

CAKE BAG 101: Can You Save Money Applying Radius Compound with a Bag?

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More and more of our 2121 Radius Compound customers are using cake bags to apply the material. They swear by them, perhaps preferring to use a rifle instead of a shotgun to apply the material or just enjoying the material savings. The intended use of cake bags would seem to be pretty much an art form. So we conducted several studies to try to put a small degree of science into the growing composites use of cake bags.

Q. We use a quart of radius compound in a cake bag and extrude a ¼” bead. How many feet of tight radii will this cover?

A. You can plan on a ¼” bead covering approximately 100 feet. We do agree with your use of a quart of material. It makes addition of the correct amount of MEKP, well, a “piece of cake”. And the fact that it should cover 100 feet is a great planning and control benefit.

Q. We have been applying radius compound with cake bags for a while now, but there seems to be a significant part to part variation in the amount applied. How can we solve this problem?

A. Our studies show that exactly where the bag is cut makes a huge difference in both the bead size and flow rate of the material. When the cut is made by eye on the production floor, the inherent variation makes it very difficult (perhaps impossible) for the operator to compensate and apply the intended amount. We suggest precutting the bags using a template. This can be done in an office setting by a person with minimal training. The length of the cut from the inside of the bag heat seal to the opposite folded edge should be 3/8” in order to achieve a ¼” diameter opening. At least initially a ¼” wood dowel can be used to verify that the cut length is accurate.



Q. Will using cake bags slow down our application time?

A. Most likely, no. Our studies indicate that a ¼” bead is extruded at approximately 3 grams per second. Based on one quart of 2121 which weighs 2.55 pounds (1,158 grams), it will take 6.4 minutes to empty the bag. This is a reasonable time given the 18 – 24 minute gel time of the material and the necessity of going “wet on wet” with the skin lamination.

Q. Currently we apply radius compound with paint brushes. Will cake bags eliminate the need for brushing?

A. Probably not. Of course it will depend on the skill of the person using the cake bag. But in our experience even the most skillful person will miss a beat because of inevitable air pockets in the bag or when shifting positions. A person following with a 1” paint brush can push the bead firmly into the radius and, where necessary, redistribute the material from high spots to low spots. However, you should notice a reduction in the material used per part because a bead of material focused on the radii makes a lot more sense than a smear in the general area.

Have we answered your question about radius compound application with cake bags? If not, please go to our website (www.arjaytech.com) and submit your question via the Contact Us page. We will make it a priority to get back to you quickly with an email response.