

# V-Pump

Unique belt-wide piston pump



- Higher product quality
- Up to 5,000 kg per hour
- Virtually no loss of raw material
- Very low cost of ownership



The V-Pump introduces a new high volume pump concept, producing up to 5,000 kilos of high quality convenience products on one system. Core of the new technology are two alternating belt-wide pistons, delivering a uniform pressure to the forming unit, moving the meat mass over a small distance with a minimum of pressure. This retains the original meat structure and texture as much as possible, an important factor for a good bite and attractive mouth feel.

### From meat to burger in a single foot

Traditional pumping of meat with an auger, via piping and using vacuum and higher pressures, leads to more shear and friction, more 'damage' to the natural meat structure. In the V-Pump meat mass is gathered by gravity only, right on top of our highly regarded RevoPortioner. The distance it travels under pressure into the rotating drum of the RevoPortioner is very short: only 30 centimeters.

The meat passageway is completely auger-free. The width of the piston is as wide as the forming drum. Meat does not have to be spread horizontally in a manifold and vacuum is not needed. Friction and shear are avoided. The pressure applied is low: All these features help retain the original meat structure.

### Execution: durability, simple design and low maintenance

Other key factors of the V-Pump are durability, stability and ease of operation. The construction is robust and there are few

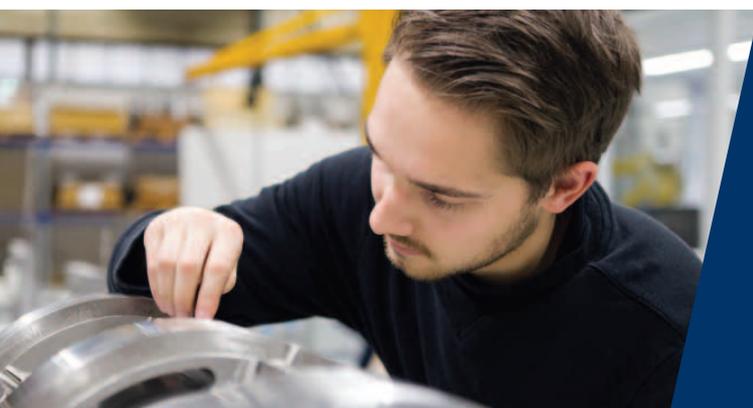
moving elements, leading to low maintenance costs. There are no complicated electronics, vulnerable electric drives or servo motors.

The V-Pump is a straight pneumatic pump, which any technical department should be capable of servicing. Perfect accessibility for quick and easy cleaning helps keeping the cost of ownership extremely low.

### No waste

A production process including the V-Pump and RevoPortioner is very stable, clean and consistent. There is virtually no loss of raw product (less than 0,3%), no downgrades and no rework.

All valuable raw materials are used. Reducing waste is attractive not just from a financial point of view; it also makes the best use of scarce natural resources.



*Marel is the leading global provider of advanced equipment and systems for the fish, meat and poultry industries.*