Bundled Know-how

Stefan Opis, CEO of Iludest Destillationsanlagen and i-Fischer Engineering, about distillation and the cooperation of the companies



In July Iludest moved into an own company building with a bigger production hall. Stefan Opis, what is the advantage for your customers? Stefan Opis: via expanded capacity we get a higher output in the production. The increased available area is improving the throughput of our production. Delivery time becomes shorter and delivery reliability increases.

So all bottle necks of capacity are abandoned?

Our systems comprise up to 5000 single components. Just one single component, delivered too late, can mean a time delay in completion. We try to improve our delivering reliability by choice of sub-suppliers – in addition to the steady improvement of internal procedures.But due to the complexity of our products and their mostly customized construction it's unfortunately never completely under one's own control.

To which industries do you deliver your machines?

Iludest-machines you find in chemistry, pharma and food industry. One application is the production of citrus oils. One additional major application is the area of recovery of ultrapure solvents. In this sector we collaborate intensively with universities, for example university of Würzburg. Additionally we deliver training machines to technical colleges, universities and vocational schools for distillation, extraction, reaction as well as absorption and desorption.

Does i-Fischer, a Joint Venture of Iludest, serve the same markets?

I-Fischer is focussed on petroleum chemistry. The portfolio comprises distillation plants according to ASTM-Standard. We operate according to D-2892, D-5236 and D-1160. D-2892 and D-5236 are consecuconcentric-tube column uses concentric tubes as a special design characteristic and therefore we don't talk about diameters in this case. The smaller apparatus dimensions are predominantly made of glass, the taller one are made of stainless-steel or glass lined steel.



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Stefan Opis, lludest/l-Fischer

tive operations. It starts with an atmospheric distillation of crude oil, followed by further distillation stages at different operating pressures under vacuum. The remaining residue in the distillation flask represents the input product for the next standard procedure. Standard D-1160 represents a boiling analysis under vacuum. Beside the ASTM-system i-Fischer offers special apparatuses like the concentric-tube column ("Spaltrohr-Kolonne"), which is able to distil very small volumes. According to the application 10 - 20 ml input product are sufficient. Configurations with conventional columns take 100 to 200 ml minimum

In which sizes do you produce your distillation units? The smallest column has an in-

ner diameter between 10 – 15 mm, the biggest - up to now - has 700 mm. The mentioned

Can you upscale all columns? If a customer requests for a later upscaling, we choose the appropriate type of column. With standardized column packing material an upscale is easy to realize.

Have you recently brought new products for process industry to the market?

We developed a membrane separator stage which is able to separate certain solvents out of a azeotropic mixture, for example useful for those solvents forming azeotropes with water. Via a solely distillative procedure the so-called azeotropic point would either not be overcome or only with great difficulty. Principally with every project we face the challenge to elaborate a problemoriented solution, partially via adaption of earlier constructions. A specific method of resolution today can already be our standard tomorrow.

Thus you only get customized jobs?

Mostly, yes. Currently we are working on a laboratory distillation apparatus for a producer of fruit flavours, which must be applicable for a later scale-up. According to the available data neither we nor the customer were able to predict whether this special product mixture could be separated with the suggested system. Fortunately we were able to connect the prospective customer to the University of Würzburg, where he could do experiments with a similar equipped lludest-apparatus. Subsequently he ordered the system at our company.

What makes you different compared to your competitors?

It's the whole package, which we offer, the combination of Iludest and i-Fischer. From our point of view we really bundle knowhow. And that makes us flexible. The user perceives our competence. Our success rate in direct customer contact is more than 90 percent. That means, as soon as we manage to get a personal communication with a potential customer, we have a big chance to get the order. In principal we are a producing engineering office and we develop the hardware and software for our control installations in-house. That makes us different from the competitive environment.

What are you going to present at Achema?

Usually we present an apparatus we are currently working with for a customer. Preferably we show our know-how. Further information at www.PuA24.net **more @ click PA108053**