Guandong
theSpecialitieSpecialist

THE TECH CORNER

CUTTING ON ROLL TO ROLL

Advice for cutting materials with the SUMMA plotter

TAP-1530 (Polyester Adhesive Fabric, Matt White, 140 gsm, 150 micron)

SETTINGS FOR TANGENTIAL AND DRAG BLADE

Standard 36° blade Speed: 300 mm/sec Pressure 150 gf.

- The material may leave some 'fibre' residue in the corners of the vertical/horizontal cuts, as the drag blade exits from the media and only at the end of the cutting. The residue is much less than in tangential cutting. In the case of this occurrence, it is advisable to work on an overcut setting.

WALLY PET-CG (transparent PET with Nano-Tack® technology, 140 micron)

SETTINGS FOR TANGENTIAL BLADE

45° blade for reflective vinyl Speed 200 mm/sec Pressure 220 gf.

- Since both the material and the protective liner are transparent, the sensor may not detect any media presence. In this case, we recommend disabling or covering the sensor with adhesive paper tape. Please take caution in this process, as the plotter will not detect the end of the material.
- If the pinch rollers mark the film, raise them up. In such a case, the material should be spread as well as possible to prevent it from rising, so that the blade does not scratch it.
- To prevent the material from curling, particularly when cutting vertical lines from bottom to top, set the exit from the blade holder and the pressure to the minimum levels necessary.
- If the blade tends to lift the material as it exits, use of a thinner blade is advisable.
- The base media must be well marked, in order to avoid breaking the material during peeling.

SETTINGS FOR DRAG BLADE

55° blade for thick media Speed 200 mm/sec Pressure di 230 gf. Brass blade holder, offset 1,0 mm

- This cutter range's sensor detects this media type.
- The base media must be well marked, in order to avoid breaking the material during peeling.

MAK-5530 (walkable for floors, 550 microns)

SETTINGS FOR TANGENTIAL BLADE

45° blade for reflective vinyl Speed: 200 mm/sec Pressure 320 gf.

- In the event of the abrasive surface making contact with the blade holder, it is advisable to dedicate a blade holder to the cutting of this material only.
- The abrasive surface may increase wear on the pinch rollers.
- The material can quickly wear the blade, due to the presence of silicone on the surface of the media.
- The base media should be well marked, to avoid breaking the material during peeling.

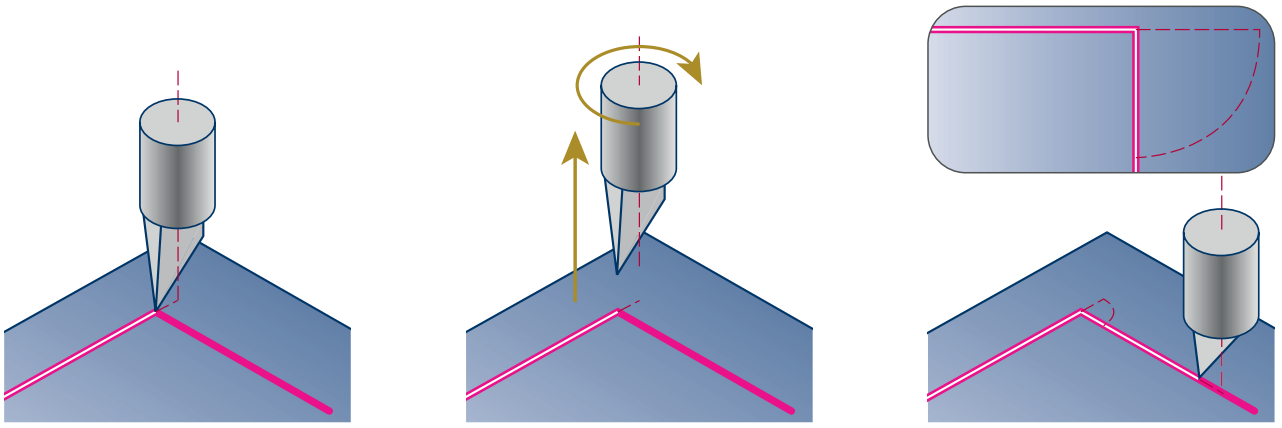
SofTeam
Summa
S2 SERIES
SC SERIES

GENERAL NOTES

- The tests were carried out in collaboration with SofTeam SrL, national distributor for Italy of SUMMA plotters.
- Tangential blade tests were carried out on Summa S Class 2 T series.
- Drag blade tests were carried out on SummaCut R/RL series.
- All the above materials tested are, by nature, 'blade consuming'. This result is accentuated in drag technology, due to the smaller size of blades used.
- In any case, it is not possible to provide precise information regarding the life of any blade type used on any of these materials.
- The indications mentioned above are generic and may vary depending on the characteristics of the blades used, their state of wear, and other factors. As such, they should only be taken as a starting point for identifying the optimal solution for the equipment used

OPERATING SCHEME OF THE TWO CUTTING TECHNOLOGIES

TANGENTIAL CUT



cutting path
blade's central axis
blade's path
blade's movements

DRAG CUT