

Comprehensive Seam Sealing Tape



Pursuit of Excellence with HiMEL

For users of HiMEL Products
by HiMEL TECHNICAL SERVICE CENTER.

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◆ **What is Seam Sealing Tape?**

Seam sealing tape is a thermoplastic adhesive film applied to sewn seams of fabrics to prevent water from leaking through the seams. It can be applied by using any of the commercially available hot air taping machines, laser or ultrasonic machinery.

The products like mountain wear, skiwear, motorcycle wear, golf wear and tents are mainly produced using waterproof, wind proof and breathable fabrics.

Those fabrics themselves are coated by P.U. or P.V.C. to prevent from leaking of water. But in the course of manufacturing apparels there must be tiny seam holes which will let leaking through of water.

Using seam sealing tape ,in that case, we could accomplish perfect waterproof.



◆ HiMEL Seam Sealing Tape is,



- HiMEL is producing various seam sealing tapes according to customers' need.
- HiMEL tapes are being tested strictly at HTSC for durability and suitability in every phase of production and we continue to perform periodic testing to verify consistency of quality.



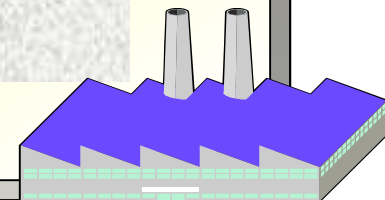
- HiMEL provides best working conditions with your fabric and HiMEL tape.
- Based on the accumulated data and technical knowhow more than 20 years, HiMEL could offer best solutions for your functional fabrics and clothing.



◆ How to store Himel Seam Sealing Tape



- 1) To maintain the highest adhesive strength, please avoid to store the tapes in the humid and high temperature place.
- 2) Please keep temperature below 18 °C(64.4 °F) and humidity below 85%
- 3) To prevent any chemical reaction please store tapes in the dark and ventilated place.
- 4) Before using please keep the tapes in a good package state, in the production line please place them in the inner box.
- 5) When using the tapes please follow “First-in , first-out” method.
Generally, the expiry date of seam tape is one year after produced date.



◆ Before using seam sealing tape



- 1) Please clean the coated surface of fabric and edge part of cutter before you cut the functional fabrics.
ex) Check pollution on the edge part of cutter, lower part of cutter etc.
- 2) Please do not use sewing thread too much soaked in the silicon oil.
- 3) Please always keep the sewn part clean(Extra care needed for contamination from sewing machine oil)
- 4) Before start main production please do sample testing for seam sealing.

★Though the HiMEL tapes are fully tested before shipment, tapes might be varied according to the conditions of factory site . So the special care written above is required . Thank you.

◆ How to test after seam sealed



When taping is well done you can pull the tape and see the coated surface is coming off from the fabric. If this does not happen, you should higher the temperature or down the speed of machine or give a little bit more pressure.

Please try to fix the condition repeatedly until you get satisfactory results.

Actually there are various coating method according to the fabric manufacturers, even in the same fabric we can see often the inconsistency by producing lot.

Due to this, there is possibility that the coated surface is not coming off from the fabric while the tape is well done. Also you can see tape is not adhered properly even in the good fixation of working condition.

In this case please ask to HTSC.

Please make a record of the best working condition and adjust machines to it's best condition on every 2 days.

It is highly recommended to fix every taping machines to best working conditions individually, since the taping conditions are not always same even in the same machine model.

◆ Best fit with HiMEL Tape & seam sealing Machine.

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Be sure to fix machines at best working condition adjusting temperature, speed and pressure.

ex) Thin fabric

Machine model : HTM – 3588, HTM – 3600, HTM – 3500

Tape model : HU – 005, HRP = 500, HU – 1000, HU – 1000W, HU – 1000LW

Working temperature : 400 °C ~ 450 °C

Working speed : 6m/ m, in

Roller pressure : 5kg/ cm

Heater pressure : 1kg/ cm

ex) Thick fabric

Machine Model : HTM – 3588 , HTM – 3600, HTM – 3500

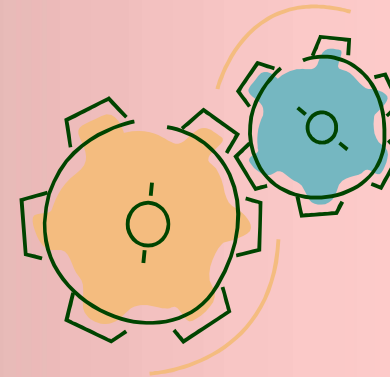
Tape Model : HU – 1200, HU – 1200W, HU – 1200LW

Working temperature : 450 °C ~ 500 °C

Working speed : 6m/min

Roller pressure : 5kg/ cm

Heater pressure : 1kg/ cm



Please refer to the above standard and set your machines at best working conditions.

◆ In case of trouble (A)



Cases below are made based on the problems and solutions which had been faced and overcome by our customers.

We have collected those solutions through the years and will keep going to do help our customers.

Please advise us if you have any other problems and solutions so that we may improve and enlarge the list.

Problem	Cause	Solution
Taping doesn't work at all	Tape is rolled reversed Wrong tape, Different type of tape Wrong adhesive condition	Roll reverse – Inward the glue part Ask help to HTSC Follow maker's instruction
Adhesive strength is not enough between fabric and tape	Speed is too high Temperature is too low	Lower speed Higher temperature
Tape is adhering to the upper part of roll	Tape is rolled reversed There is residue glue on the roll Weak link of roller	Roll reverse – Inward the glue part Clean the roller Adjust the pressure of roller/Rearrange
Puckering on fabric after seam sealed	Miss choice of tape Error in auto feeding tool Excessive pressure on roller	Select the right tape to the fabric. Check the auto feeding tool. Adjust the pressure .
Edge or center of tape is not adhered properly	Wrong arrange of air nozzle Humidity or oil around the air hole Contamination on tape or fabric.	Arrange nozzle Check air tank and filter everyday Clean the contaminated parts.

◆ In case of trouble (B)



Problem	Cause	Solution
Tape is torn at the seam line	Roller pressure is too high, wrong tape	Lower the roller pressure, change tape
Tape is burning/ Burnt or melted fabric	High temperature/Low speed Wrong arrange of nozzle	Lower temperature/Higher speed Lift a bit the nozzle upward
After taping, tapes are stick together	High temperature/Low speed Folded fabric before tape is cool down	Lower temperature/Higher speed Handle it after cool down enough
Leaking at the crossing point	Roller pressure is low High temperature/Low speed	Higher pressure Lower temperature/Higher speed
Leaking in the middle	Low speed/High temperature/ High roller pressure	Higher speed/Lower temperature/Lower roller pressure
Tape is winding on the roller	Glue contamination Tape is cut too long Tape is set reversed Residue of glue in roller	Clean Tape length should not exceed the roller cutter Set tape correctly Clean
Tape falling down after washing	Not proper washing/ Weak adhesive strength	Contact HTSC
Fail for leakage test	Weak adhesive strength	Contact HTSC
Bubble on the tape	Water or oil around the air hole	Clean the air tank and filter
Loosen tapes	Fabric is too much stretched Sticking on the auto feeding tool Tape is not coming out well from the roll Roller pressure is low	Lower tension Clean/arrange of auto feeding tool Arrange the roll Higher roller pressure