

PRISMA

The WILD Group
magazine



**FLEXIBLE AND
ADAPTIVE THROUGH
OUTSOURCING.**

▼ WILD
▼ PHOTONIC

PRISMA | ISSUE 3 • 2021

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YOU ONLY OUTSOURCE TO THOSE YOU CAN TRUST

To survive on the market in the long run, you need to be efficient and agile as a team. It is becoming increasingly vital to have the right partners on board if you want to get the best out of your product.

The WILD Group, trusted by both renowned market leaders and young startups, can contribute a lot to this. We adapt to our customers, not vice versa. This flexibility is one of our great strengths, coupled with the fact that we continuously optimise our processes and procedures to remain state of the art both in terms of technology and standards specifications. As a technology partner, we are also capable of accompanying the entire life cycle of a product from development and purchasing to manufacturing and assembly, and of delivering the necessary documentation and after sales services. In this issue of PRISMA, we present different outsourcing examples to illustrate how we solve problems or make sure they do not arise in the first place.

The art of precisely adapting to the respective customer's requirements is also a must in cleanroom manufacturing, an area where WILD recently succeeded in attracting several customers from the semiconductor industry. Benefiting from existing know-how in a new business area: this is the vision of Photonic, which plans to strengthen its focus on flow cytometry.

We wish you interesting reading,

From left to right
Reinhold Kordesch

Head of Assembly Medical Technology

Matthias Ghetta

Head of Operations WILD Electronics

Patrick Weinzerl

Head of Assembly Optical Technologies



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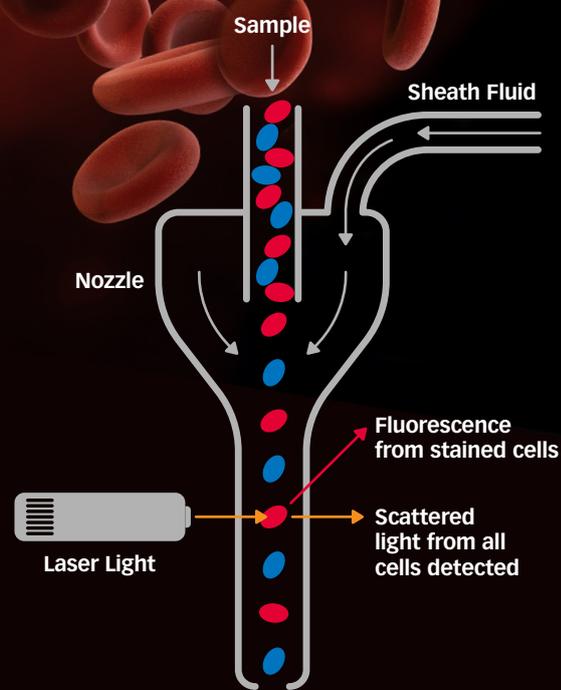
CELL COUNT AND IDENTIFICATION.

Photonic focuses on flow cytometry technology, a technology which is becoming ever more important

Today it is considered one of the key technologies for the analysis of heterogeneous cell populations, such as those found in the blood. Its areas of application have continuously expanded in recent years. Not least due to the coronavirus pandemic, demand for this analysis method has soared. This technology is flow cytometry, a technique now indispensable in basic medical research and in several other areas of bioscience research. The laser-based technology is also used in everyday clinical practice for the diagnosis of cancer, immunodeficiencies or possible side effects of treatments.

Thanks to its ability to analyse thousands of cells per second while recording multiple parameters at the same time, flow cytometry is a coveted tool in food analysis, the papermaking industry or the microbiological analysis of water quality. A measurement process that can be used for the isolation of a specific cell population and for the sorting of individual cells or particles is capable of delivering up to 200,000 events per second. How is that possible? In simplified terms, the cells are guided through a kind of laser light barrier, and the scattered light is detected and analysed.

"From a technological point of view, the illumination technique and the light detection path of a flow cytometer are similar to our projects in fluorescence diagnostics", Business Developer Gerold Aschinger explains.



THE WILD GROUP TICKS ALL THE BOXES

Due to its years of experience in optical design, dielectric filter technology and measurement technology, Photonic possesses the necessary expertise required for development or manufacturing projects in flow cytometry. "We know how to establish the ideal light mixture for the exposure or the sharp filtering of individual fluorescence detection paths. Moreover, we are well connected with suppliers of lasers and laser diodes and we have direct access to the latest developments", Aschinger stresses.

As a result of the closely integrated cooperation between optics, mechanics and electronics development, the company is capable of designing and manufacturing reliable optomechatronic systems. Photonic's expertise in the use of PMTs, APDs, and SiPM is a valuable plus in the detection of the light scattered by the cells. The WILD Group's experience in the development and manufacturing of IVD devices rounds off the required skillset. In the area of liquid handling, too, the company's in-depth expertise comes hand in hand with software design and all the required quality management processes and certifications (ISO13485, ISO9001).

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A SHIFT OF STRATEGIC FOCUS TO OUTSOURCING.

Greater flexibility, more freedom to focus on the core business and the integration of complementary competencies constitute customers' main arguments for outsourcing their production processes to WILD.

According to the latest studies, over 25 percent of German companies intend to outsource more production processes in the next five years. The reasons for this are as diverse as they are understandable. Current examples of WILD customers demonstrate how much companies can benefit from cooperating with a strong technology partner.

For instance, in order to focus more on its core competence, namely material production and development for dental medicine, a German company recently reduced its own manufacturing activities and outsourced them to WILD. "For us, this was by far one of the finest declarations of confidence", says Stephan Payer, Head of Business Unit WILD Electronics. The German company tasked WILD with the parallel outsourcing of five device types, including the specific assembly environment and the development of an adequate supply chain for these products. "These devices have been established on the market for years. One of the main issues faced by the customer was that several components were no longer available in the sourcing market, so that alternatives had to be found. By using the different production sites within the WILD Group and because we identified great saving potentials in the cost

structure behind manufacturing, we also managed to cut manufacturing costs", Stephan Payer stresses. The project team has been working on the concept since late 2019 and has developed a plan with clear timing targets. Following several weeks of training for the assembly staff at the customer's production site, the individual devices were gradually outsourced to WILD.

GREATER FLEXIBILITY

However, so much lead time is not always possible. Sometimes things have to be done really quickly. This was, for instance, the case with a medtech company on whose behalf WILD manufactures modules for PCR equipment. "As a result of the coronavirus pandemic, the customer's annual production volumes doubled and sometimes even tripled from 2019 to 2021", Payer explains. "Within an extremely short period of time, we had to determine what was feasible in terms of material supply and how we could build up or shift resources in production. Since our staff are trained on several modules and devices, we were able to use them very flexibly. Moreover, expanding our assembly lines and providing additional space was an easy task for us because we are no strangers to juggling resources."



Reacting to fluctuations in demand with a minimum of delay was also our top priority in the manufacturing of assemblies used in blood gas analysis devices which monitor a patient's lung function. "In this case, too, we managed to supply the customer with more than double the normal volume during peak times", says Payer.

OUTSOURCING OF PRODUCT UPDATES

Another medtech customer was faced with the difficult challenge of fitting a new laser handpiece to a laser treatment console already in use by its customers. In their already strained capacity situation, they were unable to cope with the additional organisational and assembly effort. "Within a few hours, we decided to accept the project despite its short notice, once again demonstrating the speed and flexibility required to solve an urgent customer problem", stresses Manfred Gallé, Head of Medical Technology Business Unit WILD GmbH. The project details were coordinated in just a few days. WILD staff travelled to the customer's production site at short notice to familiarise themselves with the product, analyse the assembly process and draw up the project plan. After that, they disassembled around 200 devices from different countries at the WILD site in Völkermarkt, installed the new components and carried

For us, it is by far one of the finest declarations of confidence when our customers reduce their own production and outsource it to the WILD Group.

Josef Hackl, WILD CEO

out the necessary tests. The WILD Group is skilled in the quick, efficient and flexible integration of complex product outsourcing projects into its manufacturing process. The technology partner does not shy away from taking on all associated tasks at extremely short notice in order to take off pressure from its customers. These tasks include adjusted commissioning systems, a stable material supply or the optimisation of existing products. The production transfer management system process also plays an essential role in outsourcing. "The respective project team meticulously works its way through well-proven checklists, enabling it to plan and implement all necessary details in the areas of supply chain, assembly, material supply, infrastructure, tools and resources, as well as training etc.", concludes CEO Josef Hackl. As a result, it is possible to rapidly and efficiently develop know-how for new products in the company, thus taking off pressure from the customer's manufacturing capacities.

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A NEW DIMENSION OF PLANNING QUALITY.

Optimised inbound/outbound logistics is closely linked to the digital twin concept, which guarantees the necessary transparency along the supply chain.

How can you design logistics structures that guarantee supply and ensure a smooth workflow along the entire supply chain under all circumstances? The WILD Group delivers the answer to this question with a digitalisation offensive in warehouse and transport logistics. New technological possibilities create particularly powerful leverage for a more flexible, efficient, and sustainable operation of all links in the supply chain.

CEO Josef Hackl explains how WILD orchestrates its warehouse management: The objective is to deliver the material to be processed as quickly and cost-efficiently as possible from the supplier to the ramp, the goods receipt, consignment control and storage, or directly to the fitter in the production facility. And, in the opposite direction, the finished product back to the delivery vehicle. To achieve this, the technology partner digitally integrates all steps in this chain in a single system and renders this process visible and steerable in real time. As a result, the physical processes and their digital twin remain synchronous. From goods receipt to invoicing, one can always find out where the parts are located in any given moment. This reduces errors in data collection and minimises the search effort. In goods receipt, WILD has introduced tablets and scanners to book materials using bar codes. This significantly reduces the workload for the staff involved.

“The objective is to deliver the material to be processed as quickly and cost-efficiently as possible from the supplier directly to the fitter in the production facility.”

Josef Hackl, WILD CEO

Yet digitalisation already begins a step before, namely with the supplier. The order record provides them with data that later triggers automatic workflows in goods receipt. It is equally important to ensure transparent data transfer to suppliers which is carried out in real time and minimises supply risks. “We take advantage of this to adjust the supply chain to actual demand in the short and medium term. By transferring the forecast, we also secure our material planning in the long run, especially in the case of increasing replenishment lead times”, says Horst Schöffmann, Head of Logistics WILD GmbH. In materials scheduling, the company is currently working on the implementation of a procurement platform that will allow for an order-related scheduling and booking of raw materials via an EDI interface. The next step in implementation is digital storage space allocation.

The most important tool in goods issue is the digitalised shipping list, which controls invoicing and delivers a digital “worklist” for packaging and shipment, as well as information on possible delays and the urgency of the shipment.

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THOROUGHLY CLEAN.

Working under cleanroom conditions is a widespread skill at WILD. As recent examples demonstrate, the technology partner is well-versed in the art of precisely attuning to the respective task and the customer demand.

Disposables for medical technology, sophisticated optics for measurement technology, laser assemblies or conveyor systems for semiconductors - manufacturing under cleanroom conditions is spread across all product groups of the WILD Group. Many such products are created along a long cleanroom chain, ranging from development to component manufacturing and packaging.

"In several cases, we are already involved in the design phase, where we contribute our expertise in areas such as the selection of the right surfaces and materials and support our customers in making their products suitable for cleanroom serial production. Tricky areas are, for instance, cavities that are difficult to clean or abrasion debris generated during assembly", says Martina Trinkel-Rudman from Business Development. For this reason, WILD defines the ideal cleaning process together with the customer already at component level. The technology partner was recently involved in the process design of a laser optics system, offering its support in optimising the cleanliness of a 3D measurement microscope.

CLEANROOM TRANSPORT

Another exciting project was recently implemented on behalf of a leading international semiconductor manufacturer. It involved a modular conveyor system used to transport or store wafers in different cassettes between processing

steps in the fab. "The customer was in charge of development. We took over procurement, cleaning, cleanroom assembly and packaging", explains Stefan Werkl, Head of Business Unit Optical Technologies WILD GmbH, who is delighted over more incoming orders from the semiconductor industry. Especially in this sector, the WILD Group enjoys a good reputation for its long-standing experience in vacuum technology and for its mechanics, optics and electronics expertise. The group's skills range from high-precision parts manufacturing and parts cleaning under extreme purity requirements to ISO 6 cleanroom assembly and final tests.

"We have an array of options when it comes to verifying the required cleanliness in the final product: these include residual gas analysis for the detection of gas emissions, visual inspections under UV light, vibration tests with a subsequent visual inspection or product-specific tests. All in all, this in-house production allows for a cohesive cleaning process that also covers packaging", Trinkel-Rudman stresses.

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GROWING STRONGER THAN THE REST.

Modern, new products are the drivers of the current surge in orders.

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The strong demand for in-vitro diagnostics modules, intensive care devices and semiconductor equipment has left all the WILD Group’s sites awash with orders. Moreover, new customers have been added in the dental sector, an area where WILD already has several years of experience. “In addition, several development orders are contributing to strong and, above all, sustainable growth. We are just at the beginning of the product life cycle with these projects, so we hope that we will be accompanying our customers for quite some time to come”, explains Wolfgang Warum, CTO of the WILD Group.

In recent years, the group has focused in particular on significantly expanding its development competencies and enlarging its technology base. For instance, it has multiplied resources in optics development and considerably expanded

its simulation competence and software development, especially for standards requirements in medical technology. Innovations within the process landscape, a focus on the special markets of additive manufacturing, endoscopy and 3D vision have also created a fertile ground for this positive development. “It’s not just about constantly improving existing skills, but about being open for fundamentally new things”, Warum stresses. “We recently experienced how coronavirus vaccines were developed in record time due to many years of fundamental research. Our close collaboration with research facilities and the constant development of new expertise as part of our technology roadmap are very similar to such fundamental research. These measures provide us with a genuine competitive edge. They enable us to offer precisely those technologies and skills that our customers need today and in the near future.”

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THE WILD GROUP

The WILD Group is comprised of the WILD brands which are established in Völkermarkt and Wernberg (Austria) and Trnava (Slovakia), as well as Vienna-based Photonic. The technology partner develops and produces optomechatronic systems for medical and industrial applications as well as optical technologies exclusively on behalf of its customers. Approximately 500 staff members are always the first choice whenever precision and reliability are called for and wherever innovation takes place.