all kind of different sizes and made out of almost all known rubber compounds. Furthermore, our portfolio also includes caps, O-rings and rubber-metal parts.

M: *Why did you last choose MAPLAN as your machine supplier?*

K&M: We have a variety of machines in use and have compared them all. The new MAPLAN edition series was being developed at the time we were looking for new machines; this series matched our requirements and was available at a price that fully

met our financial capacities. We never regretted our decision. The excellent service from the MAPLAN office in Murr has nothing but confirmed our choice MAPLAN as our supplier.

M: *Thanks to the variety of machines you own, you are able to compare them in a very comprehensive way in your production. Can you tell us more about that?*

K&M: Yes of course, the MAPLAN FiFo injection unit for example is a perfect tool for a company like we are. As we often process relatively expensive, often coloured, compounds in small batches, it is essential that the change of material can be done quickly with as little compound waste as possible. FiFo is great for this. We just have to pull the nozzle inserted, eject the old compound with only one injection volume of new material and everything is clean. What also convinced us with

MAPLAN machines is the user friendly interface of the PC5000 control unit. Anyone can easily operate it.

M: *Thank you for this enjoyable conversation.*

www.gummi-formteile.eu



Joachim Macho (KNORR & MACHO) and Horst Schmidtke (MAPLAN) in front of the MAPLAN MTF1500/250 edition (delivered in January 2015)

Review

Rubber 2014 Tüyap, Istanbul, Turkey

The eighth „Rubber 2014“ trade fair took place at the TÜYAP Fair and Congress Center in Istanbul from 27 to 30 November 2014.

With numerous customer visits as well as new prospects, MAPLAN was able to expand its leading role in the Turkish market for elastomer injection moulding machines.

In close cooperation with our customer – the company LASPAR Anxiety & Pfister from Bursa, MAPLAN was able to exhibit a horizontal injection moulding machine at the show in a ready for production state, prior to delivery at the customer’s facility.



Rubber 2014 Tüyap MAPLAN Team:
 Paul-David Betea, Hatice Dincer, Caner Polat

News

New production plant location purchased

For 2016, MAPLAN is planning to build a new plant south of Vienna, Austria, to enable larger and more efficient logistics and production processes.

The site for the new company has now been acquired in the Kottlingbrunn industrial park (Baden near Vienna), about 40km away from company headquarters in Ternitz. Construction work is scheduled to begin in the 4th quarter of 2015.



Upcoming Events

Elmia Polymer	Jönköping, Sweden	21 - 24 April 2015	A 0614
Tires & Rubber	Moscow, Russia	21 - 24 April 2015	1E60
Plast 2015	Milano, Italy	5 - 9 May 2015	Hall 11- B01
DKT / IRC 2015	Nuremberg, Germany	29 June - 2 July 2015	12-117
Rubber Expo	Cleveland, USA	13 - 15 October 2015	

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