Application example

Tightly sealing stand-up pouches and sealed-rim bags

Task
Prefabricated stand-up and sealed-rim bags must be sealed tightly with a top seam after filling. Adhesive residual product in the sealing area must not impair the sealing quality. The head seam’s appearance should match the edge seals created during prefabrication as closely as possible. Very easy serviceability and fast changeover times for a tool change are just as necessary as reliable and reject-free production at the highest possible cycle rates.

Solution
Telsonic has developed the stand-up pouch high-performance sealing module for sealing head seams after filling bags. It works with an ultrasonic frequency of 30kHz at max. 2.4kW power. The compact, digital MAG generator can be integrated into any control cabinet. The modular and space-saving design of the stand-up pouch module allows it to be easily installed in virtually all filling lines. It is powered by a cranked or pneumatic servomotor. An innovative quick-change system for tools ensures extremely fast changeover times and self-positioning of the tools.

Advantages of this configuration
The modular and space-saving design, combined with clearly defined interfaces, makes the stand-up pouch module ideally suited for retrofit applications. Thanks to innovative positioning and location centering of the tools, changeover times are reduced to a minimum. The servomotor-powered infeed movement via 2 x 90° crank drives enables production rates of up to 70 cycles/min. with a max. sealing force of 1,850N. The stand-up pouch module is suitable for sealing and cosmetic seams for bag widths of up to 200 mm. Cooling devices for the sonotrode and anvil, together with the MAG generator and its highly dynamic control characteristics, significantly help to achieve high process stability and reliability.