



Testing the speed and finish of the Evolution3™ SmartFold vs cutting by hand

PVC foam board cutting test

The material and cut sizes were the same for both the hand and Evolution3 cutting tests.

Material: 10mm (0.394") thick PVC foam board was cut into 6 pieces of 600mm x 800mm (23.622 x 31.496") boards from a 2440mm x 1220mm (8ftx4ft) sheet.

Cutting by hand

Equipment: For hand cutting we used a hand knife and a Safety Straight Edge. Although we know that many users simply utilise a steel rule, we wanted to ensure finger and hand protection.

Completion time: the boards were completed in 43 minutes 54 seconds.

Quality: The finish was very poor; the cut was not always clean. The process resulted in dust and debris which will stick to other materials and can be damaging to expensive printing machines in the workshop.

Cutting with the Evolution3

Equipment: Evolution3 SmartFold

Completion time: the boards were completed in 10 minutes 50 seconds.

Quality: The finish was clean and precise, and the boards were identical. There was no dust or debris to clog printer heads or stick to other materials in the workshop, and it was completed safely.

Results:

The Evolution3 was 4 times faster than cutting foam board by hand.

The boards were perfectly identical and finished cleanly.

There were no mistakes and so no waste.

With no dust or debris, expensive workshop equipment was not compromised.

The design of the Evolution3 ensured user safety.

The cutting required minimal effort making it a comfortable and easily repeatable task.

Banner Material test

The material and cut sizes were the same for both the hand and Evolution3 cutting tests.

Material: A large sheet of vinyl banner material was cut into 2 pieces of 600mm x 2000mm (23.622" by 7.8740").

Cutting by hand

Equipment: For hand cutting we used a hand knife and a Safety Straight Edge. Although we know that many users simply utilise a steel rule, we wanted to ensure finger and hand protection.

Completion time: The banners were completed in 6 minutes 15 seconds.

Quality: The quality was poor, and the possibility for mistakes was high.

Cutting with the Evolution3

Equipment: Evolution3 SmartFold

Completion time: The banners were completed in 4 minutes 11 seconds.

Quality: The finish was clean, precise, and easily replicated.

Results:

The Evolution3 was 1.5 times faster than cutting banners by hand.

The clear advantage was that the banners were perfectly aligned and cleanly finished.

Replication of identical banners was easy.

There were no mistakes, so no waste.

The Evolution3 ensured safety with no risk of a blade slipping and causing injury.

Date of testing January 2022