

# NORMALIEN report

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

## STRACK parts support Opel Insignia production



„Insignia” is the name of the “car of the year 2009”. It’s the new flagship of the famous car manufacturer Opel. This design-orientated and youthfully-fresh appearing car displaces the “Vectra” of which 5,5 million exemplars have been sold all over the world. The new medium-class model is produced at Rüsselsheim, the head office of Opel. The right and left side panel for the limousine and the “Insignia” Sports Tourer are produced in the press- and stamping plant by die-mounted roller cams SN5620 of STRACK NORMA. During a visit at the

Opel plant, by the way the modernest of its kind throughout Europe, key-account-manager Reinhold Spielberger could get an idea of the complex production of the manifold awarded medium-class vehicle. Thomas Ziegler, team leader of the tool construction in the International Technical Development Centre “Internationales Technisches Entwicklungszentrum (ITEZ)”, which is also located at Rüsselsheim and Matthias Bredel guided the STRACK employee in the so-called “holy halls”. There first contours are pressed in the pre-cut sheets. Thereby the dimensi-

ons of the press tool are impressive. This hardly surprises because the limousine of the Insignia has a total length of 4,83 meters. Low costs and a high quality are attributes for the utilization of STRACK NORMA roller cams. “We can place the necessary punching dies without using an adjustment press,” Thomas Ziegler gets the advantages to the point. The installation of the roller cams directly at the tool provides for enormous time savings and at the same time for a reduction of the costs for the brand manufacturer.

*...further information on page two*

### Editorial



Innovations are the key for an effective production. That’s the reason why the technique and development with STRACK NORMA have a very high significance. We will present a result of our future-orientated work on the current fair “Blechexpo” at Stuttgart. Then the cam-series PowerMax® celebrates its launching on the market after a long and intensive work.

We know: Being the leading provider of standard parts for injection moulding- and die-casting tools as well as for die cutting-

and forming tools, we only work successfully if we offer innovative products to our customers, which improve their competitive position enormously on the market, which is continuously subjected to modifications. The success of the customers stimulates us.

Have fun while reading!

*D. Friedrich*  
Dag Friedrich  
business manager

...continuation page 1



■ Reinhold Spielberger (STRACK NORMA), Matthias Bredel and Thomas Ziegler (in front left) in front of the deep-drawing

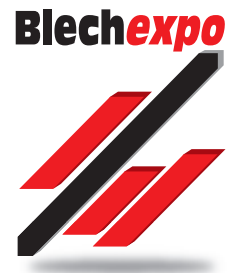
“After long tests in the production, we decided for the cam elements of STRACK NORMA”, explains Thomas Ziegler. Vehicles of the tradition brand Opel stand for highest quality. Thereby each detail is important. Hence only the sum of the details results in a demanding product.



■ More than 30 roller cams SN 5620 are in action for the die-cutting of the holes in the deep-drawn side-panel.

The Insignia not only appeals among experts but also the customers. More than 150.000 vehicles have already been ordered. To avoid delivery bottlenecks Opel is dependent on reliable partners. “Besides

the price and the quality also the reaction time of our suppliers is a quality characteristic for us”, Ziegler refers to an important point. Within a few hours an employee will be in front of one of the plant gates to solve potential problems or to deliver spare parts. Thereby Ziegler attaches great importance to the technical expertise in the collaboration. More than 30 roller cams SN 5620 are in action in the two punching dies (left/right). After the deep-drawing and the cutting of the side panels the die-cutting of the necessary holes is effected by the roller cams of STRACK NORMA. This provides for a great comfort and flexibility at the mounting of the cam elements. The cams can be mounted in an angle spectrum of  $-30^{\circ}$  till  $50^{\circ}$ . The die-mounted cams, as they are actually used with Opel can optionally be ordered with further technical equipment features. The cam SN 5620 can be delivered with an active return to avoid for example a failure of the gas spring. Within the production cycle the space of time and the acceleration can freely be defined. This succeeds previously by the exact definition of the driver curve.



## Fair fever in December

Premiere of the PowerMax®-series is in the spotlight at Stuttgart

The month December is the month of fairs for the sales team and the application engineers of STRACK NORMA. At the end of the year the employees in particular look excitedly forward to the premiere of the PowerMax® series on the current fair Blechexpo. From the 1st till the 4th December the fair Blechexpo takes place in Stuttgart. It is already the 9th version of this international fair for the sheet metal forming. In the newly finished exhibition halls the exhibitors present themselves after 2007 for the second time. In hall 4 at booth 4112 the visitor will find the striking stand of STRACK NORMA. Already at the first day the PowerMax® will be presented. “In my opinion this fair offers the optimal starting point for the market launch. A visit at our booth is even more profitable this time”, explains the technical manager Ludger Müller.

The worldfair for the tool making and mould making, design and product development euromold takes place in December in Frankfurt as usual – this time from the 2nd till 5th December. STRACK NORMA presents itself to trade visitors as usual in hall 9.0 at booth A 101. Here the unscrewing units as well as the new deflection elements are presented to the trade visitors. Prior to the respective fair, customers now have the possibility to have a look on the booking schedule. Thereby the visit on the fair can be planned in such a manner, that the customer has the possibility to meet the desired contact person at the booth of STRACK NORMA. The documents for the download are available under [www.strack.de](http://www.strack.de).

## Maximal power – highest technical comfort

The new freedom: PowerMax® creates new prospects in the construction

Punctually for the current “Blechexpo” fair STRACK NORMA presents with the cam program, produced in Lüdenscheid, several patented news for the cutting and forming technique.

PowerMax® unites a variety of new features in a special program, which provide for a high degree of performance and flexibility, but at the same time distinguishes itself through its small and compact type of construction. The newly developed three product versions redefine the criteria in the cutting- and forming technique. The technique of areal- or die-mounted cams is not really new in cutting dies and forming tools. Because of the vertical movement of the pressing tools these are required for the insertion of lateral holes or for the cutting, to deflect the forces well-directed in the desired effective direction. Practically at each product at which sheets cannot be processed vertically, these cams are used.

PowerMax® exists in three patented versions: BASIC, MEDIUM and PREMIUM. The installation dimensions are identical for the three product lines. The low-cost BASIC version constitutes the entry. But particularly the types MEDIUM and PREMIUM open completely new prospects for the constructing engineer and the toolmaker concerning the design of cutting dies and forming tools – all this particularly against the background of a cost-effective solution. This is reached by an adjustable active return. At each stamping process, this active return provides a very high and up to now unreached retraction force.

The active return, which only mechanically recalls the forces which are necessary for the stripping process, is supported by one (several) gas spring(s), which press(es) the cam slide after the stripping process back to the initial position.



■ The sum of ideas:  
The cam series PowerMax®

When the cam drives together, a smaller force is required because of the fact that the gas springs work with a more reduced force than usually. Cam, tool and press are thereby prevented from damage because needless loads are avoided and maintenance costs are reduced. This is an advantage of the PowerMax® in comparison to a cam slide which is only placed back by a gas spring.

The active return always raises the exact force, which is necessary for the stripping of the stamping part. The gas spring only pushes the cam slide back to its initial position. Concerning the cams from a width of 460 mm, additional gas springs in stripping direction reach considerably higher stripping values within the first 20 mm of the return stroke way. The in the construction considered force application points, paired with an optimally designed prismatic guide, result in a great degree of running precision.

A separate component replaces the working surface at the PREMIUM-version. This special mounting plate is high-precisely produced and “shouldered” in all directions. It allows a simple disassembly of the tool and thereby a simple machining of a rectangular plate on a machine tool. Constructive modifications or the production of special plates according to specific customers’ requirements don’t confront the operator any longer with the up to now therewith connected effort. These requirements will easily be realized in future.

The PowerMax® cam program already covers a multiplicity of dimensions and cam angles. For stamping operations at high-strength sheets, where the cutting element has to meet the sheet in a right angle, the program also offers a qualified solution. On request the cams are produced in the desired angle, which lies outside the deliverable standard angles (0° till 75° in 5° steps).

The market launch of the PowerMax® will be rounded by comprehensive service measures. The machining of working surfaces according to customers’ specifications, the assembly of mounting plates with polygonal punch retainers as well as the production of special mounting plates with changed dimensions and cavities, increase the flexibility and create unusual liberties in the tool production.



The team of STRACK NORMA is looking forward to present the cam personally to each customer. Make an appointment with our consulting engineers or visit STRACK NORMA at the premiere exhibition Blechexpo at Stuttgart, hall 4, booth 4112.

### The world of PowerMax® in the Internet



Customers find all information concerning the new PowerMax®-cam program under the address [www.powermax-schieber.de](http://www.powermax-schieber.de) in the Internet. The data on this service platform have already been reprocessed for the customers in order that they can reach with only a few mouse clicks a dataset in the formats Catia V5 R16 or Step. Thereby the customer obtains an active support concerning his construction tasks. All dimensions with indication of forces and structural dimensions already facilitate the choice in the Internet. Together with exploded drawings, item lists as well as together with instructions for installations, the data assigned to the selected cam dimension, are always assembled in actual PDF-documents for download. A printed overview in a handy DIN A5 format additionally completes the online-catalogue and already facilitates the selection in the factory, at the construction or at the method planning.

## Imprint

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# Successful premiere of the expert conference "TOOLservice" STRACK NORMA for two day in the Mecca of tool design and construction



■ Many visitors:  
The premiere of the TOOLservice met with the approval of the participants

Talking about special techniques, new technical expertise and collecting new impressions out of the world of the tool making – the new concept of the two-day event "TOOLservice" of the standard specialist STRACK NORMA has been successful. End of April 180 guests out of the line of business met to follow the premiere event at Lüdenscheid in the Sauerland.

The first day was in the centre of the development and the production of injection moulding dies and die casting moulds, whereas on the following day the focus was on the technology of punching- and forming dies. STRACK NORMA is the only producer in the world, which delivers from an assortment of more than 160.000 articles, standard parts for the metal-working and plastics processing industry.

The respective day program was arranged, besides the own application engi-

neers, by consultants of the numerous partner-companies. During the presentations and the demonstrated applications, it became clear, that today it isn't only sufficient to purchase standard parts at low price but that it is also important to use the wide-ranging know-how for the own production. "All participants went home with new technical expertise", Ludger Müller, Technical Manager of the host, brings the purpose to the point. "Complex requirements by which our customers are confronted day-to-day demand special solutions", continues Müller. Thus STRACK NORMA succeeded to present practice-oriented examples for manifold applications to the listeners of nearly 100 different companies. STRACK NORMA presented here a new generation of cam elements with the PowerMax® and announced the market launch for the fair Blechexpo 2009. The presentation of the ejection of undercuts by the utilization of STRACK NORMA's unscrewing units attracted much interest.

The extensive program was completed by round tours in the production and the logistics area at the Königsbergerstraße, which have only recently been modernized and expanded by considering the optimization of the production. Additionally new products of the standard part producer as well as of the partner companies were shown in a small exposition.



■ View in the heart: In several groups the visitors were led through the production on both event days.

A concluding survey among all guests showed that the objective target was reached. Furthermore all participants asked for a remake of the TOOLservice. Thus the business management has announced a repetition of the event for the year 2011. In future this meeting shall take place every two years for the trade experts as a trade forum for the newest developments in the tool- and mould making.

## STRACK<sup>®</sup> NORMALIEN

### 10 years

Holger Schmale	15.05.
Andreas Kemser	01.06.
Barbara Palka-Gester	15.06.
Denise Lemke	01.08.
Thomas Kaufmann	01.08.
Hans Joachim Oswald	01.10.

STRACK NORMA congratulates the employees who have belonged to the STRACK family for many years.

### 25 years

Cornelius Schmidt	01.09.
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**Congratulations!**