



Exclusive on MULTIVAC

# Reliable packaging solution in 24-hour operation

Operating under contract to well-known brand owners, T.H.E.M. packs a wide range of different food and non-food products in 24-hour operation. The US Company has been supported in this since the middle of 2014 with a R 535 thermo-former by MULTIVAC. But MULTIVAC is more than just a machine supplier – the two companies are bound by a strategic partnership.

#### MULTIVAC MILESTONES AT T.H.E.M.

**June 2014:** Installation of first R 535 thermoforming packaging machine – a very adaptable machine used to help T.H.E.M. customer's prototype, test-market and produce at low or medium volumes. It is equipped to run PS for Snapsil and standard portion packs

**October 2016:** Installation of T 300 H traysealer – Packs non-food products in preformed PP and PS shells

**December 2016:** Installation of second R 535 thermoforming packaging machine – Packs salad dressing in 3 Snapsil portion packs, 1 multi-pack, 1 standard pack with MAP in PS.

T.H.E.M. specializes in the production of attractive and innovative disposable packs for food and non-food products. The abbreviation stands for Technical Help in Engineering and Marketing. The private company, which was founded in 1973 as one of the first suppliers of innovative packaging solutions with its headquarters in Marlton, New Jersey, has a very diverse range of activities. The company is registered with the FDA and has Safe Quality Food (SQF) certification. This means that the contract packer is among those companies, which manufacture, process and handle food to the highest possible standards.

Some of the company's most important products are stick packs for powders, paste-like products and liquids. T.H.E.M. was not just one of the first suppliers of such packaging solutions in the North American market, it has since become the leading supplier. With a total of eight lines, the company can process quantities between 10,000 units and 100 million. The spectrum of products ranges from portion packs of mayonnaise, ketchup, mustard and barbecue sauce through to packs of syrups and cooking oils and right up to nutraceutical and cosmetic products.

### A massive variety

In addition to this however, a wide range of food products, drinks, cosmetics, and nutraceuticals, THEM has opened a second facility where non-food items are filled and packed in film pouches and other packettes at an output of up to 2,400 packs per line per minute. The variety of products and packs at the two facilities is enormous, and the filling volume ranges from 1 to 70 milliliters.

The Ranch salad dressing for example is packed in units of 1.5 fluid ounces (approx. 44 milliliters), while a typical liquid plant food is packed in a weight of 2 ounces (approx. 59 milliliters) and a Bug Killer concentrate in a film pouch of 14 milliliters (approx. 0.47 ounces).

"Up to now we have not had the right equipment to be able to serve those new customers, which we wanted to gain in the market. The packaging procedure had to be changed and optimized, so that we could tap new customer potential," explains Tom Martin, Vice President and General Manager at T.H.E.M.

### Individual packs of high quality

Only small quantities of disposable blister packs had been produced up to that point. This was due to change with the acquisition of packaging machines from MULTIVAC. The initial challenge was primarily to find reliable high-output models, which could operate faultlessly in 24-hour operation and guar-



antee a high level of availability and efficiency, as well as being capable of being converted quickly to different formats. The machines also had to be capable of being combined with filling and weighing equipment. They also had to meet all the relevant

requirements on formats, pack designs, hygiene and pack quality. "We match all our packs precisely to the particular needs of the customer.

This means that we also take into account all visual and sensory aspects of the packs, as well as the functional elements such as opening aids like 'Snap & Peel', 'Snap open' and 'Peel back'," explains Tom Martin.



The packs produced on the different MULTIVAC lines use a wide range of packaging materials. The shelf life of the packaged products ranges from nine months to two years.

### Food products packed on thermoforming packaging machine

Since December 2016 a freely configurable R 535 thermoforming packaging machine, complete with gas flushing system, has been in use in the company's food packing sector. At that time, T.H.E.M. already worked with a R 535 thermoforming packaging machine that allowed customers to prototype, test-market and produce Snapsil and portion packs at low or medium volumes.

Thus, the company opted for a second thermoforming packaging machine that was purpose-built to produce five different salad dressing packages, three with Snapsil feature. The R 535 offers the highest level of efficiency thanks to the lowest possible consumption of packaging material and energy. With the most comprehensive range of equipment options on the market, the machine enables complex pack shapes to be produced at a high cycle output. The newest R 535 at T.H.E.M. is also equipped with the KPS07 interchangeable matched male-female complete cutting system with docking cart. This enables easy tooling changeover.

### Non-food products packed on traysealer

Since October 2016 in the new facility, non-food items have been packed on a highly flexible T 300 H traysealer. The smallest fully automatic traysealer available from MULTIVAC is equipped at T.H.E.M. with a MULTIVAC Tray Carrier™ System. The Tray Carriers are used as a transport system for those trays, which cannot be transported with standard systems due to their shape. They can be loaded and unloaded by means of a gripper system.

The use of the MULTIVAC Tray Carrier™ System increases flexibility and output of the traysealer with regard to processing different tray geometries. The T 300 also enables fast die change to be carried out, so that the machine can be quickly converted to other pack formats. Thanks to the IPC06 machine control with touchscreen, its operation is very user-friendly. The machine at T.H.E.M. was retrofitted with two more sets of tooling and is now able to run three different packages.

### Thoroughly successful projects

Several hurdles had to be overcome, however, on the way to success. The thermoforming project was complicated by the wide variety of different shaped packages. The precision to which packs had to be formed, automatically liquid filled, sealed and cut around the perimeter in five different designs while minimizing film waste is a feat of engineering. The resulting packages comprise a family of new, innovative, attractive and consumer-friendly salad dressing portion packages.

"The traysealing project was not that easy at all," says Tom Martin. The die design in particular, as well as the fixed delivery date and acceptance of the machines at T.H.E.M, were a chal-



lenge to the project group. The traysealer had to be matched to the specific requirements of the contract packer. "It was a completely new machine design, which had never been built in that way before", adds Tom Martin.

The VP of Operations is delighted with the very flexible and high-output machines, as well as with the excellent pack results and professional MULTIVAC service. "This company not only builds superb packaging machines and has extensive project experience, it also provided professional support at every phase of the project. No less important to us however is the fact, that our customers are highly impressed with the new products. That has also been a big success." ♦