

NORMALIEN report

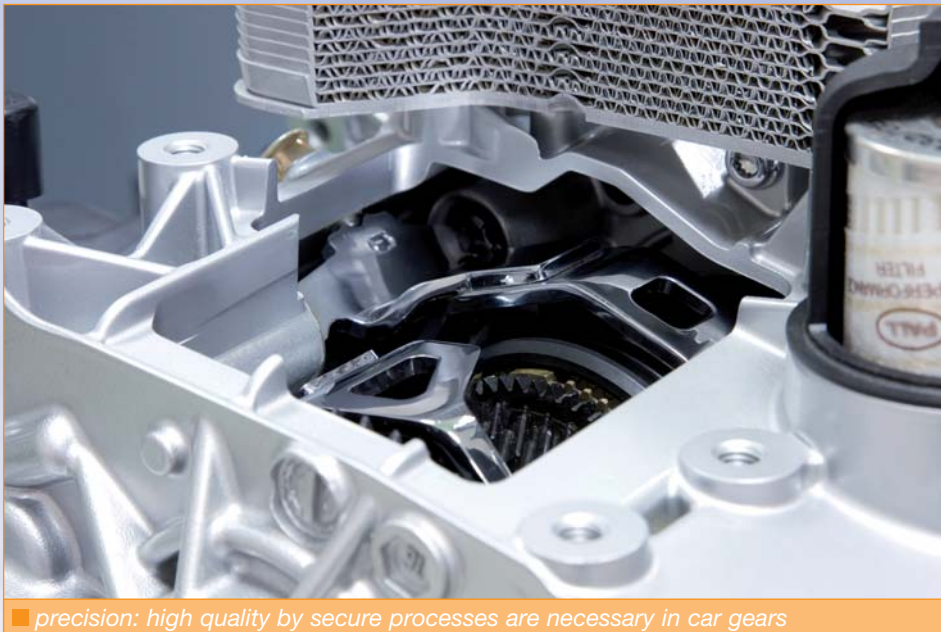
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The information service for the tool- and mould making of **STRACK[®]
NORMALIEN**

Process reliability with each new gear

Precision with cooperation:

In the production SODECIA counts on STRACK NORMA



precision: high quality by secure processes are necessary in car gears

12.000 pictures per second make visible how a selector fork for a car gear conducts under loading. The development engineers draw important conclusions for the construction of tools from this impressive Hi-Speed procedure. In the SODECIA Technical Center nothing is left to chance to generate a maximum of process reliability. The technical creative workshop in Burgwedel creates continually milestones in the gear construction in the automotive engineering. Thus the engineers of SODECIA developed for example the dual disk clutch transmission (DSG).

Precision is the priority objective of the company SODECIA. Here precision tools for punching- and forming parts are developed and produced. The production location of the group in Sachsen is responsible for the fine blanked parts which have to be produced with these tools. "Our highly-perfected components are mounted in all gears of well-known German car manufacturers", explains Detlef Tiedtke, the business manager of the company.

Reiner Scheinpflug is the manager of the tool making. "To be able to produce quality, we also have to rely on the quality of our suppliers." The engineers of both companies characterize by the attention to detail and the sense for innovative product solutions. A perfect interaction which has already functioned for many years, as Reiner Scheinpflug and Detlef Tiedtke assure. For

this reason the company has cooperated with STRACK NORMA for years. The standard part specialist delivers its proven precision die sets to Burgwedel. Scheinpflug praises the quality standard: "Particularly the processing of the plates is exceptional and ideal for our processing." The plates, which STRACK delivers custom-tailored are therefore utilized in the company in a multi-functional way. "Also the one or other testing device is produced in our company with these plates."

The cooperation in this business relationship is already extraordinary good in the decisive construction phase. "We exclusively process 3D-data in the construction phase", explains Reiner Scheinpflug while having a tour in the construction

Editorial



The business barometer in Germany has considerably increased. The economic institutions put us everywhere in a good mood with their predictions. The recovery after the economic crisis can now also be noticed in the tool making, where the mood has considerably brightened. The order books are again filled well.

However positive economic conditions are not a cushion to repose eternally. Therefore we are already working on the products of tomorrow. Our aim remains to increase the productivity of our customers effectively with know-how and technical innovations.

Thus the year 2011 started again with numerous product innovations of our company. Who wants to discover the world of STRACK NORMA and its products gets the opportunity on our second TOOLservice on 4th and 5th of May. Accept our invitation and see on site what we are doing for our customers.

Have fun while reading!

D. Friedrich

Dag Friedrich
Business Manager

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...continuation page 1



STRACK NORMA delivers the precision die sets for the complex tools of the company SODECIA

department – the heart of the company – in which many of the 53 employees are simultaneously working to find new solutions. “To be able to integrate the delivered standard parts directly in our constructions, STRACK NORMA supplies us 3D-data.” Thereby the supplier adapted to the customer. The data is delivered in the SODECIA specific color code for the defined tolerances. “This facilitates our work considerably”, Reiner Scheinpflug praises the flexibility. Due to the fact that process reliability is a part of the corporate philosophy of the Technical Center, in the work flow the delivery of the standard parts “Just-in-Time” becomes a “must” for STRACK NORMA. The offer phase is finished after 12 hours. “We aligned all processes in our company to a quick submitting of an offer and to a quick order processing”, explains Andreas Geyer, sales manager of STRACK NORMA. “Maximal performances demand fine-tuned internal processes”. Meanwhile SODECIA is working on a new gear for the future. “Naturally we are not allowed to reveal how it will look like,” smiles the business manager Detlef Tiedtke.

Innovation: sprue nozzle reduces cycle time

Heated sprue nozzle is directly positioned in front of the parting plane

The development of the sprue nozzle is an innovation in the zinc diecasting technology. Utilizing the sprue nozzle, the melting point is directly positioned in front of the parting plane. Thereby the sprue is considerably reduced. Thus the cycle time reduces up to 35 % and at the same time the quality of the raw part increases.

At the zinc die-casting inevitably a sprue arises because of the melt, which is solidified in the long feed channels. The greater and the heavier the sprue is, the more material has to be recycled. The thereby arising additional costs have to be considered in the piece-cost calculation and cause increased production costs. The new sprue nozzle Z7090 is directly positioned in front of the parting plane, like the commonly used cold bushes. Thereby the melting point shifts directly in front of this parting plane and the sprue is reduced to a minimum. Considerable material savings, reduced tool costs and shorter cycle times by a quicker cooling of the melt are some of the advantages which can be retraced in the calculation. Tests have shown a cycle reduction of up to 35 %.

less scrap arises. Such savings particularly have a positive effect, if the scrap can only be recognized after finishing measures, for example galvanization.

Heating system from casting neck till sprue

In order to obtain an optimal casting result and for the manufacturing of economic products STRACK NORMA offers the whole heating system from a single source: besides the heated sprue nozzle Z7090, the shrink-on coil cartridge heaters as well as an insulation ring, a closed sealed heater, the heating cartridges which have to be integrated in the casting neck, as well as the necessary control devices complete the system.

Greater part quality due to better flowability

The length of the melt flow path from the exit point of the machine nozzle is decisive for the quality of the moulded part. Because of the shorter flow path by utilizing a sprue nozzle, the melt in the near of the cavity has still a higher temperature than in usual procedures. Thus the cavity can be better demoulded and longer flow paths in the tool can be planned. At the same time smaller channel cross sections can be taken into consideration in the construction of the tool. Due to the better flowability the demoulded casting has a closer structure. In the serial production a constantly high quality of the moulded part is reached by a reduced porosity and less blowholes. Tests show that at surface parts considerably



Unreached: the sprue nozzle Z7090 reduces the cycle time by up to 35 %.

Expert discussions on the fair BLECHEXPO

STRACK NORMA attaches importance to customer proximity

The fair BLECHEXPO, the second largest trade fair for the sheet metal forming takes place from the 6th till 9th of June in the exhibition halls of Stuttgart. In the year 2009, 957 national and international exhibitors presented their innovations, for this year the trade fair organizer reckons with a further increase.

STRACK NORMA presents itself to the trade experts in hall 8, booth 8114. On this international trade meeting for the manufac-

turers of products, machines, systems and accessories for the sheet metal part production the company presents its comprehensive product range for the punching- and forming tools.

STRACK NORMA is one of the greatest suppliers of standard parts on the market in the world and therefore it is very important for the company to participate in the national and international fairs. Primarily this means for

the company STRACK to enter in a direct dialog with their customers and the trade professionals on site at the booth. Thus STRACK NORMA presents again as an open-minded contact. In a pleasant atmosphere the visitors can experience the world of the standard parts, can test and touch the products and can inform themselves about the innovations.

Blechexpo



New ejector coupling reduces setting-up times

Z4156 creates form-closed connection

Particularly a frequent tool changing occupies a great part of the setting-up time in die casting- and injection moulding machines. Cost-intensive machine break-downs are the inevitable consequence. A reduction of the setting-up times offers therefore considerable possible savings.

The new pneumatically operated ejector coupling Z4156 of STRACK NORMA uses these capabilities and facilitates the coupling concerning a changing of tools or other production devices. Proven in use in die casting- and injection moulding machines the ejector coupling together with the bolts Z 4157 and Z4158 takes care for a form-closed connection of the hydraulic machine ejector with the tools. Due to this simplification the setting-up times are considerably reduced, because of the fact that the coupling process can be effected in a flash of seconds. Also the application of a key inside the machine belongs to the past with the new ejector coupling.

The ejector coupling in compact construction is compatible with the most current machine sizes and is closely connected by the threaded pin with the machine ejector. The air supply which is necessary for the pneumatic operation is effected by the thread R1/8. It is provided with a pressure of 6 till 8 bar and is turnable by 360 °C. After the installation it is responsible for the unlocking without difficulty.

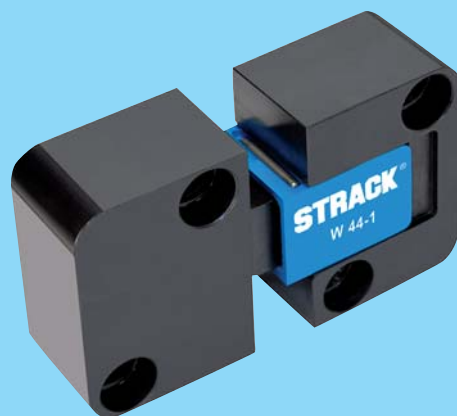
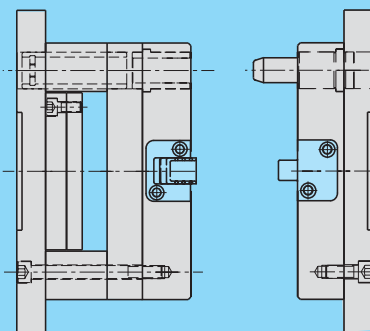
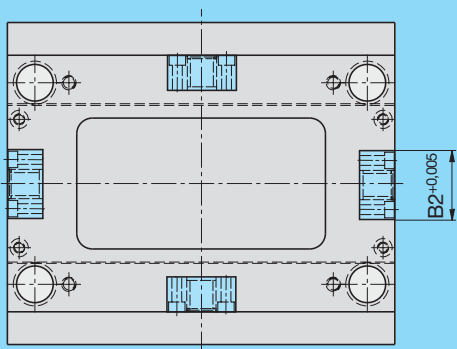
The coupling bolts Z4157 or Z4158 are mounted on the side of the tool and take care for a form-closed locking. The locking procedure happens absolutely free of play between coupling and ejector bolt in a mechanical way. Therefore a second air supply is not necessary. Due to the great locking surfaces the transmission of great forces is possible.

The coupling bolts of STRACK NORMA offer the necessary flexibility: a radial eccentricity of up to 0,8 mm can automatically be balanced during the mounting and the coupling bolt Z4158 can individually be shortened for the adequate application.



Short setting-up times: the pneumatic ejector coupling Z 4156 facilitates the coupling of tools.

Construction tip: More comfort: perfect centering of cavity plates



In the practical experience the centering of cavity plates can prove to be very time-consuming and nerve-wracking. STRACK NORMA developed a more comfortable solution with the centering unit W44.

After the mounting in the tool the patented system is completely free of play and offers a perfect centering of both mould halves also at older injection moulding machines. The tilting of the

movable mounting plate is optimally balanced by the centering units. This is reached by a pretension of three thousandth millimeters.

A high bearing capacity is guaranteed by needle rollers of needle bearings in an aluminium retainer. The rolling friction in contrast to the sliding friction makes the system nearly wear-free. Besides the achievable economic efficiency because of the longevity of the centering unit, a

further particularity of the centering unit is its simple mounting in the tool.

The system can be obtained in the construction sizes 32 x 63 mm and 40 x 100 mm. On request, special sizes are possible. The centering units are furnished with long-term lubricating grease in food grade. Thus the utilization in the clean production or in the processing of the food industry is possible without problems.

Imprint

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STRACK®
NORMALIEN
STRACK NORMA
congratulates the
employees who have
belonged to the STRACK
family for many years.
Congratulations!

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|------------------|--------|
| 10 years | |
| Weihe, Wolfgang | 01.02. |
| Car, Annette | 01.03. |
| Toll, Hans-Peter | 01.04. |
| Kliewe, Wolfgang | 01.06. |
| 25 years | |
| Wiegand, Jörn | 03.03. |
| Nowak, Norbert | 13.03. |

Use the know-how of the specialists!

STRACK NORMA invites to the second TOOLservice

The premiere of the TOOLservice in the year 2009 with about 180 guests was a complete success. Therefore also in this year STRACK NORMA invites all interested persons on the 4th and 5th May to come to the site in Lüdenscheid, Königsberger Straße. On two days the participants of the meeting can expect an exciting mix of know-how of informative and practice-relevant presentations, which will provide innovative knowledge concerning the production of tools. On the 4th May the manufacturers of the "tool- and mould-making" are in the focus, the following day applications for the punching- and forming technology are presented. Besides the exciting presentations there will be the possibility to meet interesting people and to have interesting conversations around the subject tool-technology and tool making.

The first day starts with a presentation of Karl-Heinz Möller concerning the subject "The tool- and mould making – key industry of each modern economy." Thereafter specialists out of the whole subject area as well as specialists of STRACK

NORMA report about centering elements, hot runner technology, cam elements or latch locks and thread unscrewing units. The company Hotset of Lüdenscheid explains in an informative representation the price- and production advantages due to the utilization of a new sprue nozzle for the zinc diecasting. After a lunch break a round tour in the company STRACK will take place. At the end of the day the present constructing engineers learn how the CAD-system NX helps to improve development processes and product preparation in the mould making.

The second day of the meeting also starts with an informative input about the tool- and mould making. Subsequently the newest developments and innovations are presented. An operator story concerning the subject "Application of roller cams" shows concretely the advantages of this low-maintenance unit in the practical experience. Presentations which report about an effective wear protection in punching tool making and concerning the gas spring systems in the modern toolmaking impart knowledge for the practical



TOOLservice for the second time: STRACK NORMA invites the practicing experts on 2 days to come to Lüdenscheid

experience. Also the advantages of the CAD-system NX which may not be underestimated are shown for the construction of punching- and forming tools. In the last presentation of the day, the graduated engineer Bernhard Raschper of the management consultancy Grams & Partner reports about the advantages in the price competition due to consistent price calculation in the toolmaking.

Entrance and service is free for both event days. However the seats are limited. Applications can be made by telephone 02351/8701-0 or by fax 02351/8701-203. An application via e-mail is also possible at toolservice@strack.de.

Kieran Griffin replaces „institution“ Friedhelm Schulte

He is an institution. Everyone knows him and everyone likes him. After having worked for more than 40 years in the "World of the standard parts" Friedhelm Schulte goes in its well-earned retirement. His successor as sales representative for the "Märkische Kreis" becomes Kieran Griffin.

Friedhelm Schulte who joined the company in 1970 made the typical career- like many employees of STRACK NORMA. He learned the trade as a toolmaker from scratch and later he took over the commercial agency of the today's STRACK NORMA GmbH & Co.KG. For decades he has been the contact person for his clients and also for his colleagues. Schulte disposes of an enormous historical knowledge about the development of the standard parts. Still today he likes to tell little anecdotes of passed times – of the pioneer times of the tool making. At the age of 65 years he

goes now in the well-earned retirement and transfers his responsibility to Kieran Griffin. The new person for the "Märkische Kreis" is called Kieran Griffin and is a born Irishman. Love of adventure and the interest in his job let the 40-year old toolmaker go to the "Mecca of the toolmaking" in younger years. Still today he is living with his family in Lüdenscheid. "I am looking forward to my new task and the teamwork with my colleagues." Kieran Griffin used the first months of his occupation to present himself to the numerous clients. Kieran Griffin can be reached at the following address:



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