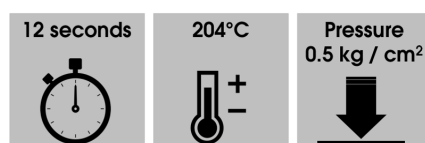


Heat sealing

- For optimal sealing results it is crucial that all parameters are set correctly and checked frequently.
- What is the aim of heat sealing transponder patches or labels? The aim is to obtain a lifelong attachment of the product on the garment which is wash resistant in even the most severe washing processes.
- The application can be done without any great effort such as sewing by using manually or pneumatically operated heat seal machines.

Technical advices



- The Standard Advised setting for heat sealing transponder patches is 204 °C. The set temperature is critical because it is needed to allow the glue to become fluid within a reasonable time frame.
- The set time is critical because the fluid glue needs that to flow into the textile. The Standard Advised Time Setting is set to 12 – 14 seconds.
- The Standard Advised Pressure setting is critical because the glue must be pressed into the textile, so it can attach into the textile optimally. The standard advised inter-plate pressure on the heat seal press must be 0.5kg/cm² which usually corresponds to 4 to 5 bars of input air pressure on a pneumatic heat seal press (warning, the conversion rate between input air pressure and inter-plate pressure depends on the heat seal press so check your specific user manual). Manually operated machines cannot be set to a controllable pressure setting. The pressure can be visibly monitored at checking that the upper and lower platens close firmly together on the whole surface without a gap between them. When a sheet of paper is placed in between, it should be held firmly when the press is closed and not be able to be pulled from between the upper and lower platens.

Please note:

- Heat sealing should be performed on clean and dry items. Heat sealing on soiled and wet items can be done if the position that needs to be labelled, is dried under the heat seal press until all moisture is evaporated. After this, the label can be placed and heat sealed, following advised instructions. Using this method can lead to fixation of dirt and other undesired substances into the textile.
- Barrier textiles need extra attention. Due to the nature of the textiles i.e. developed to prevent matter from passing through it, the application of transponder patches can be a challenge. The advised procedure is of a general nature which can differ from type of barrier textile.
- An extra cycle with pre-heating the barrier textile for 7 to 10 seconds can amend any adhesion issues. Position the transponder patch immediately after pre-heating and seal it into place.
- For specific settings, it is advised to test before starting any production, to establish what the optimal heat sealing settings are for individual types of (barrier) textiles.
- Most issues when sealing labels or transfers are caused by not following the instructions provided or by malfunctioning of the heat seal press.