

KMD Smart mirror machines increase productivity and performance while saving time and money © KIEFEL GmbH

KMD Smart Series for fast and efficient thermoformed-packaging production

German-engineered equipment for polymer processing at the best price-performance ratio

In times of changing demands and fast-moving markets, speed and quality play key roles in the packaging industry. For this reason, offering innovative technology solutions is crucial for staying ahead of the competition.

Advanced and robust machine solutions engineered in Germany for high-quality packaging products

Kiefel has been leading the way in this regard, a market leader in the design and manufacture of polymer and natural fiber processing machines, automation and tools. With a wealth of experience in this field, the German manufacturer has been successfully providing reliable solutions for packaging production for many years. Kiefel also offers a special series of steel rule cutting

machines with an attractive price-performance ratio named SPEEDFORMER KMD Smart, which is engineered in Germany and specially assembled in the Brueckner Group high end factory in Suzhou, China. Numerous customers already rely on these machines worldwide.

The SPEEDFORMER KMD Smart Series presents state-of-the-art features for efficient production of various types of thermoformed polymer packaging for food and non-food applications, including trays, containers, hinged boxes, pallets, blisters, lids and technical packaging. "Our fast and precise KMD Smart models allow for processing traditional, bio-based or recycled polymer materials, such as PET, PP, PLA, PS, PE, rPET and C-PET at the best price-performance ratio", emphasizes Kurt Brunner, Product

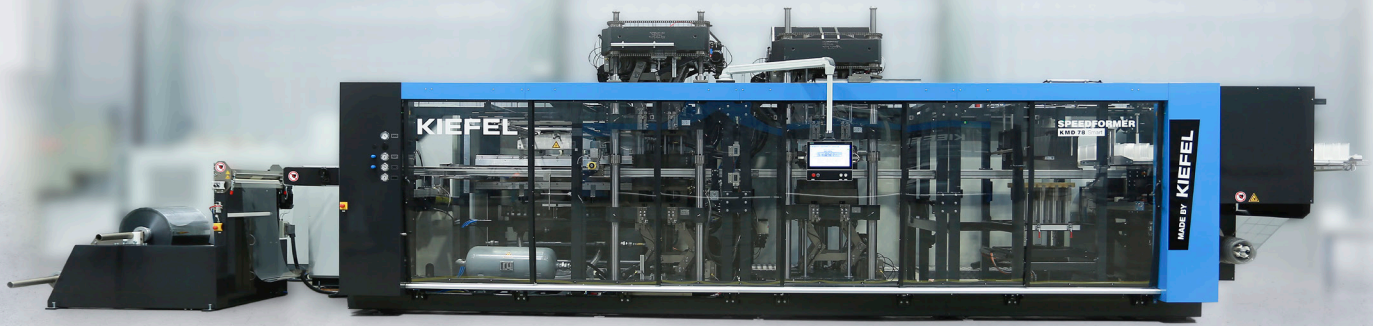
Manager of the Polymer Packaging Division at Kiefel.

The KMD Smart series offers two models to better meet customers' needs: the KMD 78 Smart and the KMD 90 Smart. The latter shares many of the benefits that the 78 model already brings to the table

and, on top of that, it offers a significantly larger forming area which results in up to 50% more output, depending on the product characteristics. Both machines have cast steel tables and yokes, and toggle drives with needle bearings which make them stand out for their longevity and robustness.



Part of Kiefel's team working next to a KMD 78 Smart machine © KIEFEL GmbH



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Furthermore, the KMD Smart Series is also available with optional CE.

Speed and high performance – key benefits of the KMD 78 Smart

The highly productive KMD 78 Smart comes with a forming area of 760 x 580 mm, a tool area of 780 x 600 mm and it can produce formed parts with a height of up to 150 mm. The machine is efficient and therefore sustainable, as an integrated infrared pyrometer provides closed-loop control to monitor and precisely adjust the film temperature and compensate for fluctuations caused by ambient temperatures. Furthermore, it is fitted with an energy recovery system.

Additionally, the KMD 78 Smart offers fast, easy tool change, which can be completed in less than 45 min, as well as quick heater production readiness, which allow customers to save time, reducing production downtime and maximizing potential income.

“Some of the key benefits of the KMD 78 Smart are its well-proven performance and process control thanks to servomotor drives for tables, plug assist, film transport, and the stacking pusher”, highlights Kurt Brunner. “This advanced technology, together with its fast, efficient heating allows for greater precision and efficiency throughout the production process, resulting in high-quality products and leading to a high production speed of up to

40 cycles/min”.

Customers can also benefit from Kiefel’s patented “Kiss-Cut” technology provided by tension bars at the cutting station. This system ensures the highest quality cutting results, extended knife lifetime, reliable stacking, and minimized labor costs. Moreover, its user-friendly HMI equipped with a touch screen and reliable functionality enables convenient operation while its fully automatic lubrication facilitates machine maintenance.

Versatile machine with customized stacking solutions and easy maintenance

“Stacking is the next step towards automation. This not only saves time and money but also improves overall efficiency. Proper stacking techniques can lead to significant cost savings eventually, making it a valuable investment for any business”, says Kurt Brunner.

The KMD 78 Smart is a versatile machine that can be adapted to customers’ production requirements, offering a high level of flexibility for downstream automation thanks to its three efficient stacking solutions. One of these is the Up-Stacking system, which is widely used in the industry and offers high-speed production with its two-level stacking and safe ejection. Additionally, its stacking height only depends on the product being processed. Another solution offered by this

machine is Down-Stacking, which offers an ergonomic unloading height for products, a large in-line product buffer on the conveyor belt, and cost-effectiveness for part-specific equipment as well as stable stacking facilitated by vacuum support. Last but not least, the

Pick&Place Inline is a very reliable solution with functional features, and is also available as a dual stacking system, allowing an existing up-stacking tool to be used and offering the highest staking speed.

Variety of high-quality polymer trays © KIEFEL GmbH



PET tray produced on the KMD 90 Smart © KIEFEL GmbH

