

# A NEW CLOSURE DESIGN FOR THE CIRCULAR ECONOMY

Our modern packaging industry must respond to consumer demands and EU guidelines. There is growing concern that our reliance of one-use plastics significantly contributes to environmental degradation. This calls for a concentrated effort towards recycleable and monomaterial packaging.

Current production processes are not up to this task. Our use of multimaterial spouts and pouches requires sealing machines to employ temperatures of up to 200°C. Without additives and machine retro-fitting, monomaterial pouches begin to take damage once the sealing process exceeds temperatures of 130°C.



It takes high levels of energy to bridge this 70°C gap, as a considerable amount of heat disperses ineffectively during this process. This often affects components negatively. While additives lower the sealing temperature, they also lessen the strength of adhesion between spout and pouch.



130 °C



Mono polyethylene  
(200 mu & 110 mu)



sealing at 0,5 sec., 200°C  
**VISIBLE DAMAGE**

**MENSHEN OFFERS AN ELEGANT AND EFFICIENT SOLUTION TO THIS PROBLEM:**

## **THE MENSHEN – LoTUS™**

Due to its unique design LoTUS™ foregoes the need for additives. The welding process for the monomaterial spout happens with a far more efficient energy distribution. This significantly lowers the risk of damaging the pouch.

The bonding process between pouch and spout can be completed with little to no adverse effects to the product.



### **THE RESULTS SPEAK FOR THEMSELVES.**

With its efficient energy distribution during the welding process, LoTUS™ lets you fulfill pressing EU guidelines. It also allows you to meet customer demands for a more sustainable and environmentally friendly packaging solution. All of which culminates in a smoother, more appealing consumer item.



Mono polyethylene (200 mu & 110 mu),



sealing at 0,5 sec., 200°C  
**NO DAMAGE**

### **THE SWITCH IS EASY: MENSHEN-LoTUS™**

- Stable production process without additives
- Improved sealing quality due to more efficient energy distribution
- Suitable for different thickness, applications and both PP & PE
- Adapting existing machinery to LoTUS™ does not impact capacity
- Dedicated expert weld-spouts team at the Center of Excellence to support you throughout the process of switching to LoTUS™

