

# «P'X5™ Product Configurator leverages Business Engineering.»



Dr. Jörg Pochert, Director  
Pharma and Biotech:  
“Sometimes particular  
innovations on the IT level  
allow better business  
processes and enhance a  
strategic success position”



Matthias Düchting, International Sales Director:  
“We will be more successful in sales using the MICROLAB STAR Line configurator”

Using the P'X5 product configurator from Perspectix, globally active HAMILTON Robotics has found the perfect sales medium: Almost 500 articles of “MICROLAB STAR Line”, a robot system for pharmaceutical and biotechnology research and development, can be configured into approximately 2500 customer-specific variants. The open system works like a common language, connecting IT solutions throughout the sales process – and getting business processes up to speed.

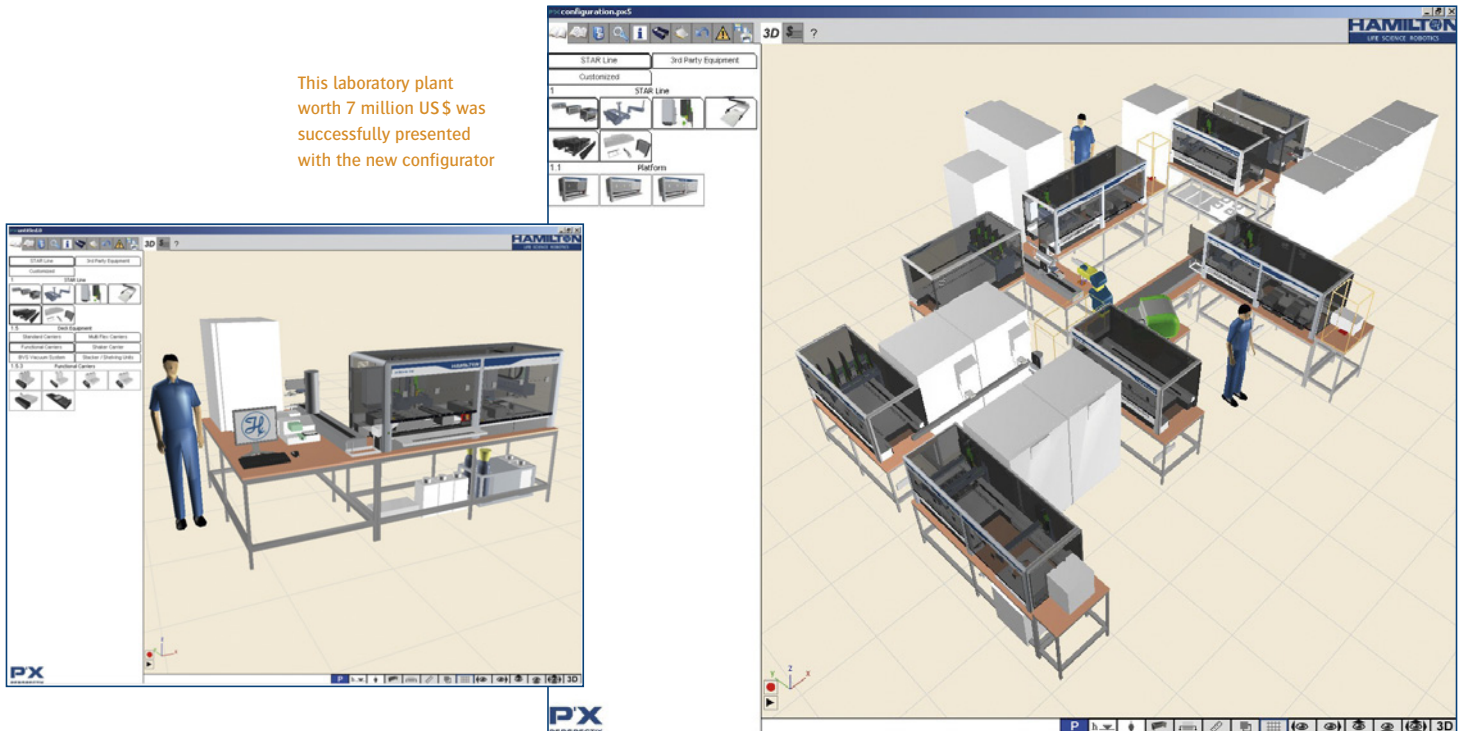
In Europe as well as the USA, HAMILTON is playing a leading role in several fields of medical technology and laboratory automation. In Bonaduz/Switzerland, the company designs and manufactures a series of automatic micro laboratories in the area of life science robotics for different tasks in research and analysis. The STAR line excels with scientific accuracy and cost effectiveness in several application areas and is yielding a double-digit growth in sales. “Our strategic success position on the one hand of course results from innovative, highly complex, modularly structured products, but on the other

from our customers’ trust in our sales department, in our project management and in our implementation expertise”, says Dr. Jörg Pochert, Director of Pharma and Biotech. “They value how professionally we handle extreme complexity.” The company realized that the P'X5 product configurator from Perspectix would provide an excellent opportunity to extend these strategic advantages even further. In the classical model of business engineering, strategic concerns shape business processes, which must then be supported by appropriate IT systems. “But sometimes the reverse happens and particular innovations in IT allow for an improvement of business processes, reinforcing the strategic factors of success. The introduction of the Perspectix configurator appeared to be such an opportunity to us”, said Dr. Pochert. Whereas the competitive advantages among medical devices are nowadays eliminated within one year, progress in process technologies lasts for up to three years. “The most sustainable effects, lasting up to five years, can be obtained by developing new, optimal business processes”, the marketing strategist explains.

# «In cooperation with Perspectix our requirements were executed quickly and professionally.»

Roger Caviezel, Product Manager STAR Line

This laboratory plant worth 7 million US\$ was successfully presented with the new configurator



First the user chooses one type of the three MICRO-LAB STAR Line size classes which he can always exchange during the configuration process

## Improving sales processes on-site

The focus is on the process of solution finding and tendering offers. Normally a sales representative determines the customer's requirements on-site and hands over the project to the application department for detailed specification. Finally the CAD department creates drawings for the offer – which is returned to the customer after an elapsed time of about a week. Using the product configurator results in a new process model: Already in the initial phase, projects can be detailed to a high extent very quickly, with several cycles between customer and sales representative. Application and CAD departments are no longer burdened with the elaboration of ideas and variants, and are only needed when verifying important order documents, when millimeter accuracy is required, and in large-scale projects. With this background, the management approved a budget for a challenging project plan at the end of June 2006, which was supposed to be executed within six months.

## Successful cooperation in distributed teams

Under the direction of Roger Caviezel, Product Manager of the STAR Line, another team member at HAMILTON and two software specialists at Perspectix went to work. First, the 3D CAD models from Pro/ENGINEER were simplified, screws and dispensable, overly complex geometry were removed and

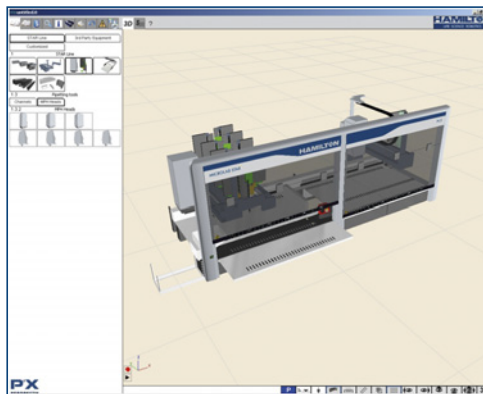
## THE CLIENT

### HAMILTON Robotics

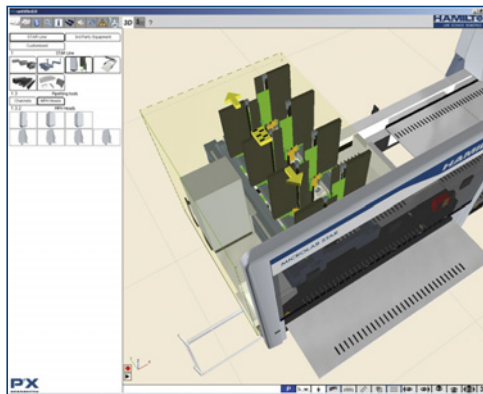
As worldwide leader in the design and manufacture of manual, semi-automated, and robotic products for precision fluid measuring and laboratory automation, HAMILTON commits to precision, accuracy, and quality. Since the company founder Clark Hamilton developed the microliter syringe in 1947, Hamilton has provided a broad offering of products for precision fluid measuring: pipettes, dilutors, pipetting robots as well as analysis and assay systems, HPLC, and GC columns. With manufacturing facilities in Reno, Nevada and Bonaduz, Switzerland and branch sales offices in the US, Germany, Switzerland, France, Italy, China, and Great Britain, HAMILTON satisfies demanding customer needs by combining quality materials with skilled workmanship. HAMILTON is fully ISO 9001 and partially ISO 13485 certified, and produces certain product lines under US GMP conditions.

transferred to modules with item numbers and prices. These 3D models were converted to P’X5 via the VRML format and connected to the related logic by Perspectix. The developers at HAMILTON built the first assembly types. The included P’X5 Authoring Workbench provided all the necessary tools and now gives HAMILTON the ability to maintain the configurator on their own. The structured and well prepared cooperation focused on weekly project days: Product knowledge, such as how assemblies can be customized and arranged, or which changes could influence other options of the robot, were connected with modelling features of P’X5. The rather demanding project schedule was met. “Perspectix really was very fast, the cooperation proceeded brilliantly. I am astonished how this project kept in line with the time and cost budget”, said Dr. Jörg Pochert. “The interaction was very fast and tight and to some extent even driven by Perspectix.”

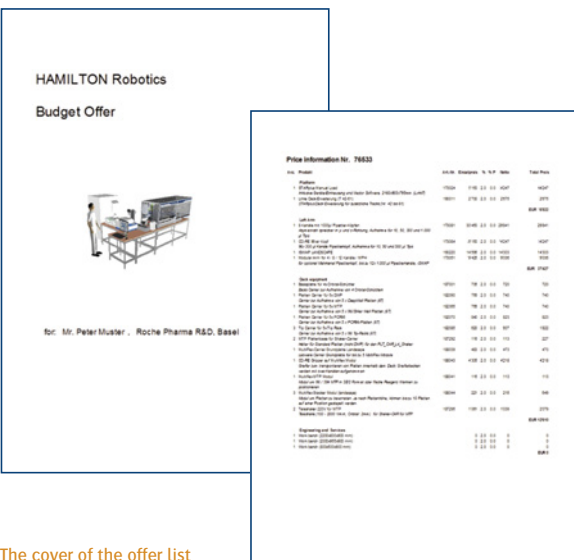
When, at the beginning of the year, the first test users were involved, all employees were enthusiastic. “Their customers immediately gave them outstanding feedback and so they were highly motivated”, said Roger Caviezel. “That’s when we knew that the introduction would lead to success.” In short training sessions, application engineers and sales representatives were already working effectively with the software after only two hours. Afterwards, emerging questions were answered – and each of the 60 users were ready to start.



The function Hide/Show Covers shows or hides the chosen covering and therefore allows insights into the technology



At the push of a button the channels of a pipetting arm can be positioned collectively, so that they don’t have to be parked separately



The cover of the offer list concisely illustrates the configured micro laboratory – the price of each chosen component is clearly summed up

PROJECT OVERVIEW	
<b>Industry</b>	<ul style="list-style-type: none"> <li>Medical technology, life science robotics</li> </ul>
<b>Task</b>	<ul style="list-style-type: none"> <li>Customer-specific configuration of automatic micro laboratories in three size classes, with about 2500 possible variants, including price calculation and CRM connection.</li> </ul>
<b>Languages</b>	<ul style="list-style-type: none"> <li>English, German, French, Italian</li> </ul>
<b>Highlight results</b>	<ul style="list-style-type: none"> <li>Essential simplification in custom-specific product configuration, reduction of lead time, elimination of routine work in the application engineering department, increased planning precision due to automatic commercial calculation, improved customer communication</li> </ul>
<b>Project duration and team</b>	<ul style="list-style-type: none"> <li>About 6 months from order to successful practical test</li> <li>2 employees HAMILTON, 2 employees Perspectix</li> </ul>
<b>Users</b>	<ul style="list-style-type: none"> <li>40 in the US, 60 in Europe</li> </ul>
<b>IT infrastructure</b>	<ul style="list-style-type: none"> <li>CAD: Pro/ENGINEER, Import/Export via VRML and DXF/DWG, CRM: Pivotal</li> </ul>

### Graphically interactive plant engineering

In the new MICROLAB STAR Line configurator, the sales representative first decides for one basic type out of three size classes, which he pulls into the working area of the window. This foundation platform – exchangeable even later on should the need arise – is then equipped with pipetting arms via drag and drop. As soon as a component is attached and the mouse button released, all coverings and dropping positions are automatically adjusted. Now the desired pipetting and plate handling tools are added to each arm. "All components can be animated within the real degrees of freedom", Product Manager Roger Caviezel reports. Coverings can be shown or hidden; all tools can be moved in unison for simplified handling. With the mouse cursor over an assembly, descriptive information in text, picture, or video formats is provided. In the next step, the covering layout is equipped with carriers. In doing so, several different, pre-prepared components are pulled into the platform and docked. "To some extent digital pictures were used for complex geometries to keep the models lightweight and nevertheless provide details for visualization", showed the Product Manager. "That's how the customer associates himself with his specific task."

In parallel to this playful plant engineering, each article used is automatically added to an offer list. "By connecting geometry to prices you can continuously keep a cost overview", says Roger Caviezel. Only services and articles such as consumable materials must be added from a product catalog to generate items in the offer list. Finally, working stations are added to the configuration, and the additional space is used for placing more robots and external devices, which can be found in a graphical library. Annotations later reveal if these external devices must be purchased or are already present. "Within about 15 minutes a complex plant can thus be configured – and automatically presented in a graphically pleasing, illustrated tender", Roger Caviezel adds delightedly.

### Smart CRM connection

The sales representatives plan their activities with a CRM system, in which they find a lot of important information about their customers, the plants on-site, as well as current activities in service and maintenance. Why shouldn't this system be connected to the open configurator architecture? Via a newly created button in Pivotal CRM, P'X5 can be started directly. The master data of a potential buyer are added to the new configuration – and can then be saved and closed. With a cover letter and technical product information as attachment, the generated offer list now becomes a tender in the right currency and language.

### Enhanced strategic success position

Each sales representative is free to choose whether he directly configures the plant during his visit to the customer or to hand in the first solution proposal the following day. In any case, it only takes about 15 minutes to generate a complex plant out of 800 sales articles. "That's how the customer at once gets the proof that we have understood his requirements – and can master the complexity", says Dr. Jörg Pochert. The previously mentioned process loop via application and CAD departments can be left out in most cases – only the final version has to be drawn due to accuracy, manufacturing, and warranty requirements.

"We won't occupy new market segments using the STAR Line configurator", says Matthias DÜchting, International Sales Director at HAMILTON. "But we will convince more potential buyers during the decision phase to become customers." That's another reason why sales representatives are pretty enthusiastic about the new tool and highly motivated to work with it. Matthias DÜchting: "After all, we can underscore our sales pitch graphically with the configurator and extend our success factors – managing high product complexity and high solution capability."

#### PERSPECTIX – COMPETENCE AND EXPERIENCE

Since its founding in 1996, Perspectix AG has continually developed as a leading provider of software solutions for sales and technical project planning of variant-rich products in engineering industries. Users of P'X5 Visual Product Selling™ profit from experience in varied complementary branches: mechanical engineering, plant construction, electro-technical engineering, and logistics systems. With the unique combination of sales optimization and Product Lifecycle Management in a forward-looking technology, Perspectix is a strategic supplier for renowned manufacturers and partner of leading IT solution providers.

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