

Seam designs for joining fabrics by means of gluing technology with the Ultrasonic Bonding Machine JAG 4796-2-

The following seam designs for manufacturing clothing and similar application demand depending on the design 1 – 3 gluing process. Depending on the kind of process like flat gluing, edge sealing or cut-welding, different rotating sonotrodes are necessary that means different machine configurations.

Special guiding units with integral gluing and cover tape feeds for the different seam designs are a necessity for such application besides state of the art ultrasonic technology with rotating sonotrodes and application optimized anvil rollers and anvil belts.

Depending on the kind of gluing tape, that is activated by heat and the covering tape, if necessary, the glued seams are very elastic and thin.

1. Simple overlap seam, 1 process

For this application the cut out fabrics pass between sonotrode and anvil. A guiding unit defines the seam width and feeds the gluing tape.



2. Simple overlap seam with one sealed fabric edge, 2 process

In a first step the edge of one fabric is cut and sealed with ultrasonic. For this purpose a steel sonotrode and cutting wheel is necessary.

The second process is the same as described in point 1.



3. Simple overlap seam with two sealed fabric edges, 3 process

In a first and second step the edge of the two fabrics are cut and sealed with ultrasonic. For this purpose a steel sonotrode and cutting wheel is necessary.

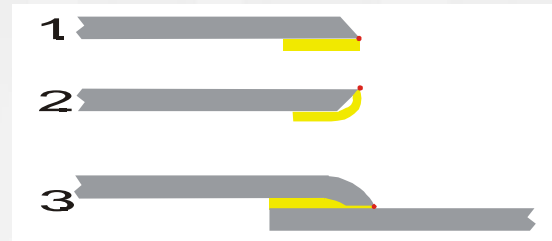
The third process is the same as described in point 1. ^



4. Simple overlap seam with closed cutting edge, 2 process

In a first step the edge of one fabric is cut and sealed with ultrasonic. Simultaneously the gluing tape is fed and bonded with the fabric edge. For this purpose a steel sonotrode and cutting wheel is necessary.

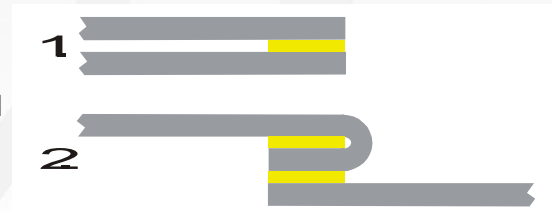
In a second process the gluing tape is turned over to bond the two fabrics and the cutting edge.



5. Folded and twice glued overlap seam, 2 process

In the first step the two fabrics are glued along the edge.

In the second step one fabric is turned over and glued a second time. An additional gluing tape is fed.



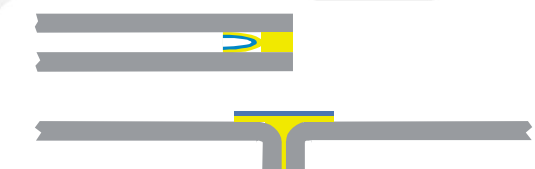
6. Folded, simple overlap seam, 1 process

In one process the fabric is folded and glued with the second fabric.



7. Covered and folded seam, 1 process

In one step a folded cover tape with glue coating and a small gluing tape are bonded between the two fabrics along the edge. Subsequently the bonded fabrics are unfolded.



8. Twice covered overlap seam, 1 process

In one step a upper and lower cover tapes with glue coating are fed in addition to the gluing tape and simultaneously activated.



9. Twice covered side by side seam, 1 process

In one step a upper and lower cover tape with glue coating are fed to the edge to edge guided fabrics and glued simultaneously.

