



✦ Laser Marking Solutions  
**MULTIVAC**  
Case Study

## MULTIVAC and Videojet - two world leading brands working hand in hand.

**MULTIVAC is one of the world leaders in packaging solutions and the global market leader in thermoform machinery. Their comprehensive portfolio includes tray sealers, vacuum chamber machines, flat belt machines, quality control systems and complete turnkey solutions. The MULTIVAC Group employs more than 4,200 people worldwide, of which 1,500 are based at the German headquarters in the town of Memmingen.**

The company, which was founded in 1961, offers a unique range of expertise and pioneering know-how for customers in the food sector, industrial applications and pharmaceutical and medical industries who are looking for tray sealers, thermoform or vacuum chamber packaging machines.

Discover how marking systems from Videojet ideally complement MULTIVAC packaging machinery: For the perfect combination of speed and reliability with the security of a worldwide service network.

Both MULTIVAC and Videojet operate global businesses, supporting international customers and projects, however, their true synergy lies in the company's core values. Comprehensive support and delivering the optimum solution for each and every requirement are paramount to both companies. Thomas Marquardt, Area Sales Manager at MULTIVAC, describes a typical solution process:

"We always start from the packaging or the packaging design – and from there we develop our custom solution. This raises fundamental questions, from the packaging size through to the exact details. This also includes whether a seal must be particularly easy to open or whether the option to re-seal is important at all."

In each client-specific implementation, MULTIVAC constructs and delivers the core of the production line: the packaging machine. Additional components are selected and implemented in the modular system in line with specific requirements:

"Things always run very, very smoothly for us with Videojet!"

Thomas Marquardt  
Area Sales Manager  
MULTIVAC



**MULTIVAC is represented on all continents with more than 70 subsidiaries across the globe. Over 1,000 advisers and service engineers use their know-how and experience to support customers and ensure maximum availability of all installed MULTIVAC machines.**

for example MULTIVAC labeling and inspection solutions, but also third-party components from reputable manufacturers. The field of labeling technology – including that of Videojet – is particularly important at MULTIVAC. This is based on the fact that there are different approaches to solutions and of course different methods in the technologies: "Whatever the client needs, we can build it", claims Area Sales Manager, Thomas Marquardt. A common occurrence, as packaging machines and labeling systems often come together: An existing labeling system is connected with a new packaging machine, or the client buys the appropriate printer directly from the manufacturer. In the case of Videojet, this means reliability, efficiency and ease of use and the security of a worldwide service network.

MULTIVAC Marking & Inspection is always on the ball if a new coder needs to be employed. The subsidiaries function within the MULTIVAC Group as a competence center for labeling and inspection technology. MULTIVAC Marking & Inspection delivers and incorporates the high-quality, reliable Videojet systems in addition to their own solutions as OEM.

The third option is the open selection of the printer, as a thermoform packaging machine is connected to its coder: "We advise our clients to the best of our knowledge and belief. Our practical expertise are particularly beneficial,

especially in relation to products with which we have had particularly positive experiences. We put our trust in Videojet for exactly this reason", Marquardt sums up the customer service at MULTIVAC. It is only natural that some clients decide against a particular recommendation and often implement their own ideas for financial reasons. However, this quickly turns out to be a costly bad investment: "Some customers initially opt for a primarily low-cost printing solution which can of course appear rather financially attractive. The downside is then that we need to retrofit another printer after six months", according to Thomas Marquardt: "Usually there's hardly any print, especially at high speeds."

From a certain speed, low-budget versions no longer run cleanly and reliably enough; speed can then only be achieved at the cost of marking quality. And this is precisely where the underlying coding technology directly affects the output of the packaging machine, which must later be restricted to the capacity of the weakest link in the chain. "In short: Our machines earn you money", as Marquardt sums up the advantages in a nutshell. The focus is always to package the product volume as quickly and conveniently as possible, which requires the maximum simplicity, a high degree of automation and as little manual intervention as possible. A high-quality coding solution quickly pays for itself – initially independently of the printing technology used. This is because the technology must be selected based on the specific product



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BETTER PACKAGING



and application: "If you want to print in color on paper, this application is the classic area of an inkjet. Different printing methods are hardly practical in this case", explains Thomas Marquardt. Other requirements are best implemented with a thermal transfer printer – and relatively recently also with a CO<sub>2</sub> laser from Videojet.

Even though direct laser coding is not widely used in Germany and Europe, the advantages of this future technology from Videojet are obvious to Thomas Marquardt and are connected to additional proven benefits and further savings potential. "In a specific application, the laser labeling was the first choice for us", as he anticipates using the solution. "In addition to versatility, it was also about further aspects that we were able to solve in one fell swoop with the laser."

Flexible programmability, simple synchronization, fast changeovers and the fact that practically no consumables are needed are also key factors.

First of all, there was the requirement from MULTIVAC for optimum programmability, which posed hardly any obstacles: The interfaces to all printers and laser coders from

Videojet are rather easy to use and the systems understand a comprehensive set of commands.

While the coder can function independently, the thermoform machine and the Videojet system communicate with each other, with the packaging and marking working fully synchronously. This synchronization can be performed in various ways, with a rotary encoder in the same way as with time measurement or the digital re-delivery of the feed rate – as a result, the correct code is always in the right position on the packaging.

In addition, security considerations and the integration of the printing unit into the security circuit play an important role: On the one hand, the packaging machinery stops as soon as the laser housing is opened. On the other hand, the laser is immediately blurred if the machine is opened or stopped with the safety switch.

Extremely fast adaptation during task selection and versatility in the printed image are further advantages that distinguish the Videojet laser marking system from its rivals.

In Thomas Marquardt's experience, these are the ideal conditions for complex applications such as graphics or Asian characters.

A particular requirement of the MULTIVAC machinery was central for a client in China: having to replace minimal wear parts and use as few consumables as possible – an application that was predestined for a laser coder such as the Videojet CO<sub>2</sub> laser range.

In the same way as the advantages of the planning phase proved impressive in advance, the system also excels during operation: As with simple operation of the system and the integrated functions for quality assurance, errors in the task selection are as good as ruled out.

This makes the solution from Videojet an impressive overall package. Thomas Marquardt sums it up: "Things always run very, very smoothly for us with Videojet!"



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