

iNOEX keeps Development Tempo up

For more than 20 years, iNOEX has made a name for itself with automation technology for the plastics extrusion industry. As one of the market leaders in gravimetric dosing and ultrasonic sensor systems, the company offers revolutionary equipment for an increase in efficiency and quality. One of the times the company located in East Westfalia caused not only a small sensation was on the K'04: ADVANTAGE was a top surprise for a suffering pipe industry. This visionary system for the automated change of product dimensions called ADVANTAGE offers a lucrative way of creating added value and a higher production flexibility. Its presentation was a convincing one: in the meantime six out of ten of the leading pipe producers have decided to use ADVANTAGE. Reason enough to ask Reinhard Klose, CEO of iNOEX, which course he set for iNOEX on this year's K'07:

Mr. Klose, on the K'04, iNOEX presented for the first time its new claim 'The Future of Extrusion'. Have you lived up to your promise?

Reinhard Klose: Absolutely. In 2002, we initiated a strategic change in course for iNOEX and we were able to present our first impressive results on the K'04. At that time, our product portfolio encompassed not only the measuring and control technology for which we had been renowned for years but for the first time also process engineering modules for the complete production process 'Pipe Extrusion'.

In particular, the presentation of ADVANTAGE was one of the highlights on K'04. This new technology has filled a gap in the market and it has further acknowledged us as technology partners in the extrusion business. And iNOEX will further pursue its strategy to have a strong and positive influence on the future of the extrusion industry through new and essentially innovative technologies.

Does this mean that iNOEX will further intensify its engagement in developing process engineering technology?

Klose: We have set our focus on technical solutions, especially for the pipe extrusion process. The target is to make our customers benefit from a very interesting potential which is in the creation of added value, in other words in increasing drastically the efficiency of a production process. During the past years, an innovative team of experts has been established for this purpose. This team concentrates a 100 per-

cent on the development of new process engineering technology. Our own technology centre is a great support for us in this respect: we have got three complete extrusion lines available for development trials and live demonstrations.

This is certainly very interesting news – which of your results will be presented on the K'07?

Klose: For K'07, we have chosen two highlights and which I can briefly explain: The field of 'Interior Pipe Cooling' has for ages been the hard nut to crack – now iNOEX has untied the knot and will present results on the K show. Our customers will see a convincing and efficient solution which is located inside the extrusion die.

What do you mean exactly: iNOEX has untied the knot?

Klose: Options for the creation of added value heretofore left unexploited are now being used for yielding profits and the key is in innovative technology. The 'Interior Pipe Cooling' is a particularly interesting example in this respect.

The new technology achieves an efficiency ratio of 15 up to 20 percent, a higher cooling efficiency means that line outputs can be increased. Controlled thermodynamic effects inside the extrusion die lead to these results. Normal compressed air is annealed into hot and cold air flows. The cold air flow of approx. -5°C is led out of the extrusion die into the interior part of the pipe. This makes the pipe's temperature drop considerably when it leaves the extrusion



Reinhard Klose

die which has a positive effect on the subsequent cooling process.

Additional positive effects will be in the production of large-diameter pipes. Not only the sacking effect will be reduced but tensile forces in the pipe wall will also be minimized. Anyone who wants to come and see is most welcome to a demonstration in our technology centre. We have installed especially for this product a complete extrusion line based on a Cincinnati extruder.

What exactly does this mean for the producer?

Klose: He can directly increase his production output for an investment of manageable size which will on top pay back very quickly. And he is free to decide – similar to all other iNOEX-conceptions, also this one is modularly structured: either he converts his own extrusion die or he buys a new one including our technology. In both cases, the payback time is just over six months.

Just before, you mentioned two innovations?

Klose: Correct. In the past months, iNOEX has plunged into the subject of PEX-A pipe extrusion so that in the future we will be able to offer a complete package for cross-linking technology. As you may know, iNOEX is already leading in the market of equipment for the conveyance and dosing of sensible materials and recipes which is a very complex process.

But the news is that iNOEX is now able to offer a technology for the inline cross-linking process based on an infrared oven. On the K'07, we will for the first time present a conception where both products are integrated in one control concept.

Which is the advantage of this combination?

Klose: What is of prime importance is a



How do we have to see your recently announced co-operation with Crosslink/ SF?

Klose: Crosslink has developed the cross-linking technology based on an infrared oven and has for some time been able to offer a safely and reliably performing product to the market.

We think this is a very convincing technology which is why iNOEX adopted globally and exclusively the sales and development rights from Crosslink. In the medium term, we will also take over the production and maintenance of this product. Future development will be done co-operatively together with Crosslink.

Let us get back again to your product line ADVANTAGE. Which of them is first in the race: ADVANTAGE or QuickSwitch?

Klose: Difficult question. I would say, both are winning. ADVANTAGE due to its technical conception which offers advantages in the retrofitting business and which makes it the leading system in this segment.

KraussMaffei and QuickSwitch are clearly leading in the extrusion line business. This is not our field of business, iNOEX is simply not supplying complete extrusion lines. But we will become stronger in this kind of business because in the meantime other extruder manufacturers encounter an increased demand for equipment for dimensional changes.

For example, Battenfeld Extrusion has had some very successful projects where our ADVANTAGE system was part of the line. In addition, Battenfeld Extrusion agreed that one of their extrusion lines was installed in our technology centre where we use it for our trials.

The partnership between KraussMaffei and Egeplast must be an obstacle for ADVANTAGE, right?

Klose: At first glance, this is certainly the case. Especially the demonstration facilities Egeplast offers efficiently support KraussMaffei's sales activities. However, there are also those in the market who disagree on account of the competing position of Egeplast.

But also in this respect we will positively make up: besides the already existing demonstration facilities in our technology centre, we will shortly present renowned pipe manufacturers as reference partners

PEXLINK Infrared Oven
ADVANTAGE Calibration Sleeve

for the fully automated change of dimensions with ADVANTAGE. Including all of our innovations.

Besides the products I mentioned before, we will additionally present new specialities of the ADVANTAGE programme in Düsseldorf which will further underline our claim to be leading in this technology sector. On top, we have a pleasant surprise waiting for our customers- things have become easier and less expensive and performance ranges were extended.

Could you give us some details in advance?

Klose: Certainly. The most essential one first: the setting range of the calibration sleeve will be extended from approx. 1:2 to approx.1:2,5, e.g. from 63 to 160 mm. This result became possible through a modification of our inlet zone, whereby the cage structure was not changed. Further, the product range was extended. ADVANTAGE can now be used for pipe diameters up to 1200 mm and we offer a solution for small pipes of 16 to 25 mm dia.

Die set changes will be history in the future. A forming chamber permits draw balance ratios of the melt tube which permit the production of the total wall thickness range within the setting range of the calibration sleeve.

With these new product features and unique functions, ADVANTAGE will become even more competitive, to make us technically the leader in automated dimensional changes.

Such a development tempo surely means to undertake large investments. How can you afford this?

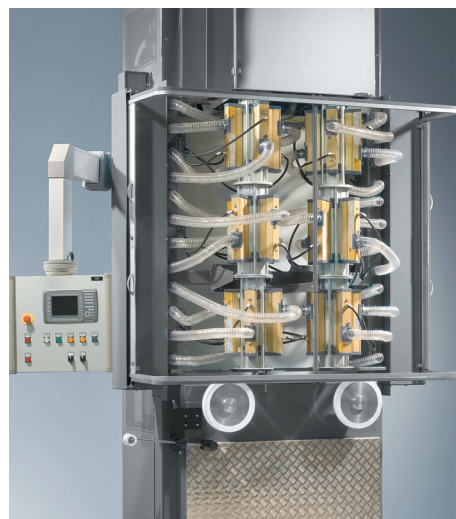
Klose: You are right. And our investments have two sides: one is the financing of de-

new development for inline measurement of cross-linking degrees. A feature which will be revolutionary for the production process and its documentation.

Thanks to this new solution, monitoring & control of the cross-linking degree in PEX-A pipes become possible for the first time. Manufacturers will in the future know already during the production process whether the cross-linking process was successfully initiated. They can not only prove the fact but also intervene, if necessary. And, in case this infrared technology is linked to our automatic control systems, the production process as such will be much more efficient.

Besides, for the time being, iNOEX probably has got the only free PEX A pipe extrusion line installed in its technology centre, based on a Weber DSE.

As an additional service we will use this extrusion line to optimise the interplay of our system modules for recipes, process engineering and cross-linking technology in order to ensure that the absolute maximum of value for our customers is derived from this innovation.



velopment projects, prototypes and the cost for marketing and market introduction. But the other side which is even more important to us is the creation of Human Resources which will support our steadily increasing product portfolio in the long term. For this reason we have for some years been working together with different universities, also in order to generate and support our young professionals.

You see, in the end we decide everything on the grounds of comprehensible and measurable strategies and business management data. Results prove that we have done the right things, and our success in the market or our annual growth rates give us an additional confirmation.

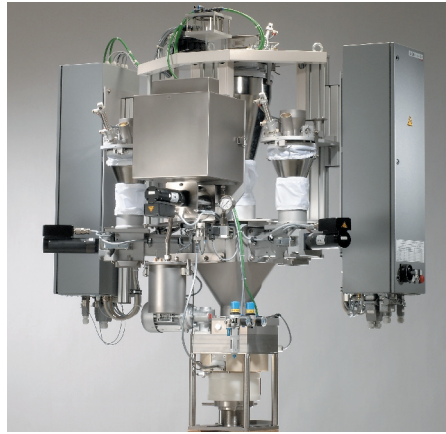
Do you generate your growth rates mainly through your new process engineering products or does the effect come also from the globally positive investment behaviour of your customers?

Klose: Our main business is still in measuring & control equipment. These systems increase efficiency and quality in the extrusion process which is very much the current trend in the market. Our SAVEOMAT in particular, a system series for the dosing of materials, also liquids, for weight per metre control, and the dosing of poorly flowing materials is very high on demand at the moment.

In ultrasonic technology, our AUREX system for 100 percent pipe wall thickness measurement and flaw detection has set a new standard. In view of product liability and traceability our products offer the required safety. As we supply complete packages including our intelligent sensor systems and the linked modules of measuring and control equipment for the integration into extruder control, we also participate from the positive sales figures of our OEM customers.

Especially as far as our sensor technology is concerned, we will present some real innovations on the K'07 and we are sure our customers will like them very much. The new SAVEOMAT generation with an integrated suction conveyance will be presented and in ultrasonic technology, we will start into digital measuring technology – to be sure we offer the highest possible measuring accuracy and most simple operation features.

Last year, you started your co-operation with ASCONA GmbH which is based on your holding interest in this company. Can



New SAVEOMAT-Generation

you tell us about the benefits of this decision for your customers in the profile extrusion business?

Klose: The benefits are perfectly obvious: customers are offered the most up-to-date and the best measuring technology for their measuring tasks. The combination of PROMEX technology and ASCONA's experience in aluminium markets has resulted in perfectly suitable measuring systems for inline and offline operation in the profile extrusion. After some tough times in this segment, we are now pleased to register very positive sales figures. What is more, ASCONA slowly but surely becomes a market and technology leader in this line of business.

Is iNOEX going to take up more interest of this kind in the near future?

Klose: If we are positive that such an interest will create potential for added value for our customers which is in turn an improvement of our market position, then we will go ahead with other co-operations.

Finally: How do you see your market chances globally?

Klose: We have started to face the challenge 'Global markets' some years ago. In volume markets such as the United States and China, we have established our own subsidiaries for sales & service. We have a clear target for these markets: through our marketing strategies and our investments in new products we hope to become leaders in technology in these markets. For sure, this will be the only way to confirm our claim 'THE FUTURE OF EXTRUSION' for many years to come.

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