

Large area lamination with hot melt adhesive film requires attention

Detail Introduction :

Hot melt film has been widely used in various industries today, but it is mostly used in large area lamination applications, softening fabrics, rolls, plates, etc. These occasions are particularly high demand for hot melt film which often has a certain wide demand.

When laminating a large area, the operation of hot melt film composites requires attention to some key matters to ensure the completion of quality and quantity of composite, so which specific items?

First, the most important thing is the laminating temperature, that is, the temperature provided by the machine to heat the hot melt film to make it dissolve. This temperature can not be too low and not too high. Too low a temperature will lead to the film not being fully melted. Too high will lead to permeable glue and other problems. It is worth noting that many laminating hot melt film machines and equipment show the set temperature, and the surface lamination temperature is inconsistent. So it is recommended that you use a non-contact temperature gun to measure the actual contact surface temperature to determine the exact value of the laminating temperature to regulate.

Second, the process of hot melt film lamination also needs to pay attention to the maintenance of the laminating time, on the one hand, the heating time, and the cooling time. We need enough time to melt the hot melt film during the heating process and enough time for the hot melt film to flow and penetrate the surface of the bonded material to produce a good bond. Of course, time is not the length. The better the time control will also lead to composite products after the permeable glue and other phenomena. After compounding, we need to have enough time to make the hot melt adhesive film cool. After waiting for cooling, hot melt adhesive film can play a role in bonding.

Third, the hot melt film lamination process requires a certain amount of pressure, often overlooked. The pressure needs to be controlled within a certain range. Too much pressure will lead to the hot melt film and the adhesive layer being extruded. Too little pressure has not played a good role in the composite. In addition, because some materials (such as metal, wood, etc.) have their thermal stress, lamination and then cooling will produce deformation. And the hot melt adhesive film can not form a good bond before complete cooling.

this kind of material also needs to involve a cold-pressing step.

The above three points, temperature, time, and pressure, are the three necessary elements of hot melt film lamination for composites and are indispensable process parameters that must be regulated. I hope you have a deeper understanding of the hot melt film lamination process through the above elaboration.

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