

Hand Trials

An important tool at Beckmann Converting at every stage in the development of your program is the "Hand Trial".

The primary goal of the Hand Trial is to determine if the laminate design you have created is bondable using ultrasonics. If successful, customers often use their hand trial samples to show their customers what is possible and sometimes to try downstream converting processes. Under certain circumstances, hand trial samples are appropriate for undergoing various end use performance tests to gain additional insight on the laminate.

We run all hand trials directly on our production equipment, not on laboratory research and development rigs. This approach gives us and you more confidence that your laminate design is bondable using ultrasonics and that it is scalable to production. You also get to see the exact bond point patterns as they would appear on production runs of finished product.

A typical hand trial results in delivery to you of between 3 to 6 samples run on a single roll pattern. If 2 or 3 different roll patterns are anticipated to be effective for a particular laminate and end use, we may be able to run a hand trial on each pattern roll so you can compare them during your evaluations.

The characteristics and performance of hand trial samples may be very different from what is achievable through an optimized production process. Hand samples are run at very slow machine speeds, and they are pulled through the ultrasonics section of the machine by hand. The quality of finished product in automated production is always better than what can be achieved in a hand trial. Caution should be taken when interpreting results of hand trials, especially when performance testing is done. The staff at Beckmann Converting can assist.

Hand trial sample sets are approximately 12" in cross machine direction by 20" in machine direction. We like to start with 6 to 10 sample sets of each laminate variation. One or more sets are utilized to adjust the machine settings until a good bond is achieved. Each hand trial sample is labeled with date of the trial, the customer's name, the materials involved, and the bonding technology used.

We prefer that our customer prepares the hand trial sample sets and labels them in detail. This is particularly important when one or more of the layers involved have specific sides that need to be oriented in certain ways to adjacent layers. Alternatively, we can take in short rolls of 4 to 6 yards of each material and prepare the samples at Beckmann Converting.

Beckmann Converting has eight different roll patterns available that are appropriate for different materials and different laminate end uses. Our staff will work with you to determine which roll pattern or patterns may be best to use. You can refer to the Virtual Swatchbook on our website for more details about each of the roll patterns available.

Normally there is no charge for a simple hand trial involving one or two different roll patterns and 3 to 5 samples each. Once agreed upon, the hand trial would be run the next time the desired roll pattern is mounted in a laminating machine.

Expedited services are available for hand trials and are charged on an hourly basis. If one of our current production jobs can be interrupted and a temporary roll change can be accomplished, we will estimate the number of hours it would take to mount the desired roll, execute the hand trial, and then return the production run setup to its operating condition. A purchase order would be required before the hand trial would be scheduled, and payment by credit card is preferred.

Charges may also apply for hand trials when more than a few sets of samples are required for a customer program. This could be driven by the need to provide samples to customers, or for more extensive testing of the hand sample laminates. These are also charged on an hourly basis with credit card payment preferred.

Beckmann Converting will provide a formal quotation including the hourly rate and the number of hours anticipated based on the hand trial plan. You would only be invoiced for the actual hours used in the trial.

For all hand trials, we ask for a UPS or Fedex account number along with guidance as to what level of expedite service to use to ship the hand trial samples to you when they are completed.

Call 518-842-0073 x 615

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