

NORMALIEN **REPORT**

Edition 41 / 2017

Informative · Interesting · Innovative
The company magazine of STRACK NORMA

THE NEW GENERATION COLLAPSIBLE CORES!

At this year's fair Fakuma STRACK NORMA presents its highlight – the first 3D-printed collapsible core.

STRACK GOES AMAZON BUSINESS

Now STRACK NORMA offers its standard parts for the tool- and mouldmaking over the B2B-portal "Amazon Business".

NEW CORPORATE DESIGN

A fresh look for STRACK NORMA: From now on the standard part specialist producer has a new, modern Corporate Design.

UNIVERSAL HOT RUNNER- SYSTEM

It is surprising how much plastic is in concrete.

STRACK®

NORMALIEN

IMPRINT

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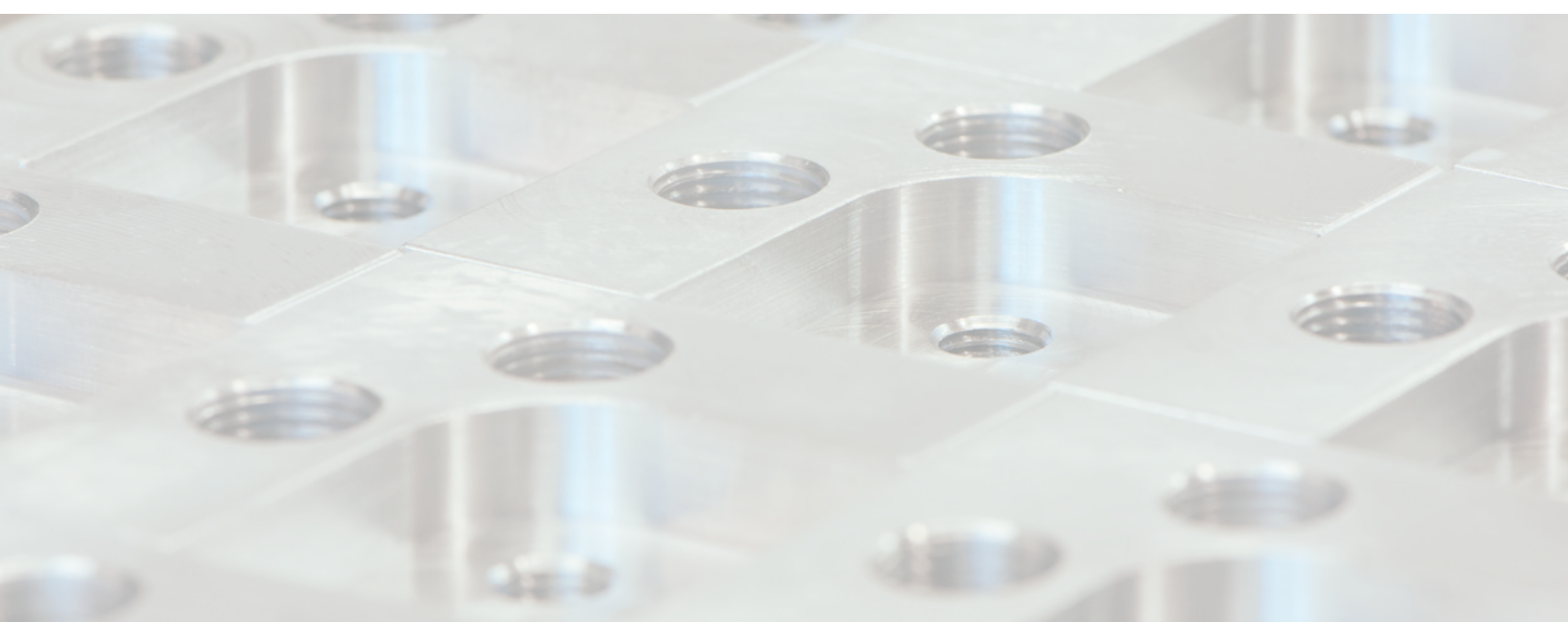
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EDITORIAL



DEAR READERS,

2017 – a year of changes. A “fresh look” for STRACK NORMA which is reflecting in our new Corporate Design. We are constantly working to support our customers innovatively and creatively in the daily challenges. This orientation as technological partner is evident from now on with our new, fresh and modern design.

We modified the standard part report, which you receive from now on once a year, as well as our whole media presence for you. Our homepage has also been reworked, a contemporary design and an easier navigation allow now to get information quickly and to simplify the order processes.

Learn more about our technological developments and further new products.

I hope you enjoy reading this report!

Michael Lang
Michael Lang
Managing Director



NEW CORPORATE DESIGN FOR STRACK NORMA



FRESH LOOK UNDERLINES THE STRATEGIC ORIENTATION!

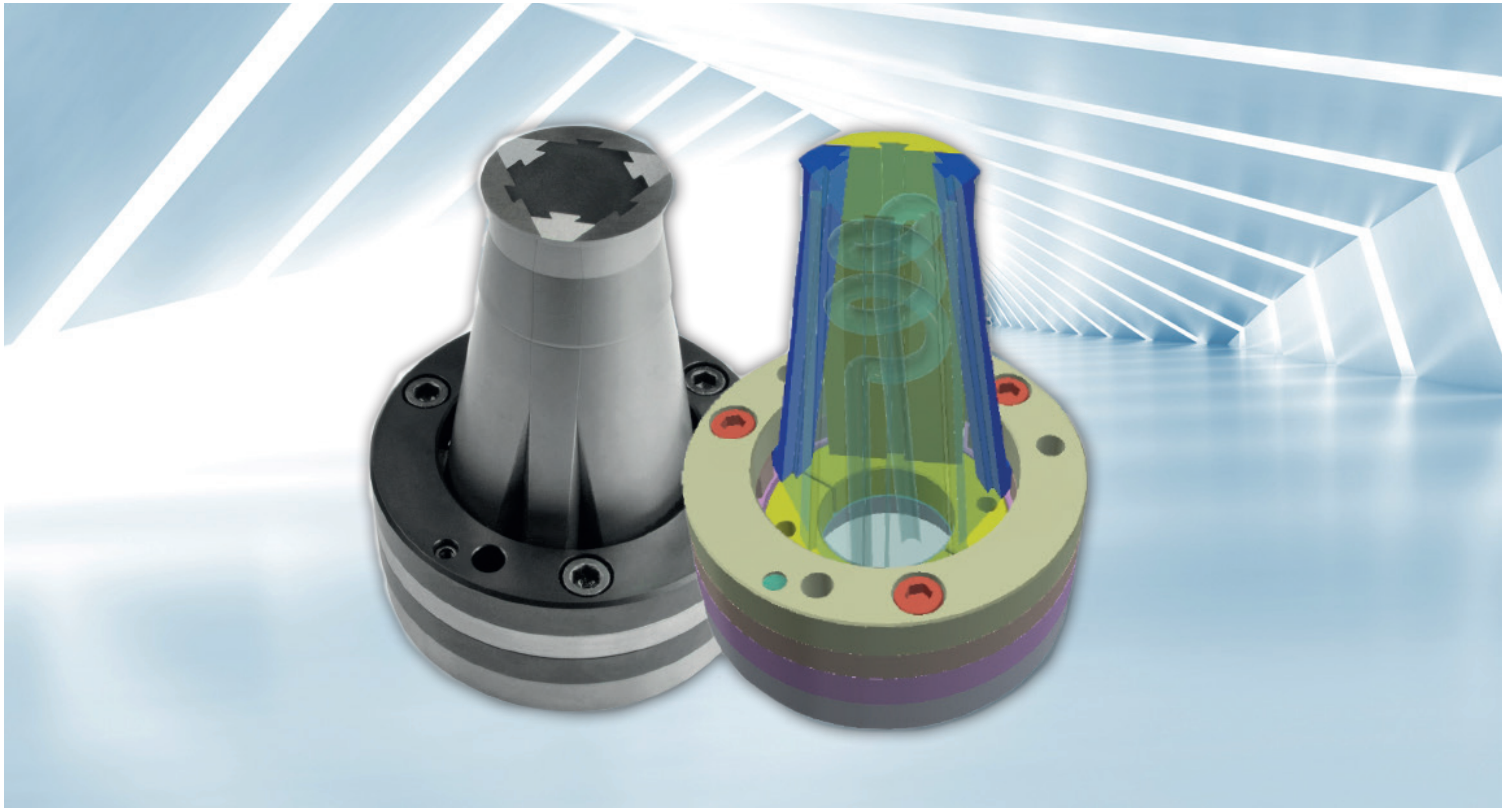
Fresh look for STRACK NORMA: with immediate effect, the standard part producer gets a new, modern Corporate Design. The modified appearance underlines the strategic orientation of the company.

“We want to be the first contact person for technologically innovative standard parts for our customers”, explains Michael Lang, managing director of the company. *“Today’s customers want an all-rounder helping them with all individual requirements. Day-to-day we meet this challenge. And precisely this demand must reflect itself in our outer appearance.”* The new design strengthens the brand STRACK compared to the competitors – and at the same time makes it unique and inimitable.

NEW ONLINE APPEARANCE

For STRACK the customer with its’ requirements is the centre of all considerations. This factor has also been taken into account in the Corporate Design. Therefore, the website has also been redesigned during the relaunch. As a result, it has a more structured and modern effect. Now, the user finds large pictures and little text. Some points have been summarised and simplified. You will find applications of the Webshop and a lot of other information at the usual place. *“We want to connect simplest navigation and current design with functionality”,* explains Michael Lang. *“The customers should have fun with the Online appearance of STRACK”.*

THE NEW GENERATION COLLAPSIBLE CORE!



STRACK NORMA PRESENTS A WORLDWIDE NOV- ELTY WITH THE 3D-COLLAPSIBLE CORE

The standard part producer STRACK NORMA from Lüdenscheid presents the first 3D-printed collapsible core. The additive production process of the worldwide novelty realizes an optimized cooling system for shorter cycle times and higher moulded part quality. The family-owned company renowned for its innovations presents the collapsible core, which is applied for patent approval, for the first time on the fair Fakuma in October.

Advantages due to 3D-print: high moulded part quality and cost saving

Layer for layer the new 3D collapsible core is produced in a new metal-laser sintering process. By using this additive method, three-dimensional shapes for each required application, from a single

cavity mould up to a multi-cavity mould can individually be created. Also, the matching of different materials for segments and core become possible. All motion elements are vacuum-hardened, wire-eroded and round ground. The inner core as well as the guide rings have a DLC-coating and according to customers' requirements STRACK offers further sliding coatings. "This saves an additional lubrication in the subsequent production process", emphasizes Michael Lang, managing director of STRACK NORMA.

"The demoulding function of the 3D-collapsible core is regulated by the mould movement. Up to 17 percent of the undercuts can thus be demoulded." A spiral-shaped cooling channel, which works with cooling water as well as with oil cooling, cares for an even heat dissipation. "The high contour proximity guarantees a quick temperature control. Thus, the collapsible core provides a high part quality and quick cycle times", explains Lang. "Because it has no elastic elements, it can be used over long running periods. With these properties, the 3D collapsible core provides thus

in the short- as well as in the long-term cost savings. STRACK NORMA has applied the innovative collapsible core for patent. "Now, we are searching for reference partners to test the advantages of the printed collapsible cores compared to the conventional collapsible cores", reports Jürgen Krugmann, project manager at STRACK NORMA. The appeal is particularly directed at mould makers producing moulds for die-cast and injection moulded parts with inner undercuts such as bottle tops or oil filter caps starting from 40-millimetre diameter for their customers. "Of course, we will contribute to the costs in this test phase", says Krugmann.

Patent-factory for standard parts

The first 3D-printed collapsible core is only an example for the high innovation competence of STRACK NORMA. STRACK NORMA is one of the very first companies ever which produces 3D-printed standard parts. The 3D-collapsible core resulted by further developing a collapsible core patented in 1976 by which the family-owned company realized a revolutionary breakthrough even then.

The entire offer with standardized components such as customer-specific solutions for the tool- and mould making reflects the technically high level and the development spirit of the standard part producer. "Our goal is to convince due to continued first-class performance and to generate a profitable and sustainable growth", explains the owner of the company Andreas Geyer. Thus, also the latch lock, introduced in 1976, is continuously further developed and positions STRACK NORMA as market leader in this field.

According to the company, the newest version characterizes by highest static strength. At the beginning of the 90's STRACK NORMA included slide elements in the product range and developed a construction kit system which ensures the exchangeability of all parts. This was followed by the development of the smallest slide element, for which the standard part producer applied for patent in 1995. The cam series PowerMax®, started in 2009, includes designs with patented active return. "The patented standard cams are used in the large toolmaking and in the automotive industry and are among other things in operation at renowned automobile manufacturers", Geyer remarks. At the end of 2015 the series was complemented by the compact cam series PMOK (PowerMax® aerial cam compact).

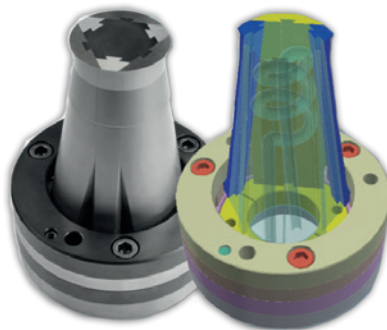
The STRACK-principle: innovations for the customers

STRACK NORMA is a considered specialist for the development of innovative standard parts, which supports its customers in an advisory capacity. "We regularly gather and analyse the wishes, requirements and expectations of our customers", explains Geyer. "Our goal is to build in the long-term stable relationships which are making economic sense." As structured full-range supplier STRACK NORMA offers standard solutions for its customers with a high delivery readiness of normally 24 hours as well as individually tailored special solutions.

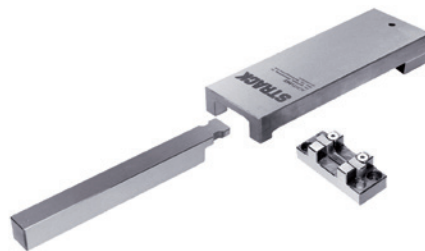
The Flexiline-program introduced 2016 gives the constructing engineer more freedom to meet customers' requirements. He doesn't have to comply no longer with a standard and can choose the best possible solution for his

construction. Thus, today, STRACK NORMA produces most of the orders according to customers' requirement. Geyer summarises the company philosophy: "If the engineers have the courage to daily challenge the limits of the technically feasible, to invent today again and again the tools for the technology of tomorrow, new future-oriented standard parts will be developed". A principle which has an effect – beyond the borders: In France, for example the term "LES STRACKS" as a synonym established itself.

The spiral-shaped cooling channel of the new 3D-collapsible core allows a close contour temperature control and quick cycle times



STRACK NORMA is market leader with the latch lock which was introduced in 1976



In 1995 STRACK NORMA applied patent for the smallest slide element worldwide



Shareholder: Andreas Geyer



Managing Director: Michael Lang



A REFERENCE PARTNER IS SOUGHT FOR THE 3D-COLLAPSIBLE CORE!

Interested parties for the test of the 3D-collapsible core can contact Jürgen Krugmann, project manager at STRACK NORMA.

j.krugmann@strack.de
Phone: +49 2351 8701-251

or inform yourself on the fair Fakuma from 17th to 21st October in Friedrichshafen at booth 2302, hall A2.

UNIVERSAL SYSTEM – STRACK SUPPLIES HOT RUNNER



INFOBOX

Monz builds tools from the one-cavity injection mould up to 64-fold injection moulding tools, also for multi-component- and insertion technology, in sizes of 160 x 160 mm up to 1 x 1 m and tool weights between 20 and 4500 kg. In each case 30 up to 40 percent of the customers are coming out of the automotive industry and the building industry, the other tools are going in other fields such as the general mechanical engineering or the electronics industry. They appreciate the personal advice and the interdisciplinary know-how of the company.

“Generally, we note the trend that the tools are becoming larger and larger”, reports Monz. “In addition, the variant variety is more and more increasing – we need more and more interchangeable tools, where in a base mould for example different design sizes of a plastic part can be produced quickly and safely”.

STABLE, LOW-MAINTENANCE & LOW WEAR

It is surprising how much plastic is in concrete: the experts in the Monz mouldmaking in Surheim in Upper Bavaria rely concerning the injection moulds for reinforcements, spacers and other plastic parts for the building industry on Mastip – hot runner systems, which are distributed in Germany by the standard part specialist STRACK.

Not only in the automotive industry there are injection moulds with high shot numbers, also in the building industry plastic parts in large numbers are produced. And there, in the production the operators of the injection moulding machine often do not take the parameters so seriously – also the materials are not always unmixed, because a lot of these products are produced with a high recycling content and often even cheap plastic is used depending on the market conditions. But on the other hand, also plastics such as PA66 with 45 percent glass fibre and PA6 with 35 percent glass fibre and flame protection are

manufactured. The used moulds must be designed correspondingly, finally they should run with a high output over a long time with only low-maintenance.

“Normally the maintenance of the tolerances is not the great challenge at the moulds for the building industry, it rarely depends on thousands of millimetres”, explains Michael Monz, managing director at Monz toolmaking in Surheim in Upper Bavaria which also produces moulds for complex, demanding automotive components for example. “The challenge is to design the moulds in such a way that they are able to produce a high number of product pieces and that they are able to provide an appropriate quality over the entire running time.

In general, 1.2311 or 1.2343 up to HRC 56 are used as materials, partly the tools are also coated to be able to produce high numbers of pieces. The plastics are treacherous: “At one tool there was corrosion again and again”, reports Monz. “We couldn’t explain it, until we examined the plastic granulate and discovered a PVS-proportion of up to 5 percent”. And this is not a single case. Also otherwise the moulds have to withstand a lot: only recently we got a mould back for maintenance which produced more than 80 million parts”, explains Monz. “It was clearly visible that it was treated very robustly in the injection moulding department – the support columns were whole millimetres shorter due to the heavy closing on the injection moulding machine. But nevertheless, usable parts were produced”.

OFTEN IT DOESN'T FUNCTION WITHOUT SPRUE



All components must be designed in a stable, low-maintenance and low-wear manner to achieve a high output during the entire running time. This applies particularly for the used hot runner systems.

“Eight, nine years ago we were dissatisfied with our previous hot-runner partner”, Monz remembers. “Among other things there were problems with the reliability. There were many mistakes and the quality was not good. We couldn’t recognize that it was sincerely worked to improve the performance. Therefore, we were open to find other solutions”.

At that time, the mould construction experts stumbled on the hot runner system of Mastip from New Zealand, which is distributed in Germany by the standard part specialist STRACK. “We took the mould, which had again and again problems with the hot runners of our previous supplier and mounted the Mastip-system”, remembers Monz. “The easy mounting, the uncomplicated installation in the mould, the reliable function and furthermore also a fair price speak for Mastip – quality and service are also good”. Mastip offers a

wide range – the product line of the systems which are manufactured by Monz reaches from the powerful MX-nozzle over the more cost-efficient BX-series up to the SX-nozzle series.

Generally, it is injected with an open torpedo on a distributor. “Mostly it doesn’t function without a small sprue spider”, regrets Monz. “But a direct injection of the parts is often not possible, the material would clog the nozzles too quickly”.

Many of the moulds for the building industry are endurance runners with high shot numbers. “If a disturbance occurs, it must be remedied quickly and safely”, emphasizes Monz. Here the easy mounting of the Mastip systems is of great advantage for us: if required, the user can disassemble the systems completely by himself and can exchange the relevant wear parts quickly and easily on his own. This reduces possible downtime and increases the availability of the moulds in the injection moulding process”.

Initially, Monz used the hot runners of Mastip only for relatively simple, little

stressed components. “But: The hot runners are working very exactly – meanwhile we are using them also for demanding components, where a corresponding demanding melting handling is important”, he explains. The shot weights per nozzle lie between 1 g and 2 kg”.

“We also have extensive experience with other hot runner producers – often the customers already prescribe in requirement specifications which system we have to use”, Monz draws balance. “But, if we have the choice, we use the system of Mastip – for good reason: as little trouble with the hot runner systems as we have with this producer, we have never experienced before.”

References, text and picture: Richard Pergler;
Trade journal: *werkzeug & formenbau*

STRACK GOES AMAZON!



STANDARD PART PRODUCER OPENS NEW DISTRIBUTION CHANNEL.

With immediate effect STRACK NORMA offers its standard parts for the tool- and mould making over the B2B-portal “Amazon Business”.

As the first standard part producer, the company from Lüdenscheid doesn't only present its products in the own Webshop under www.strack.de but now also via “Amazon Business”, here initially its' highlight product “Latch Lock”. By using the new Online-Portal the customers can now order their STRACK standard parts directly and comfortably.

“In this new started marketplace, we see a great challenge to intensify and extend the customer loyalty in the long term. Via a platform our customers can order their whole workshop requirements – “this saves time and money”, explains Michael Lang, managing director at STRACK NORMA and further assures “of course we will enlarge and expand our offer continuously in the next few weeks”.

INFOBOX

From now on you find our latch locks also under:
www.amazon.de/business

- ✓ Order your whole standard part requirements via a platform!
- ✓ Order quickly & comfortably, at any time and everywhere!
- ✓ Profit of the secure handling via the portal well known worldwide!

amazonbusiness

PLATE CONCEPT FLEX*i*LINE



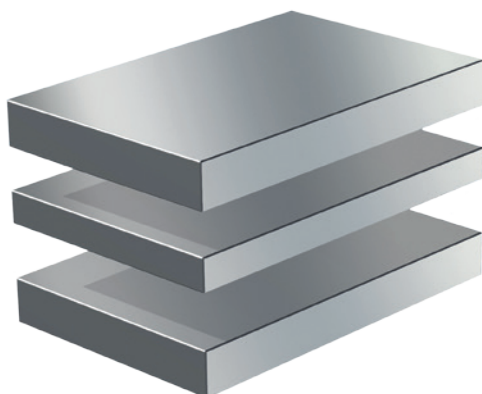
LOW-COST ALTERNATIVE: NEW SE-PLATES OF STRACK NORMA

The company STRACK NORMA expands its comprehensive plate offer with the new SE and SE2 plates. The simplified mould plates are the low-cost alternative to the previous E- and P-plates and are milled respectively finest-milled on all sides.

SE-plates are ideally suited for the production of mould plates with comprehensive machining as well as for inserts, slides, cutting- and toolmaking elements.

SE- and SE2-plates are part of the new Flexiline-plate line, which stands for flexibility, outer dimensions and hole distances. With a focus on the individual customer wish, the plates are freely selectable in size and plate thickness depending on the outer dimensions.

Further information can be found in our current brochure under www.strack.de



INFOBOX

Plates, flexible in tolerances, outer dimensions and position of the slide element boreholes

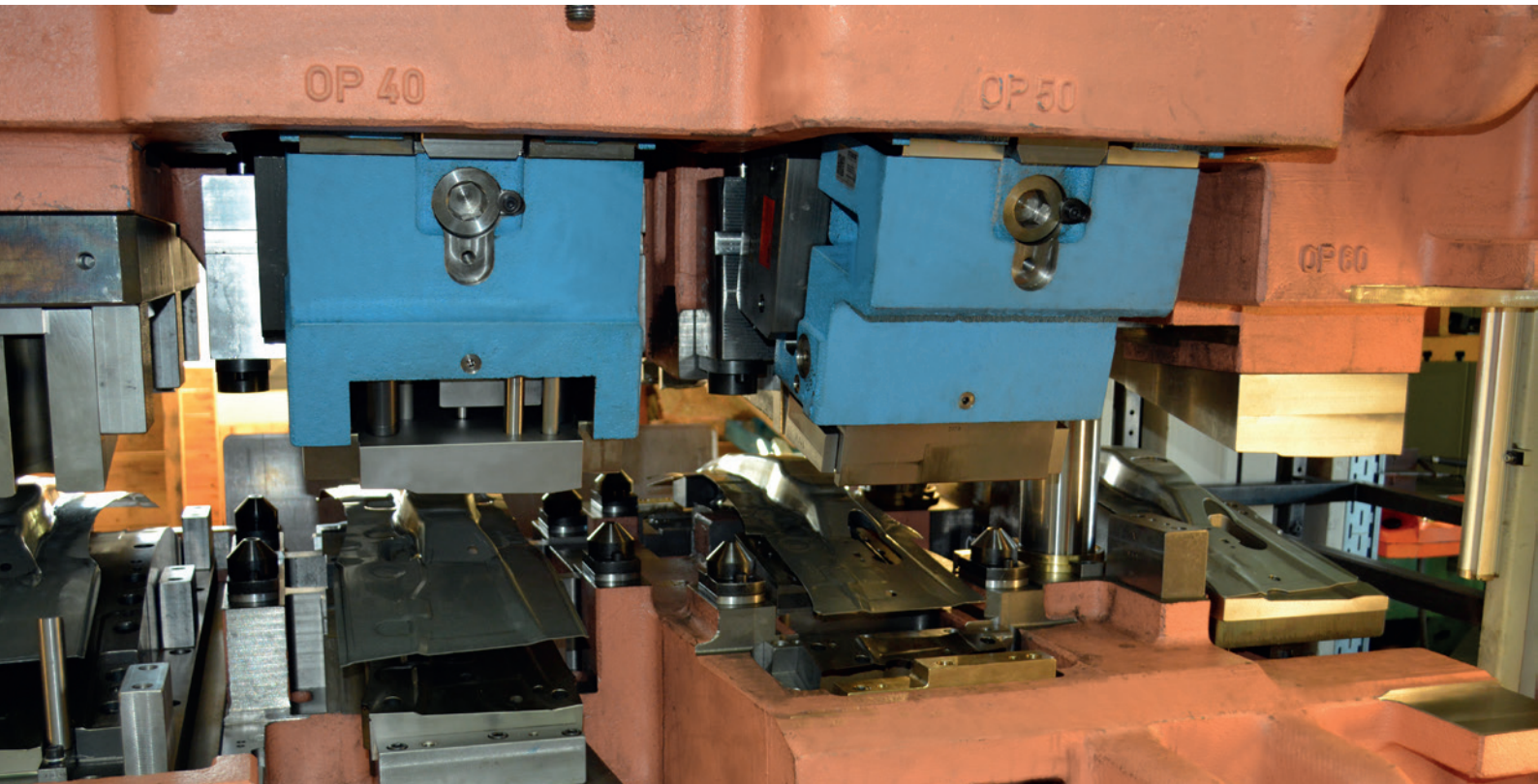
We offer you:

- ✓ Standard- and special steel qualities
- ✓ Plate thicknesses
- ✓ Tolerances according to your specifications

What we need from you:

- Width x Length x Thickness
- Milled or ground
- Material specification

INNOVATIVE STANDARD CAM SOLUTIONS



INNOVATIVE STANDARD CAM SOLUTIONS FOR THE INCREASE OF EFFICIENCY IN THE TOOLMAKING!

In the last few years STRACK has established itself on the market as a producer of PowerMax® standard cams for the large toolmaking. The company from the Sauerland started with the successful introduction of the PMO- and PMU series in the automotive industry in the year 2009.

Even from the beginning of the introduction, the standard part producer has been confronted with progressive modifications of the cam requirements on the market. On the one hand, there were the considerably higher quantities, on the other hand, the model range of the automobile manufacturers increased at the same time.

This required new concepts to shorten the cycle time in the toolmaking. The result is a solution ready for mounting with customer specific machining and special constructions. Currently, after some initial scepticism of the tool-

makers, more than 70 % of all standard cams are supplied as a solution ready for mounting, which enables the toolmaking to reach considerably shorter cycle times.

The new tool concepts quickly made clear that at many special solutions, which are provided by the STRACK technicians, compact cams are required. Based on these observations, the standard part supplier introduced the new series of the PMOK compact cam, whose success was surprising, onto the market in 2015.

Constantly changing demands make sure that new special cams, but also quite new cam concepts are developed in close collaboration with the customer.



B-pillar produced with PMON cam

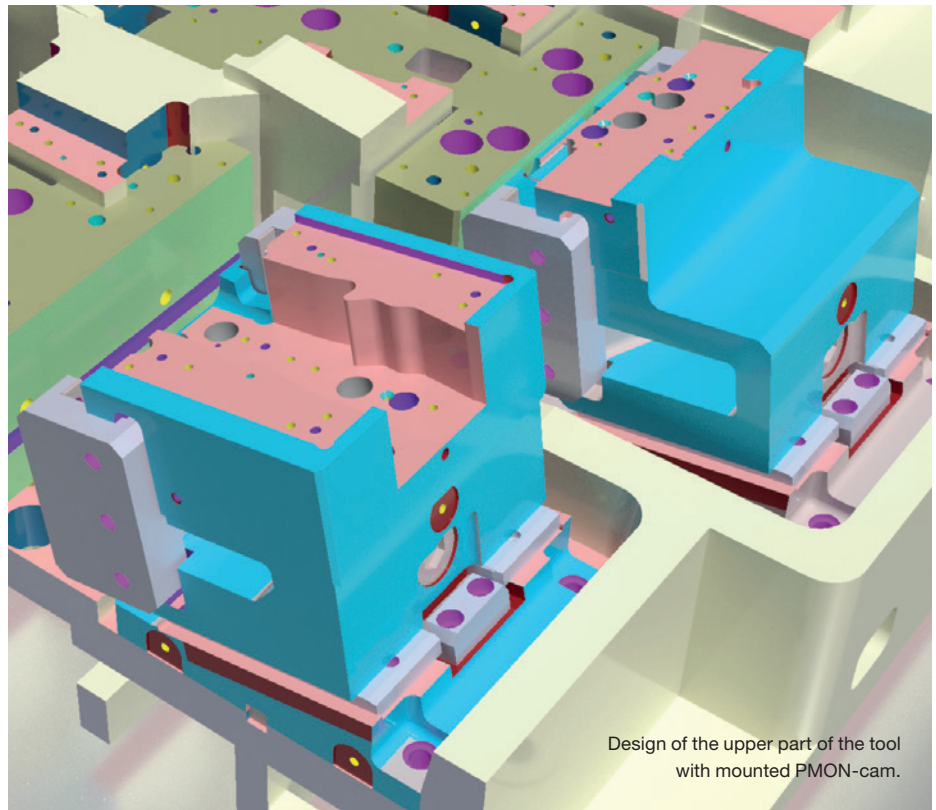
In 2016 an interesting application example had to be solved at the tool-maker Schaller. Here, the challenge was a tool-construction, which couldn't be realized with the hitherto existing standard cams. In the words of Bernhard Christoph, head of engineering at Schaller toolmaking: *"The order was to build a tool for the B-pillar of a vehicle, which should be produced over several transfer stages at a TierOne Supplier. With the variants applicable on the market, we had to build the tool about 2 metres longer, which however doesn't fit any more in the existing Try-Out press".* Critical was that the driver unit which is required for the aerial cam formed an obstacle for punching- and cutting operations.

A new cam concept had to be found to develop a cam without driver unit in the lower part of the tool. The pillar cams which are positioned in the blank holder for single bore holes inspired the idea. However, for the given problem, a considerably greater solution including gas springs, cutting punches and strippers had to be found.

Thus, the constructing engineers at STRACK developed a special solution, which is optimal for all parties involved, together with the customer.

A new cam, called PMON, was developed as blank holder cam unit. Here the driver unit is expelled out of the lower part of the tool, integrated in the upper part of the tool and connected with the cam body by using clamps. Compared to the conventional method where the driver unit pushes the cam body in the working position, the driver unit of the newly-designed PMON is in a pulling position, that means it now pulls the cam body in the end position.

At the same time, the PMON at the company Schaller characterizes by a complex machining for the acceptance of the active elements and the strippers. The thus obtained design contained in-



Design of the upper part of the tool with mounted PMON-cam.

deed the driving unit required for actuation, but due to the integration in the upper part of the tool, the disturbing component could be expelled out of the lower part of the tool. With a width of 330 mm the PMON optimally covers the working requirement.

Mr. Christoph was pleased about the good cooperation with STRACK. *"Now, we are able in our design department to evade complex productions and to save, at the same time, work stages and thus toolmaking times. The good and uncomplicated cooperation with STRACK makes the company an ideal cooperation partner".*

If these new developments can also be a solution for other application examples will be seen in the future. But it becomes again clear that the most innovative solutions are developed in close cooperation with the customer to meet individual customer requirements, based on the slogan: *"Necessity is the mother of innovation".*



PMON cam with customer specific machinings

INFOBOX

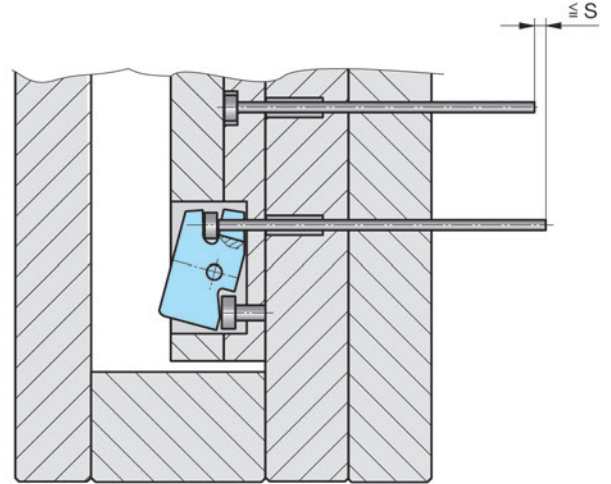
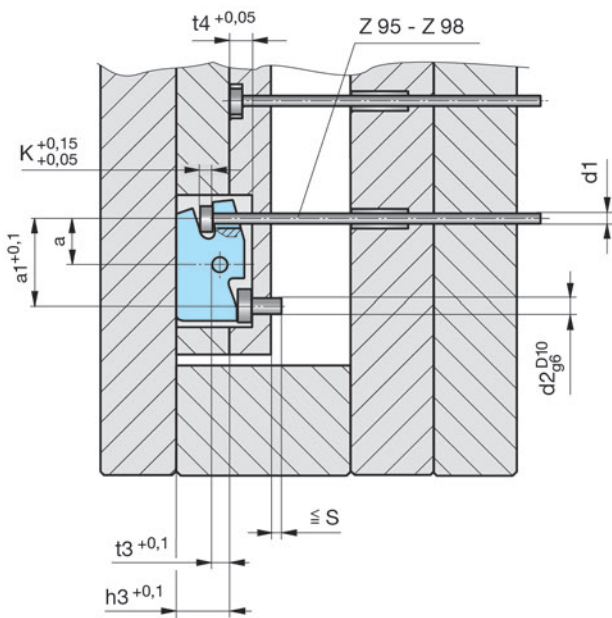
S+S Werkzeugbau
Schaller GmbH 

Since 1966 high-quality cutting- and forming tools

You will find company Schaller under:

www.schaller-werkzeugbau.de
info@schaller-werkzeugbau.de

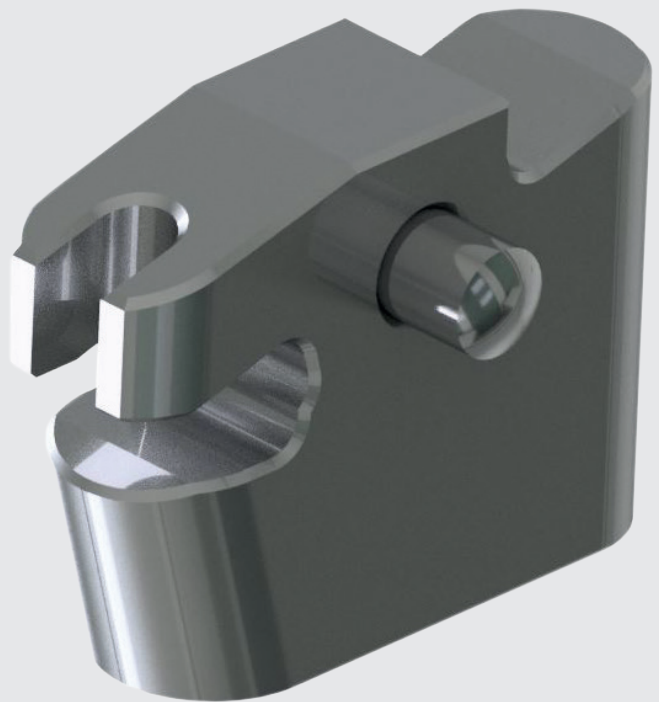
CONSTRUCTION TIP



„KICKED-OFF“

In the demoulding process, strongly ribbed plastic parts or thin-walled parts have the problem of sticking at the ejector pins. The solution are ejector pins which accelerate at the end of the demoulding process and whose travel path is a little bit longer than those of the conventional ejector pins. The acceleration rocker Z41 gives the moulded part at the end of the demoulding process the last “kick” so that the part can reliably be demoulded and doesn’t stick to the other ejector pins.

The acceleration rocker Z141 is available in three sizes for the ejector pins Z95 or Z98 with diameter 3; 6 and 8 mm. It can be integrated without problems in each ejector plate. The ejector pin equipped with the acceleration rocker accelerates in the last millimetres of the stroke to double speed and compared to other ejectors has a by 2.5 mm or 7.6 mm prolonged stroke.



ENERGY AUDIT & RE-CERTIFICATION

HIGH LEVEL: SUCCESSFUL CERTIFICATION ACCORDING TO NEW STANDARD DIN EN 9001:2015

The standard part specialist **STRACK NORMA GmbH & Co. KG** was successfully certified as one of the first companies in the region according to the new standard 9001:2015 by the certification company **TÜV Rheinland**.

The management system was further developed in consideration of the new HLS (High Level Structure).

In addition to the process-oriented approach, the context of the organisation, internal and external subjects as well as the role and expectations of the interested parties were determined, documented and occupied with corresponding activities. The risk-based approach was also a central subject of the new standard. STRACK NORMA has taken this approach and developed it in a proactive risk-management and integrated it correspondingly.

The process “knowledge of organisation” gets a stronger role than before. The focus of all our activities was and is to identify required know-how, to document it and to maintain it and to make it available to all employees.

We are more than confident to be able to ensure the high-quality standard of our products and services supported by our systemic High Level also in future.

Conformity of the energy management according to DIN EN 16247-1

The evidence about the realisation of an energy audit according to the legal provisions of §§ 8 ff. EDL-G (law about energy services and other energy efficiency measures) was successfully implemented. According to DIN EN 16247-1 the requirements are imposed on a com-

pany which are necessary to introduce an energy management system, to operate it and to improve it continuously. The goal of this conformity it to optimise the energy related performances, the energy efficiency and at the same time the use of energy.

In 2015 the company STRACK NORMA GmbH & Co. KG started with the preparations for the Environment- and Energy Management. The administration building including the building infrastructure was renovated regarding energy-related aspects.

In addition to the installation of a photovoltaic system with 35 kW Peak, the exchange of all lamps on LED technology and all windows on three-fold glazing, the whole building envelope was insulated, the roof insulation was modernized with sandwich panels and a new efficient ventilation system with heat recovery was installed.

Certificate

Standard **ISO 9001:2015**

Certificate Registr. No. **09 100 92006**

Certificate Holder:

STRACK[®]
NORMALIEN
Strack Norma GmbH & Co. KG
Königsberger Str. 11
58511 Lüdenscheid
Germany

Scope:

Innovation, Development, Production, Service, Storage and Logistics for:
- Injection Moulding and Die-casting Tools among other things cam units and latch looks
- Punching and Forming Tools among other things lateral slide units and special machining

Proof has been furnished by means of an audit that the requirements of ISO 9001:2015 are met.

Validity:

The certificate is valid from 2017-09-01 until 2020-08-31.
First certification 1999

2017-08-15

TÜV Rheinland Cert GmbH
Am Grauen Stein · 51105 Köln

www.tuv.com



NEW PRODUCTS 2018

DIGITAL COUNTER Z5265

While the mechanical counters count up to 10 million strokes, the new STRACK counter Z5265 in digital version is now equipped with an eight-digit display.

Therewith the user can determine and to control high stroke frequencies up to 1,200 strokes per minute. Suited for high-frequency punching applications and high-speed injection moulds, the digital counter is the ideal companion for punching- and injection moulding applications as well as for the application in the general mechanical engineering and in the automation technology.

The robust aluminium housing with compact dimensions facilitates the simple installation and operability. With a cable length of one metre to the sensor, the counter is ideally suited for the assembly on the tool.



The wear-free magnetic sensor with retaining plate and magnet, which is included in the scope of delivery, offers a high switching distance together with a small design at the same time. The counter is resettable and has, due to its' built in lithium battery, a long battery service life. Thus, the maintenance intervals of the tools can easier be observed, because you can directly see the executed stroke number of a tool.

TEMPERATURE CONTROL FILTER Z7700

The temperature control filter Z7700 is a specially designed oil- and water filter which was developed for small cooling holes or core coolings.

Due to its fine filter insert with 100 μ mesh size, the filter Z7700 removes finest dirt particles out of the circuit, which otherwise can lead to clogged cooling channels or to early wear of the sealing elements. This makes it ideal for applications at laser-sintered mould inserts and thin cooling water outlets, because herewith a pollution and the thus connected reduction of the flow is actively avoided. The cylindrical design has a generously designed space for pollution so that long maintenance intervals are possible. The filter insert out of stainless steel is washable and easy to clean.

The temperature control filter can easily be integrated in the cooling circuit, because at the one side a plug nipple Z7712 and on the other side a coupling Z7709 is mounted. There is also the possibility to use the 1/2 inch thread on both sides for the connection.

Due to the supplied fixing clamp, the filter can easily be mounted on the tool or on the machine.

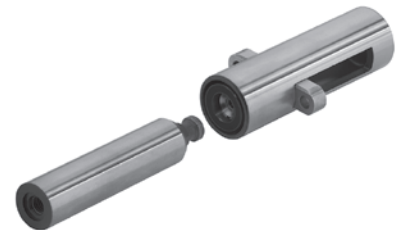


Z3 WITH DLC-COATING

On time for the fair FAKUMA the standard part specialist STRACK NORMA has enlarged its offer of DLC-coated latch locks.

From now on there are also the proven round latch locks Z3 available in improved execution with DLC-coated slide elements. This optimisation changes nothing concerning the installation sizes, the service life of the latch locks increases considerably. Due to the utilisation of DLC-coated components and the thus resulting maintenance freedom, an up to 80 percent reduction of the maintenance costs can be achieved.

The improved latch locks of the series Z3 have considerably improved running- and emergency running properties.



NEW STRACK HIGHLIGHTS

FOR PUNCHING- & FORMING TOOLS

The user requires punching- and forming tools to gain shapes out of sheet metal plates or other materials. Here STRACK NORMA supplies standard parts for smaller and medium tools but also for large tools in the automotive industry.

The new highlight brochure “Punching- and Forming Tools” provides a detailed overview of the comprehensive STRACK standard program.

You will find it directly under:

[www.strack.de/en/download/
media_library/brochures/](http://www.strack.de/en/download/media_library/brochures/)

FOR INJECTION MOULDING- & DIE-CASTING TOOLS

Strack produces high-quality mould standard parts, hence standardized components for injection moulds to produce plastic parts. Due to the application of standard parts, the production process in the toolmaking is shortened and the concentration of the user to his core competencies leads thus to an increase in efficiency.

In the new highlight brochure “Injection moulding- and die casting tools” the user will find a great product portfolio of mould standard parts for the plastics industry and metal foundries.

You will find it directly under:

[www.strack.de/en/download/
media_library/brochures/](http://www.strack.de/en/download/media_library/brochures/)



STRACK EMPLOYEE CYCLES FOR GOOD CAUSE



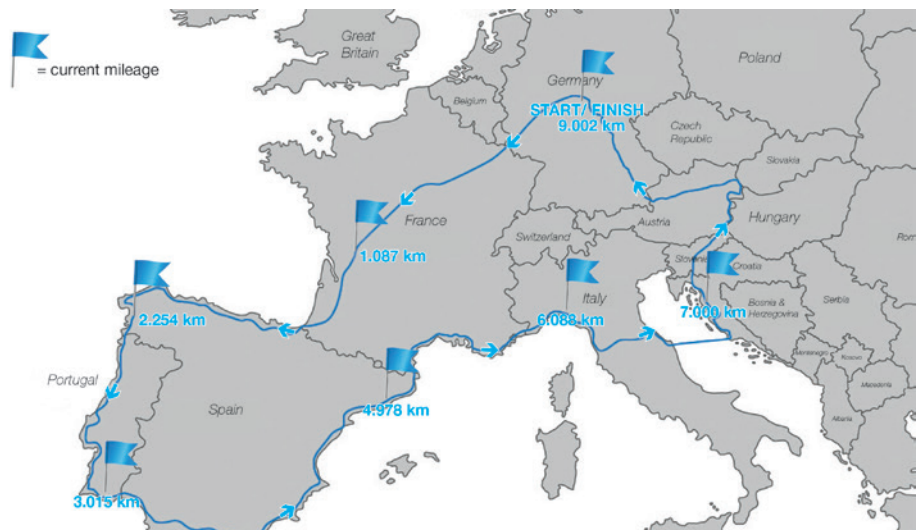
Reinhold Spielberger cycles again. From April to August of this year the sportsman from Wuppertal started his second cycling tour in Europe. He collects donations for a Children- and Adolescent Hospice. From the 1st September 2017, he will again be on tour in the USA for the standard part supplier STRACK NORMA as key-accounter.

Reinhold Spielberger is a real athlete. Three times he has already finished the Ironman (3.8 km swimming, 180 km cycling and 42,195 km running), most recently with 64 years. Now, he is no longer concentrating on competitions but also on travelling: his this year's tour took him to Southern Europe. However, this is for a charitable cause: for each of the about 9,000 planned kilometres he collected donations for the Children- and Adolescent Hospice Burgholz. Everyone could give donations per driven kilometre and all this beginning with one cent per kilometre. The donations are going for 100 percent to the hospice. When he got to know the work of the hospice the grandfather of two was im-

mediately impressed. "I wanted to make the cycling tour anyway. But to help the hospice is also a matter of great importance to me. Here the idea was born to connect both".

This time, his tour led him in the South: on the 1st April 2017, he left Wuppertal to go to Belgium and over the Ardennes to France. Along the Loire, Spielberger drove to Montlouis for taking the ferry in Blaye over the Gironde river in direction Bordeaux after 13 days. On the border

of the Pyrenees the trip brought him to Spain, where he reached in Irun the first stage goal. The visit at the long-term Spanish representative, Iker Abanzabalegi, was planned in advance and invited to stay. Mr. Abanzabalegi took the opportunity to accompany this cycling colleague for one day with the racing bike to Deba and to show him the beautiful, but very hilly landscape. The tour continued over the whole Iberian Peninsula. Over Bilbao he reached Santona and



after passing Soma he went to Santiago de Compostela where Spielberger collected his certificate of pilgrimage.

Next stop: Portugal. After 4 weeks on the road, the sportsman from Wuppertal crossed the border river Rio Mino and approached his next destination, the city of Porto. The tour continued over the whole west coast in direction Fatima and Lissabon. After nearly two weeks in Portugal Spielberger left *“the up to now most beautiful country of my journey”* and reached Huelva in Spain on 25th May. Over Sevilla the way took him along the south- and east to Malaga and Almeria to Alicante. On the 15th of June, he reached Barcelona and stayed some days in this historically significant city. After he had visited the Dali-Museum in Figueras, where he was impressed by the artworks of the artist, Reinhold Spielberger crossed four days later the French border in direction Perpignan. Over Arles and Marseille Spielberger continued to cycle along the French south coast over Nizza in direction of Italy where he passed the border on 29th June 2017.

The next stage was the journey over Lucca and Pisa to Florence and from there to Ancona. By ferry he went to Split and on the Croatian coast along the Adriatic Sea. After he had visited the



islands Pag, Rab and Krk, the tour now lasting 3 ½ months brought him back to the mainland.

During his tour Spielberger met again and again people to whom he spoke about his charity project and which spontaneously gave donations. The tour continued over Rijeka, Ljubljana and Slovenia across the Slovakia, Hungary and Austria, where the cycling profi arrived in Vienna and Linz after 117 days. A few days later he reached Passau and returned to Wuppertal over Stuttgart and Wiesbaden. After 4 months, 7 days, 9,002 km and 67,870 metres difference in altitude, Reinhold Spielberger reached his home, where he was welcomed by his family and his friends.

You will find the latest blog entries under:

www.spielis-reisen.de/

We followed the trip with great interest and congratulate Reinhold Spielberger to his successful charity cycle tour. Also the company STRACK made a donation for each kilometre. We are pleased to welcome him again in our company from September and to offer our customers the familiar high STRACK quality of advice.



COMPANY RUN 2017

The fifteenth AOK company run on 7th July is finished. In good weather and summery temperatures, the STRACK employees started together with nearly 6.000 participants again under the slogan: "Running and walking for the good working atmosphere!"



CAR-FREE VOLMETAL 2017 - WE PARTICIPATED!



STRACK SAYS THANK YOU!



A „THANK YOU BURGER“

In June, the STRACK employees received a special thank you:

The BENZ of the burger restaurant “Zur Platten Bulette” drove at about 12 o’clock into the yard of the standard part producer from Lüdenscheid and prepared its self-made, fresh and crunchy burgers for the about 150 employees.

Herewith the management expressed its thank you for the successful product introduction of the new standard cam PMOL and the great employee performance.



STRACK GETS REINFORCEMENT

NEW EMPLOYEES

OLIVER VON BERG

On 1st June 2017, the new field representative Oliver von Berg took over the sales area Württemberg from Gerhard Schneider.

The 37-years old representative, who lives in Besigheim has many years of experience in the areas of **toolmaking, jigmaking, mouldmaking and punching-die construction.**



ROBERTO SIKORA

From 15th May 2017 the application technician Roberto Sikora is firmly established in the engineering office.

In addition, the 46-years old technician is also responsible for the countries Portugal, Spain and France as **key-accounter.**



GERD ROGGATZ

The new man for manifold plates is called Gerd Roggatz. The 52-years old Mr. Roggatz is at home in Villingen-Schwenningen and has many years of experience in the range of **product development of manifold plates and gas springs.**

He reinforces the team of the technical department from 1st July 2017.



STRACK CONGRATULATES!

We congratulate and we want to thank our employees belonging to the STRACK family for many years.

MANY THANKS & CONGRATULATIONS!

25 YEARS

STEFAN DOHLE

Entrance: 15th July 1992

PETER SCHILLER

Entrance: 12th October 1992

JANUSCH WOLFRAM

Entrance: 2nd November 1992

10 YEARS

BENJAMIN COLLA

Entrance: 1st April 2007

TOBIAS GULITZ

Entrance: 14th May 2007

GIANLUCA ROBERTO INCHINGOLI

Entrance: 1st August 2007

ANDREAS WALTER

Entrance: 1st November 2007

STRACK®

NORMALIEN

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