

Target market:

Upholstery industry and processors of large pattern repeat fabrics.

Material use:

All textiles or flat materials to be cut with pattern matching. The actual pattern repeat might vary in width or length (bow and skew).

Special properties:

MATCHING Bow&Skew is an optically / visually controlled software application used to adapt the theoretical marker to the actual fabric pattern. The flat material is processed directly „off the roll“ in a single layer and photographed in the Matching window. Through an interactive monitor display and with the simplest correction steps, users can compare the real fabric with the marker produced theoretically for pattern matching. Here, the precision cutting shapes are automatically adjusted to the pattern repeat. Since fabric distortion and repeat variations, as a rule, tend to „reproduce“ within the same roll, the software adjusts all changes during the matching process, which reduces the amount of adaptations required. However, it must be taken into account for this particular application that the original geometry



may change slightly according to the pattern course, something that requires the presence of a certain tolerance for the machining process. The procedure is controlled via the screen, positioned directly before the cutting process (cutting window) and is most efficient when processing large repeats. By an alternating two-window process (matching - cutting) the automatic precision cut is being fed continuously and therefore operates at high utilization level. The operator requires no expertise in cutting patterned flat materials. MATCHING B&S can be operated with any topcut-bullmer cutter.

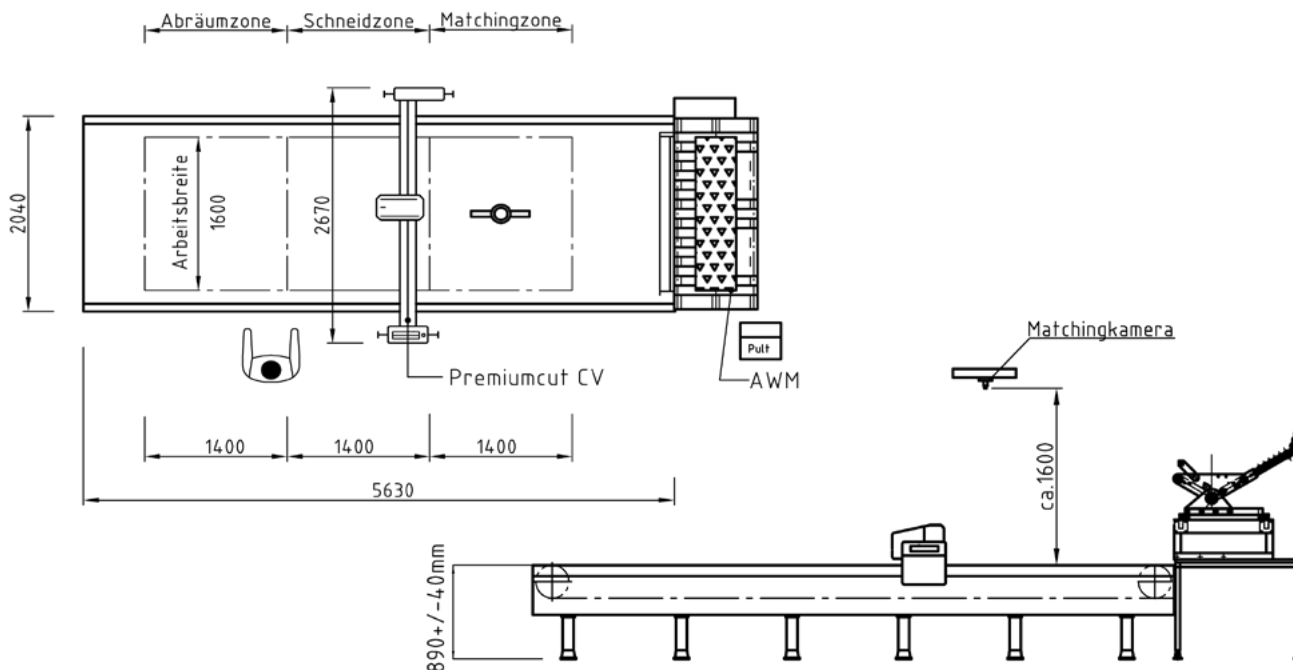
Standard version software

- Theoretical repeat processing in separate entries for warp and weft (X/Y)
- Automatic import of repeat lines (dimensions) from the marker is possible
- Simplified matching through predefined horizontal and vertical stripes (pattern)
- „Repeat box“ for the definition of adjustment positions (deformation points) outside prominent pattern structures. Precise positioning of such deformation points, e.g. between two pattern strips.
- Definition of useable material width at the selvages
- Offset value input for the starting point of the first repeat.
- Variable check / stripe lines display (entire surface or defined number). Optimum working range depending on repeat size.
- Input tolerance for deviation of the deformation partially optimizes the adjustment automatically.
- Input option for expansion (propagation) of the corrections reduces the required adjustments in the workflow. Among others, this allows for considering partial deformation also.
- Setting variable distortion „points“. This configures the correction grid (display of checked pattern/stripe lines) according to repeat/pattern size. For small repeats, it is sometimes possible to skip lines and therefore also correction points in order to speed up the workflow.
- Zooming and scrolling the screen image for detail work
- Adjustable line colours to improve the respective background contrast (fabric)
- Thanks to the adjustable matching mode, the effect of distortion on each cut can be parameterized in working direction.
- Automatic import of the respective matching window into the cutting zone (closed marker)

Standard version hardware

- Camera system to capture the fabric image
- Interactive matching monitor

Configuration example



Technische Daten

Cutter table configuration	Same size for cutting and matching area is required
Matching window:	Width: 1600 - 1800 mm Length: 1100 - 1200 mm Aspect ratio 4:3 (caused by camera)
Ceiling height	Camera installation height approx. 1550 mm above the table (absolute: 2450 mm)
Camera system	CMOS camera with 10 MP resolution
Connected load, camera	230 V
Monitor	33 inch full HD monitor
System computer	Software utilises cutter computer

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