

Correct fusing: The gateway to success

According to interlining suppliers most of the garment manufacturers are only guessing when it comes to set the right parameters of speed, temperature and pressure. This can lead to a number of problems, which can at least spoil the entire production of one working day by:

- Damaging the fabric
- Deformation of fusing goods
- Insufficient bond strength
- Loss of productivity
- Loss of customers and buyers

Today's challenge in fusing is caused by:

- More delicate fashion fabrics and interlining
- Fabrics are generally finer and lighter
- More sensitive to temperature and pressure
- Higher tendency to shrink under temperature
- Risk of easier strike back or strike trough
- Wide range of different interlining and fabric combinations
- Impact on fusing by textile finish and softeners

Some rules have to be accepted for the fusing workflow, as i.e. speed cannot substituted by temperature or vices versa. Pressure has to be used carefully, as many fabrics today are very pressure sensitive. The fusing equipment itself has to be reliable:

- By a precise and effective heating system
- By a sensitive and exact pressures system
- By a strong machine design
- By safe function of all machine components
- By easy maintenance and service

Indicated temperatures on the control panel are always belt temperatures and should not mixed up with the glue line temperature, required by the interlining suppliers.

How to check temperature and heating system of a fusing machine ?

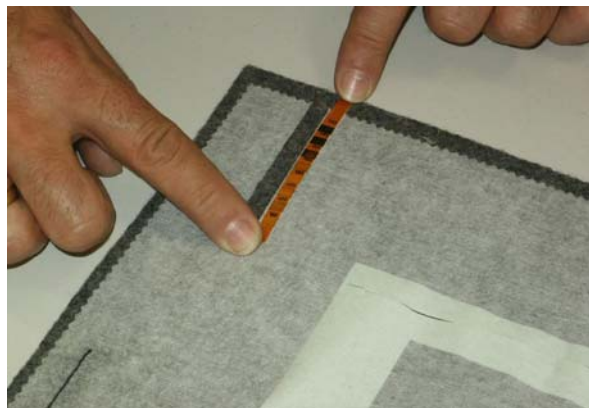
Most suitable for a temperature test are the well-known paper measuring tapes. The measured temperature between the belts (without fusing material) at medium machine speed should be in accordance with the temperature reading on the thermostat.

In case of a separate digital temperature reading it should, after heating up the machine, indicate exactly the temperature setting. The easiest way to test the glue line temperature is also by using the paper tapes. Therefore place the measuring tape face down to the fabric for an accurate reading and result.



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Read the glue line temperature above the black field. If a field is not black, but shows any grey colour, the temperature is somewhere in between two temperature indications.



Problems with fusing are not only a matter of bonding anymore. The soft handle after fusing and maintaining the structure of the fabric surface is as important for the buyer.

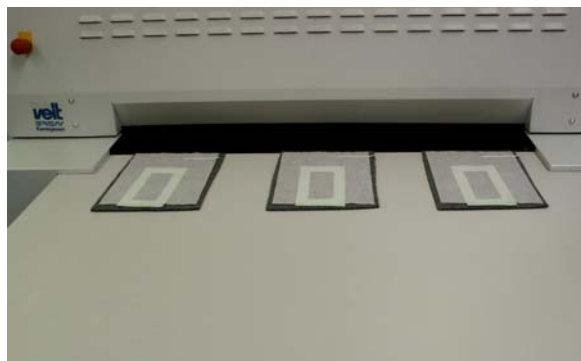
In most of the cases a large number of faulty parts are involved when it comes to fusing problems. This can lead to a major loss of fabric and interlining as both parts have to be re-cut. Following by the question of how to manage the fabric and interlining organisation and what to do with the following operations after fusing to avoid a complete stand still of the production.

Regular tests have to be done, before and during the production. Little impacts like different colours can have a lower bonding as a result.

Well organized and trained staff is needed to achieve a maximum fusing quality by reduced risk of miss fusing. Documentation can help avoid repeating tests which have been done in the past already.

The key to success is the fusing machine itself. It should be easy to be set and absolutely reliable. Even temperature and pressure is as important as the right settings provided by the interlining suppliers. To test the evenness of the temperature and pressure system of your fusing machine, just simply prepare some samples which has to be fused at the same time.

The complete test can also be done to check the left, centre and right side of the machine.



It should be clear for everybody that only authorized staff should do changes on parameters. Advanced fusing machines offer a separate access code to do program changes.

Cleaning the fusing machine is a must and should be done regular, at least once a day in the evening before the machine is shut off. To do so, only 15 min a day are required. Dirty machine bets can increase the risk of stains and spots on fabric. Never use sharp tools to remove dirt from the belt. Once the belt surface is damaged, the entire belt has to be replaced in a short time.