PINT Solution For Trade Mark and Applique Cutting

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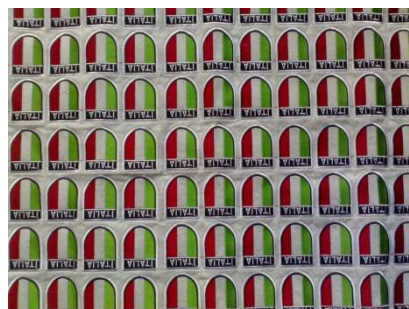
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Overview

It is a common processing to cut the printed trade mark or embroidery applique in the garment manufacture (like the sample shown in right image). It is the competing focus among the cutting machine factories to improving the automation level.

Most of the current solution of this cutting work is using a camera to catch and match the image pattern installed besides the knife or the laser tool. After finding a pattern, the cutter will go and cut it right away and go for next. While the damage will happen if the pattern matching are not good and the damage ratio can be very high. And it won't work for some kind of tasks in which the images are not suit for computer calculation at all.
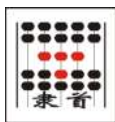
For example, the following image shows a bad case for the image processing. Other samples like reflective sequins and so on are also causing issues when being processed.

Our company developed a different solution for the trade mark and applique cutting basing the core-module of PINT. By a camera installed above, PINT can take a photo with the whole cutting plane of the machine and try to find each position of the patter piece automatically. Before printing to the cutter, operator can check the result of the auto-processing and do some editing to move or even to edit the outline. For those unfound pieces, operator can put the pattern pieces manually basing the image background. By this way, the damaging ratio can be minimized.

Principles Of The Solution

1. About The Camera

    a) PINT uses the civil camera witch has better cost performance. We recommend the entry level DSLR.

b) The camera will be fixed above the cutting machine (800~1000mm), and connected to the computer by cable line so that we can take photo by software directly.

c) PINT supports to take photo within itself for some models of camera. For other cameras, PINT will read from the image file taken by other software.
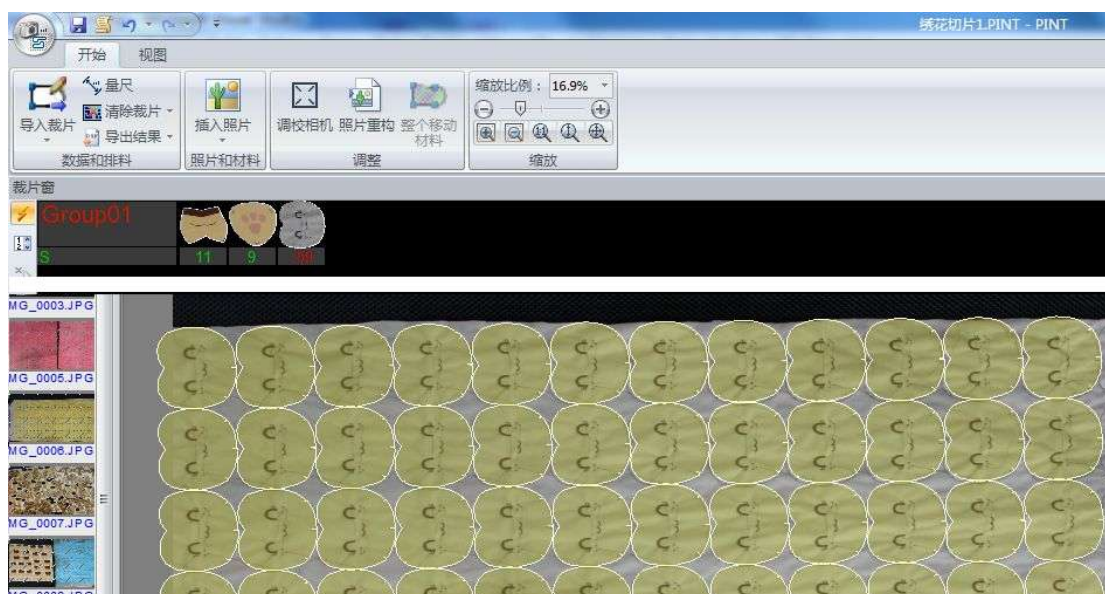
2. Camera Adjusting

a) Adjusting is required for that the camera lens has distortion and the installing position of the camera must be matching with the cutting machine.

b) Adjusting is done by a photo of a predefined frame which is cut or drawn on a paper.

3. Preparing Matching Pattern Block

a) Pattern Block contains the out block to do cut and the image inside to do matching.

b) Block has no image inside can only be used for layout or punching manually.

c) Operator can draw outline for the block on the photo image.

d) Operator can also import outline from DXF file and covers the image pattern on the image.

4. Basic Procedures

a) Puts the material on the cutter and takes the photo.

b) Prepares the Pattern Block at the first time.

c) Applies the auto-positioning.

d) Checks the result and do editing and punching manually.

e) Print to cutter. (We offer developing service to support the commands of your cutter. Otherwise PLT will be exported.)

Please write to sales@lsccm.com to learn more about PINT.