



MAPLAN MAKES THE WORLD

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EDITORIAL



Dear readers,

In recent months and years, global dynamics demanded a great deal of adaptability from MAPLAN. This has now paid off, as record order intakes and the establishment of new business areas have pushed our company further ahead in the market. This allowed MAPLAN to take additional strategic measures to strengthen its position globally.

During our MAPLAN Day of Technology this year, we announced the acquisition of our Italian representative ST.A.TE Technologies. With one of the fastest growing economies, India is also another strategic target for MAPLAN. The planned location and factory opening is aimed at meeting the increasing demand for our machines and technologies in the Asian market.

Speaking of sought-after technologies: the relevance of energy-efficient and energy-saving solutions is in higher demand worldwide than ever before. With MAP.cooldrive, MAP.compensate and many other initiatives, our MAPLAN innovations enable energy-saving potential for our customers.

Technological innovations, as well as any testing possibilities, compound, and tool trials, are offered to you on the big stage – in our modern technical center at the MAPLAN headquarters in Kottingbrunn.

We thank our partners, customers and employees for these groundbreaking stages and look forward to a collaborative future!

Philippe SOULIER, Owner Wolfgang MEYER, CEO



IMPRINT

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Marko Besenlehner, Jasmin Kaiser, Wolfgang Meyer, Gerald Kempe

LAYOUT & DESIGN



TO SUBSIDIARY

The company ST.A.TE Technologies S.r.l in Calvenzano has been supporting MAPLAN GmbH as an official sales and service partner in the Italian market since 2007. The company has always placed great importance on providing their fastest service for our customers, as well as ensuring the availability of spare parts locally. Now, what was a partnership has become a MAPLAN subsidiary.

Earlier this year, MAPLAN owners Ingrid and Philippe Soulier reaffirmed the long-standing cooperation and awarded the Italian colleagues Francesco Valsecchi and Andrea Bugini for the milestones achieved and their successes over the recent years.

THE NEXT LOGICAL STEP

On May 15, MAPLAN GmbH announced the acquisition of all shares of ST.A.TE Technologies S.r.l. "We believe that this was the right time for this step of growth, so that MAPLAN can grow even stronger in Italy in the future," confirmed MAPLAN CEO Wolfgang Meyer. The new owners, re-



Andrea Bugini, Ingrid Soulier, Wolfgang Meyer, Francesco Valsecchi Stefan Berger, and Philippe Soulier look forward to a successful future



presented by Mr. and Mrs. Soulier as well as Wolfgang Meyer, celebrated another peak of expansion with the Italian colleagues. In close coordination Andrea Bugini will continue to serve as the CEO of ST.A.TE for the Italian market.

SIGNPOST TO THE FUTURE

Beginning with the transition to Wolfgang Meyer as MAPLAN's CEO in 2013, the collaboration with Italian customers intensified, leading to optimized and more user-friendly machines for the market. Today, the MAPLAN machine range stands for highest productivity, energy efficiency, and thus minimal CO₂ footprint – a mindset that allows us to grow globally. Currently, there are more than 4,000 elastomer injection moulding machines in Italy aged between 10 to 30 years, which need to be modernized or replaced with state-of-the-art machines. We at MAPLAN aim to raise awareness among customers regarding energy management and, by using modern machines equipped with servo technology, reduce energy consumption, and thereby also ease the infrastructure in Italy.

30% MARKET SHARE

The success of MAPLAN in Italy is also reflected in the numbers. The turnover increased from a few

hundred thousand euros in 2013 to more than 7 million euros in 2022. As a result, the market share grew to 30 % in 2022. This makes MAPLAN the largest non-Italian representative in Italy. "In the long term, we want to capture the Italian market even more significantly. The market

MAPLAN is known in the Italian market as a reliable partner, thanks to many years of experience and collaboration with ST.A.TE.

understanding, flexibility and the right products have proven themselves, and the name MAPLAN is becoming increasingly popular," says Stefan Berger, Head of Sales MAPLAN.





MAPLAN in Milan **EXHIBITION APPEARANCE WITH SUBSIDIARY ITALY**

At PLAST Milan, MAPLAN made its first appearance through its new Italian subsidiary. To the numerous customers, partners, and professional guests, we presented the current version of the most sold machines in Italy, the horizontal series RAPID⁺. Many interested attendees saw energy efficiency and machine speed as path-breaking advancements. As another highlight feature, MAPLAN introduced MAP.colorflip – a highly efficient development for quick color and material change, more on page 11. Also present at the fair was the cold runner portfolio, as well as the external control device for needle shutoff cold runners, MAP.valvegate.

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HIGH-TECH ON THEBIGSTAGE





MAP.autocell Demo Cell

part inspection, a rotary table as well as pneumatic turnover handling.



Innovative MAP.commander C6 automation control as well as a MAP.mate 6-axis robot, a visual-





MACHINE PRESENTATION

Let our experts explain the individual machines and technologies to you. Witness our machines in full action live. Be convinced of the ergonomics and the user-friendly MAP.commander C6 machine control.



RAPID⁺ 700**R**/300

Horizontal machine with 300 tons clamping force and proven MAP.fifo 700 cm³ injection unit with double brush system and rubber / silicone feed. Heating plate size 670x670, Injection volume 700cm³, usable for rubber and solid silicone.



MAP.crb slim 8-nozzle cold runner

For easy retrofitting of the existing machine fleet

MAP.crb split 8-nozzle cold runner

Our dividable cold runner for frequent material changes

MAP.crb solid* 8-nozzle cold runner

Our drilled cold runner for highest injection pressures



MAP.CRB COLD RUNNER

Rising raw material prices, high disposal costs and general financial pressure compel companies to continually improve their performance and produce in an environmentally friendly manner. Therefore, we offer various cold runner systems that guarantee our customers particularly high efficiency in the production of rubber and elastomer items. All MAP.crb cold runners are available for testing. We are looking forward to testing your material mix for cold runner suitability and advising you on which system suits you best.



ERGO⁺ 2000**E**/250

Vertical machine with 250 tons clamping force and proven MAP.fifo ergo 2000cm³ injection unit. (Heating plate size 560x650mm, injection volume 2000cm³)

TECHNICAL CENTER MAPLAN AUSTRIA



MAPLAN expanded its Austrian location in gree solutions and the dynamic trend in New boxes of electrically driven vehicles. This ex-Kottingbrunn in 2022. The reasons? Increasing Mobility, which required the assembly of mapansion also led to the creation of our new

order intakes, the growing interest in 360-de- chines for very large-sized seals for battery technical center.

Vertical machine with 460 tons clamping force and proven MAP.fifo ergo 6000 cm³ injection unit. (Heating plate size 710x800mm, injection volume 6000cm³)



PERSONAL CONSULTATION

Our expert professionals and technicians are happy to take the time



TOOL TRIALS

Test your tool on a MAPLAN machine. Be convinced of our excellent mechanical engineering regarding the parallelism of the injection unit and the strong overall performance of our machines.



COMPOUND TRIALS

We are happy to test your rubber compound for you and check it for processability. We use the resulting information to configure an ideal MAPLAN machine for you.



ING. MATTHIAS TANZER **Automation Engineering** T +43 2252 790909 267 matthias.tanzer@maplan.at

We look forward to welcoming you for a personal visit at our technical center!

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Our focus: INNOVATION, ENERGY EFFICIENCY, CONNECTIVITY, PRODUCTIVITY

On June 15th of this year, around 180 professional lutions for the efficient production of elastomer A highlight of the event was undoubtedly the new

visitors gathered at our location in Kottingbrunn, parts. A particular focus was placed on user-fritechnical center located in the production hall of Lower Austria, to participate in the "Day-of-Tech- endly and connectable machines as well as the pro- MAPLAN. There, guests could admire the latest and nology." Amidst pleasant early summer weather, motion of automation solutions, to counter the most technologically advanced machines, incluthe event offered a diverse range of program items, industry-wide staff shortage while simultaneously ding the MAP.crb cold runner systems, the RAPID+ including a symposium, an extensive technical increasing efficiency. Besides three blocks of lec- 700R/300 and the MAP.autocell Demo Cell was showcase, a partner fair, and a networking dinner. tures, there was an extensive technical showcase also showcased. Particularly impressive was the MAPLAN presented a wide array of technical so- throughout the MAPLAN factory premises. active participation of the visitors during ma-

Dipl.-Ing. Robert Kusch

"Challenges in the energy management



See and feel the future"



Director Operations molded rubber parts Westland Gummiwerke GmbH & Co. KG of a rubber production"

T. SYSTEM







EXHIBITORS

of Technology









chine presentations, material and tool testing and personal consultation discussions. An outstanding machine was the MAPLAN SPECIAL⁺ 700-700/560 TWIN-RAM vertical machine with a total clamping force of 5600 kN. It has two vertical FIFO units, each with a shot volume of 725 cm³ and an injection pressure of 2300 bar, ideal for large seals. Another remarkable machine was the MAPLAN SPECIAL⁺ MR 700-700/850 QUATTRO-RAM with a total clamping force of 8500 kN, a heating plate size of 1500 x 2000 mm, and an electrically driven toggle plate unit. Optimal for sealing Electric Vehicles, the top model of the horizontal RAPID series, the RAPID⁺ 570/630 with a clamping force of 6300 kN and linear bearing plate guidance and high-pressure injection unit was introduced.

The program also included a series of exciting lectures, among them presentations by experts such as Timo Gebauer from SIGMA Engineering GmbH on the topic of "Process Simulation". He informed about the possibilities for optimizing injection molding tools and the entire injection molding process in rubber and/or elastomer part production with the Sigmasoft software tools. This includes, for example, the positioning, number, and performance of the heating cartridges or the optimization of the heating time and

identification of temperature differences in the tool. Robert Kusch, the operations manager of Westland Rubber Works, spoke about the challenges that energy management poses to operations management, but also the potential that can be tapped into through it. Günter Heinendirk from Stäubli Tec-Systems GmbH also had full attention during his lecture on "Simple Integration to suit your needs".

Besides external speakers, our employees also covered exciting topics. These include Oswald Steinbauer from MAPLAN on "Lean culture", Matthias Tanzer with his lecture on "Next level-production", and Rudolf Eisenhuber with "Reduce your carbon footprint".

In the in-house production hall, there was also a VR station and a photo box as well as an exhibition area with many exhibitors: UTP-Vision (inspection solutions for rubber components), T.SYSTEM (automation accessories, especially brush systems), MEWO (deburring and cleaning machines), Bluhm Systeme (inkjet and laser marking), Gibitre (material testing devices), and Gummiwerke Kraiburg presented themselves as part of a partner exhibition. The event concluded with a gala dinner with a show program and an impressive fireworks display, where the hospitality of MAPLAN was once again at the center of attention.



Additional **SPEAKERS**



Ing. Matthias Tanzer Head of Project, Application & **Automation Engineering** MAPLAN GmbH

"Next level-production"



Oswald Steinbauer, MSc Plant Manager MAPLAN GmbH "Lean Culture: Be better than yesterday"



Dipl.-Ing. (FH) Stefan Berger **Head of Sales** MAPLAN GmbH "Highlights of the day"

erous exhibitors and partners presented their new technologies MAPLAN showcased versatile standard as well as special machines









Dipl.-Ing. Timo Gebauer Authorized represenatative SIGMA Engineering GmbH "Process simulation: The next step"



Dipl.-Ing. (FH) Guenter Heinendirk Manager of Robotics Academy STÄUBLITEC-SYSTEMS GmbH "Simple Integration to suit your needs"



Ing. Rudolf Eisenhuber Head of Technology MAPLAN GmbH "Reduce your carbon footprint"





ELECTRO MOBILITY



Innovative, technical solutions of excellent quality. That's what Freudenberg stands for. In thousands of demanding applications - from cars to power plant turbines, from outerwear to voice prostheses to cleaning robots. Their success is based on technological expertise and innovative strength. Guided by the mission to shape the future sustainably: through efficient, increasingly digitized processes, through resource-saving products and customer-oriented services.

THERMOBARRIER COMPO-NENTS FOR ELECTROMOBILITY

As part of the "Thermobarrier components for electromobility" project, Freudenberg Sealing Technologies and MAPLAN have teamed up again to de-

velop innovative solutions for the growing demands of the industry. The long-standing partnership between the two companies, which has already existed for over 20 years, forms a solid basis for this intensive collaboration.

TOGETHER TOWARDS SUCCESS

The decision to collaborate with MAPLAN was based on various factors. The size of the machines, the availability of an initial trial machine for material processing tests, as well as the technical knowhow and experience of MAPLAN in processing silicone were decisive of great importance and contribu-

We appreciate the openness and the opportunities that MAPLAN has offered us and are very satisfied with the progress that has been made in a short time

> Thorsten Stickel, Manager Global Process and Tooling Technology, Freudenberg FST GmbH $\,$

for this choice. Originally, it was entire process, an employee from planned that the first trial machine would be relocated to the headquarters of Freudenberg Sealing Technologies after the completion of the ensure the subsequent tool cleatests to conduct experiments and produce sample parts for the customer there. However, due to local two companies.

conditions and the electrical equipment of the machine for the US power supply, this was not possible. In this situation, MAPLAN proved to be extremely cooperative and allowed Freudenberg to use the space in their premises with the entire infrastructure for the necessary work. This support from MAPLAN was

> ted to the smooth progress of the project. Many jobs planned at the headquarters, which also included tool optimization, were relocated to the MAPLAN location and carried out together there. During the

Freudenberg Sealing Technologies was on site to assist in the commissioning of the machines and to rance. This testifies to the close cooperation and trust between the



SERVICE WITH SENSE AND UNDERSTANDING

MAPLAN also recognized the challenges associated with developing injection moulding machines for this special project. Software updates and hardware changes were made to ensure that the machines are optimally suited to produce the components. In this process, all competencies of MAPLAN - from process engineering through software and electrical engineering to safety engineering - were fully utilized. "We appreciate the openness and the opportunities that MAPLAN has offered us and are very satisfied with the progress that has been made in a short time". This intense partnership will continue to enable the two companies to develop innovative solutions for electromobility and to make an important contribution to the sustainable future of the industry.



Make new from old **PRACTICED SUSTAINABILITY**

The theme of sustainability is increasingly gaining importance and is of great significance for us at MAPLAN too. We are proud to contribute by reusing already used resources, thereby promoting a sustainable interaction with our environment. Therefore, we would like to introduce our refurbished machines to you, offering a cost-effective and eco-friendly alternative. At MAPLAN, aging machines get a second chance. We purposefully buy back used units from customers, to subsequently subject them to thorough refurbishment. During this process, our focus lies on creating a high-quality machine that is also almost flawless in appearance. For this, not only defective or worn parts are replaced, but, if necessary, the machine control is also upgraded to the latest generation (C600*.web). To ensure flawless functionality, each machine undergoes an extensive test run after the completion of all refurbishment steps.

THE RESULT:

A "used machine" that corresponds in appearance and technology to a new model. This process is referred to as remanufacturing, where existing items are materially upgraded without having to be disassembled. Through this method, the product gains new functions and can continue its previous utility. Discover the benefits of our remanufacturing process and benefit from high-quality machines at an attractive price. Together, we can make a significant contribution to conserving our resources and the environment.

Should you have any questions or interest, we are always at your disposal.

Contact our team (service@maplan.at) and let's take a step towards sustainability together!

You can find current used machines for sale on our website www.maplan.at.

MARIO STEINER

Head of Customer Service T +43 2252 790909 215 mario.steiner@maplan.at

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Expanding into **NEW MARKETS**

MAPLAN establishes and opens a new location in India with a new competence center, which integrates production, service, and development. This way, we meet the high demand for high-quality MAPLAN machines on the Indian market.

MAPLAN India has a strong team, consisting of seven engineers, who will take care of the initial activities in the areas of design, sales, service, and spare part support. The team will be trained and educated at the main location in Kottingbrunn. With the introduction of the well-known machine series Platin⁺,

The expanded PV on the roof of the MAPLAN building

for some time now, as India has established itself as one of the fastest- growing economies worldwide and is expected to become the third-largest economy by 2030. Furthermore, substantial government investments are being made in India's national infrastructure, including renewable energy, roads, railways, and water supply.

With the newly assembled team and the significant potential in India, MAPLAN will soon take another step toward global market strength!

Deven Lokagariwar, Managing Director USA, China & India

The automotive industry in India has significant growth potential. Compared to the European Union, India currently has

> low car ownership, with an average of only 22 cars per 1,000 residents, while the EU has 576 cars per 1,000 residents. MAPLAN aims to address these market opportunities by establishing specialized production lines, supported by existing technical expertise and extensive industry experience.

SPECIFIC CONDITIONS

India is characterized by a stable democracy and a robust government. With an average age of 29 years, India has a young and dynamic population with an educated middle class, indicating increasing purchasing power and demand for high-quality products. With the new location in India,

MAPLAN is positioning itself to take advantage of favorable economic conditions, a growing middle class, and rising demand. The plan is not only to contribute to India's economic development but also to serve our international customers by expanding a local support network and providing high-quality machinery solutions.



DEVEN LOKAGARIWAR Managing Director USA, China & India T +1 630 924 0100 dlokagariwar@maplan-usa.com

energy and waste or scrap.

In the next steps, the development of local sourcing and the establishment of production in Gujarat will be accelerated to enable complete machine manufacturing by 2024. By 2025, the range of machines will then also be expanded according to the demand of the market with additional se-

the servo drive technology and the origi-

nal First-In First-Out injection system,

MAPLAN offers the Indian rubber indus-

try added value in terms of production

cost optimization as well as reduction of

450 MWH SOLAR POWER FOR PRODUCTION

MAPLAN adopted a Lean & Green fleet. An illustrative example is our 200 ments Additionally, we have installed approach during the construction of kWp photovoltaic system, which has ge- PV modules with a 320 kWp capacity



THROUGH PROGRESS:

MAPLAN developments aim for

SIGNIFICANT ENERGY SAVINGS AND CO, REDUCTIONS.

Energy savings are crucial for reducing the CO₂ footprint and mitigating climate change. With MAPLAN developments, many energy-saving potentials can be utilized and costs can be minimized.

To achieve energy savings, it's importally eliminated by MAPLAN's "Deep sleep" ant to understand where energy is consu-technology while retaining all timer funcmed in the production process of a plant. tions. In the elastomer sector, the focus is on the consumption of electrical energy, particularly for heating the tools. Insulation of the tools is essential for effective energy savings, and MAPLAN machines already come standard with high-quality insulation materials and edge insulation. Additionally, capturing energy consumption data is crusil fuels. cial for further savings. MAPLAN offers integrated systems for monitoring electricity, water and compressed air consumption. Combined with the simultaneity factor and efficient drives, significant costs in designing the energy infrastructure can be saved. MAPLAN CoolDrive drives enable up to a 50 % reduction in drive energy consumption and decrease the reactive power component. Adaptive, speed-controlled pumps for temperature control can also offer significant advantages. MAPLAN DCI temperature control units offer energy savings of up to 2800 kWh per unit of electrical energy per year while reducing the noise level of the devices. The standby power consump-

A LOT OF COST-SAVING POTENTIAL

There's a lot of potential for savings in industrial environments, as demonstrated by Italy, for example. Besides energy savings, these measures also have positive effects on CO reduction and dependence on fos-



CHECK LIST ENERGY SAVING:

tion of a machine of up to 400 W is virtu-

- Use energy-efficient servo drive technologies.
- Opt for electric drives instead of pneumatic systems.
- Employ energy-efficient heating coolers.
- Monitor power consumption and costs related to reactive power.
- Ensure thermal insulation.
- Achieve optimal temperature distribution on the heating plates with ISOBAR.
- Perform regular machine maintenance.
- Periodically check the pneumatic piping system for leaks.

INNOVATION ON THE RISE

MAPLAN SETS NEW STANDARDS IN ERGONOMICS AND MATERIAL CHANGE EFFICIENCY WITH MAP.COLOUR-FLIP

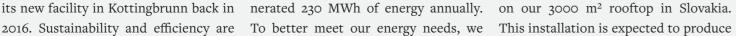
Innovation at MAPLAN doesn't stop: Following the improvements made in recent years, including the twinfeed plasticizing cylinder and the new LSR management system, the company has now focused on ergonomics and efficiency in response to market demands. Specifically, regarding ergonomics, a new standard for loading devices positioned orthogonally at right angles to the injection group was established for vertical presses. The pressure cylinder, which is usually manually opened via a hinge, can now be hydraulically moved. There is no additional effort for the operator, except for filling the silicone into the container.

Regarding efficiency, MAPLAN developed an even more efficient system for material change based on positive feedback from our customers. Utilizing the existing design, the ability to introduce interchangeable and removable sleeves into the container was developed, allowing for the physical removal of all material remaining in the hopper. This approximately 30-minute process enables:

- Up to 92 % time savings Depending on the color, material and construction, cleaning the plunger unit and screw, as well as disassembling and reassembling, often involves several hours of work.
- Almost 100 % material savings With MAP.colour-flip, there is only minimal material loss in the connector between the plunger unit and the screw.
- Prevention of contamination between different types of silicone.

For the on-demand orders market for specific materials, such a versatile system is crucial for cost optimization processes and production planning.





integral aspects of our operations, ex- have doubled the capacity of this sys- 320,000 kWh per year, meeting around tending from our offices to production tem, now producing 450 MWh of solar 75% of our electricity needs at the MAfacilities, warehouses, and our vehicle energy, covering 90% of our require- PLAN component plant in Slovakia.

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WHY

With a clear focus on continuous improvement and efficiency enhancement, MAPLAN took a significant step by establishing the Operational Excellence (OPEX) department: By combi-

tent efficiency in the process landscape and customer orientation. In each department, our aim is to eliminate waste, maximize value creation, and continuously optimize our operations. This holistic approach not only promotes higher efficiency but also ensures that all areas within the company operate in harmony with Lean principles, ultimately reflected in the final product portfolio for our customers.

The use of Lean Production at MAPLAN ensures high product quality, with optimal production conditions at the forefront. This is manifested in benefits such as seamless part traceability, digital inspection protocols, shortened lead times

> thanks to modern synchronous manufacturing, a traffic light system, paperless manufacturing, and perfected inventory logistics. The highly modern automated storage and retrieval system and the RFID Kanban system deserve special mention. All of this de-

monstrates how MAPLAN lives Lean principles in practice, delivering customer products with the highest quality and efficiency while continuously





ning project, process, and quality management, a holistic lean approach was established, further strengthened through collaborations and regular knowledge exchange with institutions such as universities and high-profile companies from diverse industries. Furthermore, 30% of MAPLAN employees have already completed a Lean "Green" or "Yellow Belt" certification in Lean Production or Lean Administration. This success was demonstrated through the recognition as a Lean Leading Company.

LEAN IN HARMONY

The Lean philosophy runs like a common thread through all MAPLAN structures to ensure consis-

ADDED VALUE FOR CUSTOMERS

striving for perfection.

EMPLOYEE STORY

FRANZ KREISEL



MY HEART AT MAPLAN.

Since when have you been working at MAPLAN?

"I have been working at MAPLAN Germany since May 1, 2016. Austria has become my second home now."

How did you come to MAPLAN?

"Through my previous employer - I've known MAPLAN for about 30 years now."

What are your responsibilities?

"I am mainly responsible for the following areas: technical customer consultation, tool design in collaboration with the customer, turnkey consulting, quotation for tools and cold runners, sales support and machine acceptance."

What do you like about your job?

"The variety."

What kind of education have you had?

"I did an apprenticeship in rubber technology at Woco in Germany. After that, I completed the industrial master's degree in metal."

Describe MAPLAN in three words:

"Challenging, good camaraderie, diverse."

Would you recommend it to others?

"Yes, the work is challenging with a perspective. You learn for life."

Why MAPLAN?

"MAPLAN was looking for process technicians and the company was familiar to me. During the first expression of interest call, we found common ground right away."



16. - 19.10.2023 Cleveland, OH | USA

OCOTBER

20. - 22.03.2024 India RUBBER EXPO | Mumbai | INDIA

MARCH

APRIL JULY

Save the Dates 2023/24

04. - 05.10.2023 Silicone EXPO USA Huntington Place, Detroit | USA

23. - 26.04.2024 **CHINAPLAS**

National Exhibition & Convention Center, Shanghai | CHINA

01. - 04.07.2024

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