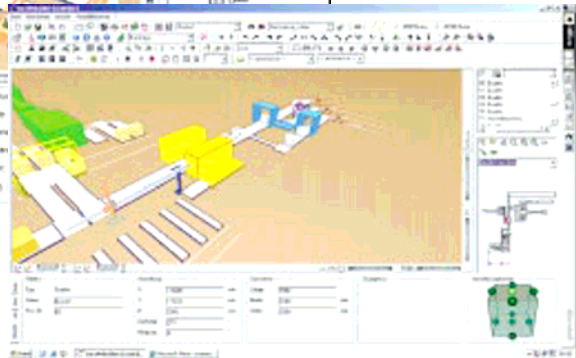


3D makes the difference: The picture in the display window on the left illustrates the added value of 3D visualization with the taraVRBuilder

One drawing – three views in 3D: The picture below illustrates the added value of 3D visualization.



## When the pictures learned to move An exceptional visualization solution

Last year, Dücker was still using a conventional form to demonstrate its transport systems. Today, moving pictures almost automatically show customers what is going on.

"We finally no longer have to mess around with PowerPoint" notes Mr. Gerd Wierschem, Head of Sales at Dücker Fördertechnik, with some relief.

In order to demonstrate to customers the specification-conforming functionality of an installation, such as a pallet loading system for the disposal of corrugated cardboard piles at the downstream end of the corrugated cardboard line, it is normal practice to use two-dimensional CAD drawings, Excel sheets with calculations and, in Dücker's case, the above-mentioned PowerPoint slides too. Back in 2002, Mr. Wierschem was already unhappy

However, three-dimensional visualization which shows, for example, transfer cars with their real dimensions, real roll diameters, real weights or sheet dimensions is much faster and easier to understand and much more credible. The impression is more lasting, and generally boosts sales prospects", notes the Head of Sales. Until the beginning of 2004, he repeatedly postponed the procurement of a corresponding solution. Notes Mr. Wierschem: "Operative business consumes too much of one's time, and we were perhaps also somewhat reluctant to invest.

100,000 euro for a tailor-made, customized solution was out of the question, and we were not aware of

the existence of a suitable standard solution." In mid-2004, CEO Peter Dücker saw a tarakos ad which he immediately gave to his Head of Sales. Demand was there and the time was ripe for a visualization solution. An appointment with tarakos was quickly made: Mr. Wierschem remembers: "We were

amazed: We expected 3D visualization. But we also saw moving pictures. A transfer car which takes up a pile or a conveyor which transports containers with a certain cycle time. We had not expected this."

### Animation possible

Performance and functionality of the taraVRbuilder demonstration clearly exceeded Dücker's expectations because the solution from tarakos GmbH not only enables people without any programming skills to quickly generate a three-dimensional planning model of a material flow installation that can be demonstrated to the customer. What's more, the solution not only animates a flow of goods with abstract or detailed goods objects, including control or their orientation and alignment. The solution is also capable of presenting flows of goods with different transport speeds and with the option of selecting different branching strategies.

## Creating moving animations without programming skills

about the possibilities which this approach offered: "Commercial representatives clearly outnumber technicians during negotiations in the decision-making process. It goes without saying that commercial representatives are also familiar with the customary approach.



### About tarakos

Since 2000, tarakos GmbH located in Magdeburg's "Experimental Factor" has been developing virtual-reality applications for medium-sized businesses. The unique selling points of the product family are low initial software and training investment and simple use on standard computers. This includes taraVRbuilder for material flow optimization in factories, transport and storing facilities, as well as taraVRcontrol for visualizing and improving production processes.

**Processed to corrugated cardboard: paper rolls up to three meters long and 1.50 meters thick.**

"Three months later, we successfully used the software for the first time", Mr. Wierschem remembers. "By that time, we had repeatedly tested the program and made adjustments in close cooperation with tarakos."

In order to fulfill the hardware requirements, Dücker Fördertechnik bought four new laptops for its sales department. The old laptops did not have graphic cards with 3D acceleration and less than 32B RAM - basic requirements for the tarakos solution.

#### Focus on customer demands

As a consequence, certain standards were adjusted to Dücker's needs: "Above all, we added a customized library to the standard software library. In the standard configuration, for example, transfer cars take up one pile to be transported, whilst we require four. We also had the existing number of connecting tracks increased from ten to fifty. We are now able to offer extremely customer-focused presentations using company-specific and industry-specific objects and the materials to be handled", Mr. Wierschem notes with satisfaction. He and another three employees attended a one-day training course for the solution in Magdeburg, and were then immediately able to start off.

Since November 2004, the expert company for logistics solutions in the

paper and corrugated cardboard industry has been using its new 3D visualization solution for its sales activities. Notes Gerd Wierschem: "I conveniently configure an installation from library modules with just a click of the mouse. Without any programming knowledge, this enables me not just to configure the transport system, but also to add production lines and factory halls or additional elements, such as machines, vehicles or workers as required. All elements are dimensionally accurate. I enter the customer data manually in the appropriate fields, for example, for height, length, width or weight. If necessary, I can also directly import dxf files from our designers and have these presented in 3D with tarakos."

#### Real simulation character

The software solution is particularly helpful for Dücker when it comes to demonstrating to customers how the finished products are transported to the warehouse. In order to achieve maximum possible utilization of production facilities, customers are extremely keen to transport their corrugated cardboard piles without bottlenecks. "This is where the solution has real simulation

character", Mr. Wierschem notes with pleasure, and explains: "Customers virtually see in advance how their finished-goods logistics will look like and work. And in order to identify possible solutions or underline our proposal, we can, for example, modify transport speeds or inserter cycle times with a given processing capacity of the production machines. Furthermore, we can also simulate downtimes or modify pallet dimensions and capacities. The quick-motion function of the software is particularly helpful in identifying bottlenecks much better. The counting function increases the simulation character and additionally underpins the realistic presentation."

This is why customers are always impressed by the logistics layout concepts developed by Dücker. Notes Mr. Wierschem: "The CEO of a Spanish customer, for example, who was initially under enormous time pressure, then took more than one hour of his time in order to have us explain to him in great the transport of the cardboard piles from the inserter – i.e. the point of picking the finished goods – via the routing to central pallet loading." Another particular attraction is taraVRbuilder's feature that lets customers walk through their three-dimensional logistics solution or to see a video animation of the solution."

### About Dücker

Dücker was established in 1850 as Friedrich Dücker forgery and locksmithery in Hitdorf on the river Rhine. The engineering firm of Friedrich and Peter Dücker was established in 1971 and started developing transport systems for the corrugated industry. The equipment was produced exclusively by the locksmithery established by the owners' father. In 1976, the engineering firm and locksmithery were merged to the company Gebr. Dücker which was converted to Dücker Fördertechnik GmbH in 1981. The materials handling core division was supplemented by the automation unit as a developer and supplier of software solutions for logistics and process automation, as well as the Swedish subsidiary, CORPAL, specializing in the development, manufacture and implementation of palletizing systems and stack separators.

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