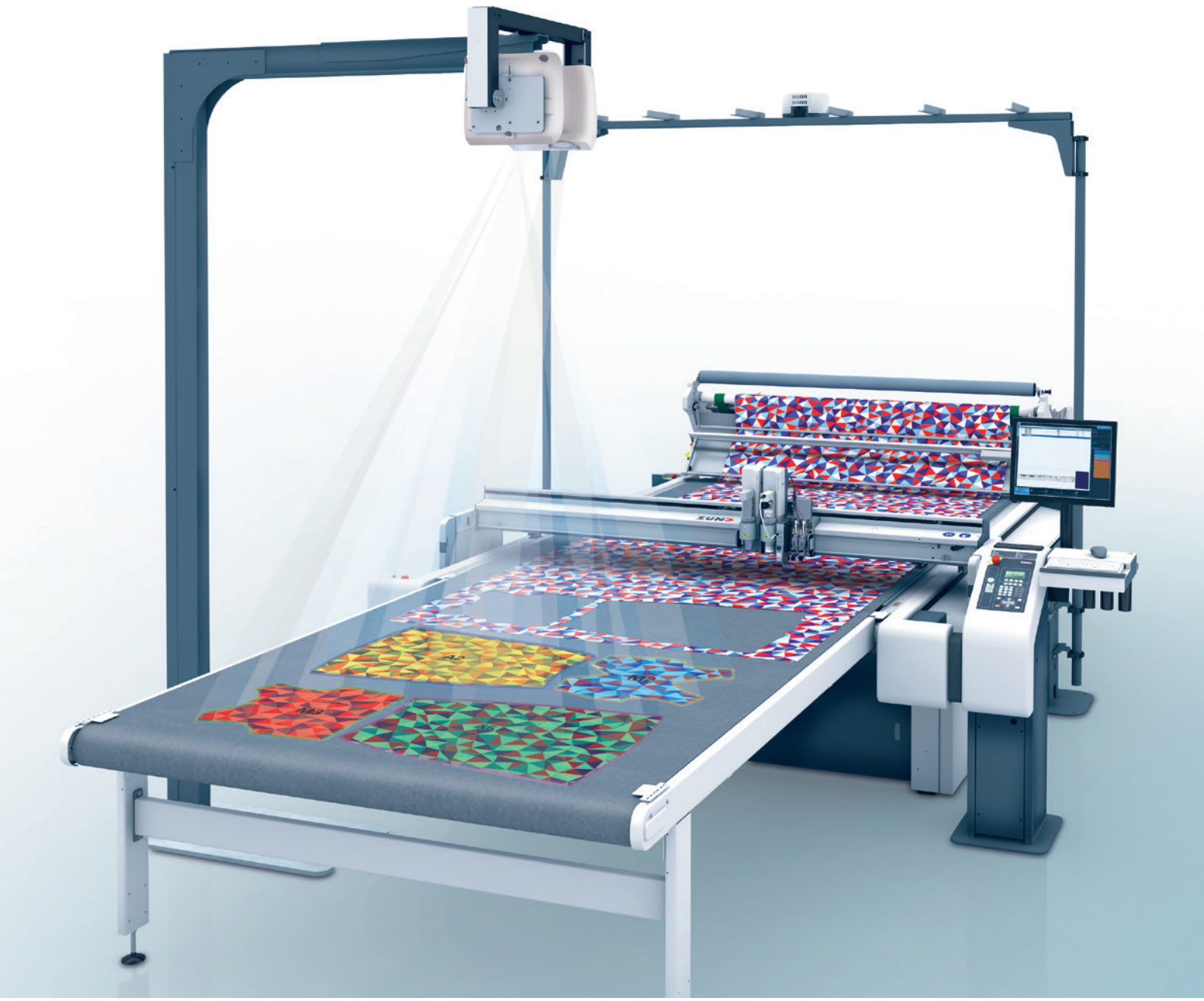
Turn-key systems for
Textile processing



Your first choice in digital cutting.

ZÜND
swiss cutting systems

Advantages of digital cutting
with a single-ply cutter

Single-ply cutting is the answer to changing demands in the textile industry. In an increasingly digital production environment, order sizes are smaller, order cycles shorter, and the degree of customization keeps increasing. Lot size 1, fast fashion, and mass customization are among the hottest trends. High-performance digital cutting systems from Zünd, combined with highly advanced yet intuitive software, enable fully automated digital cutting without manual intervention.

Flexibility
Regardless of whether a job calls for natural or synthetic fiber, the cutter delivers perfect results with clean and smooth edges.
The variety of available cutting tools offers maximum flexibility.

Automation
Zünd single-ply cutters stand out because of their numerous automation options. From feeding to advancing, material detection and cutting, everything happens completely automatically. Picking/sorting, the final step, is a manual process facilitated by the software.

Efficiency
Zünd single-ply cutters are setting new standards in speed and efficiency. The Zünd D3 cutter delivers ultimate performance and productivity with two beams operating simultaneously. Sophisticated nesting algorithms increase material yield and help keep production costs low.

Creating an ultra-efficient workflow
for processing textiles

1 Loading ▷ 2 Capture ▷ 3 Create Marker ▷ 4 Cutting ▷ 5 Picking/sorting

A camera captures the fabric that needs to be processed and its exact position and dimensions, no matter whether the material is plain, printed, or patterned.

Textiles are cut to shape with high-performance tools. The vacuum system provides reliable hold-down during the cutting process.

For efficient removal, cut parts need to be identified quickly and unmistakably. To facilitate picking/sorting, the system projects color codes and other relevant data onto the parts for efficient removal.

Powerful nesting software positions parts as tightly as possible for maximum material yield, and a marker is created automatically.

Zünd offers a wide range of material-handling options that facilitate loading/feeding and tension-free advancing.

Maximum efficiency:
Nesting parts on plain fabrics

High-performance digital cutting technology combined with high-precision tooling, advanced vision systems, and highly efficient software: standardized data is imported and processed at the push of a button. The software recognizes part and marker-based data and also enables the creation of new markers.

Material recognition
A high-resolution camera automatically captures the position of the material, and the cut contour is positioned automatically. The system also captures previously marked material defects.

Nesting
Parts are optimally placed for maximum material yield. If necessary, the nested parts can be projected directly onto the material for verification.

Simple operation
The user interface clearly displays all software functions. Any cut parts that do not meet quality standards can be marked for post-production and subsequently reproduced.

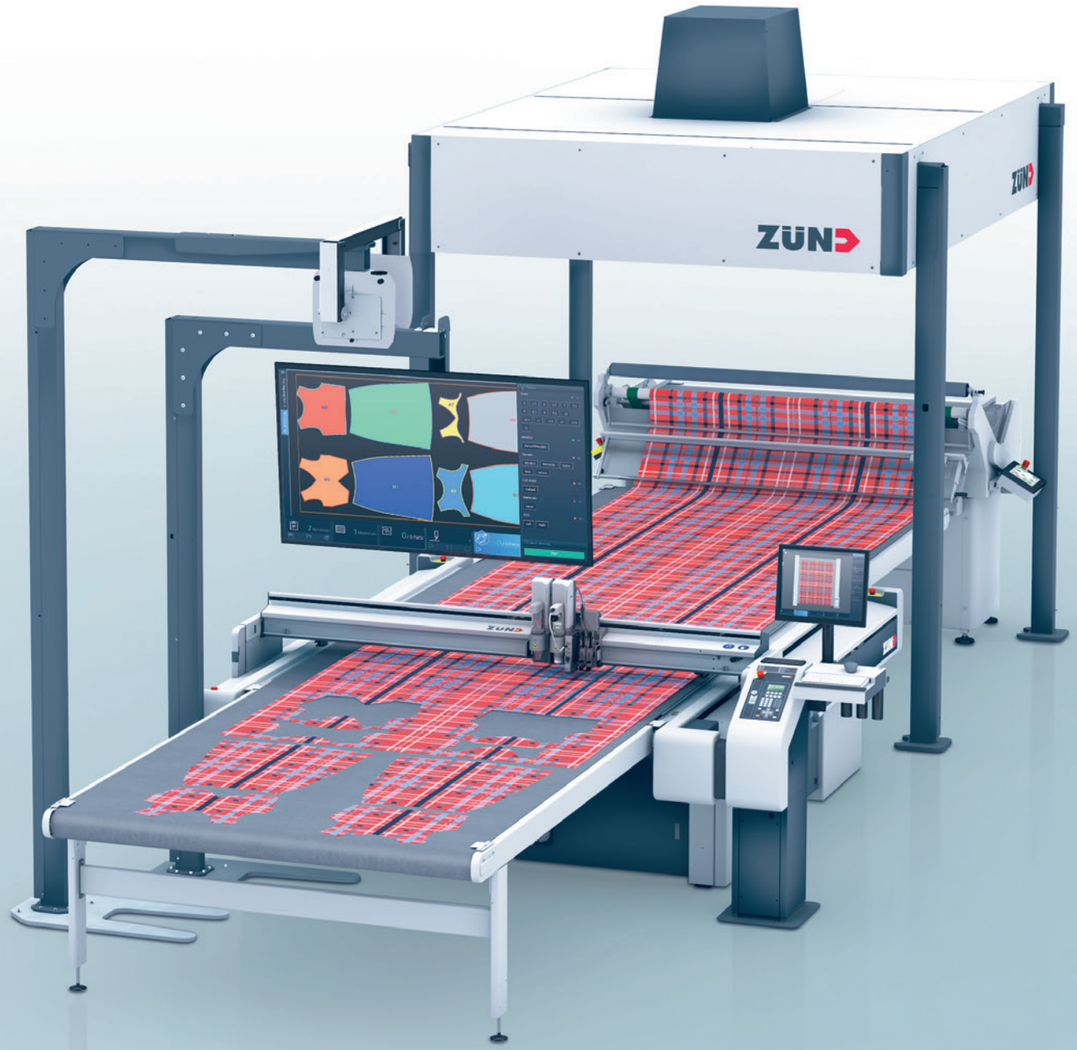
Perfect pattern matching
on textiles

Dots, squares, horizontal stripes - advanced registration systems are capable of recognizing patterns automatically and reliably. In a matter of seconds, the system makes the necessary adjustments for perfectly matching markers to the pattern at hand.

Pattern matching
The software offers several options for pattern matching, regardless of whether part sizes need to be retained or part contours re-positioned for pattern matching.

Material database
The material database provides material-specific parameters for processing and also stores pattern-based information.

Software-guided picking/sorting
To assist the operator in picking/sorting, the system color codes the cut parts, which makes the job much simpler.



Flexible and precise:
Processing custom-printed textiles

Custom digitally printed fabric is in vogue. Zünd's print & cut workflow provides cohesive, end-to-end data flow. Because of their open interface, Zünd cutters can be easily integrated in existing production environments and enable efficient cutting of custom-printed textiles using register marks for matching cut to print.

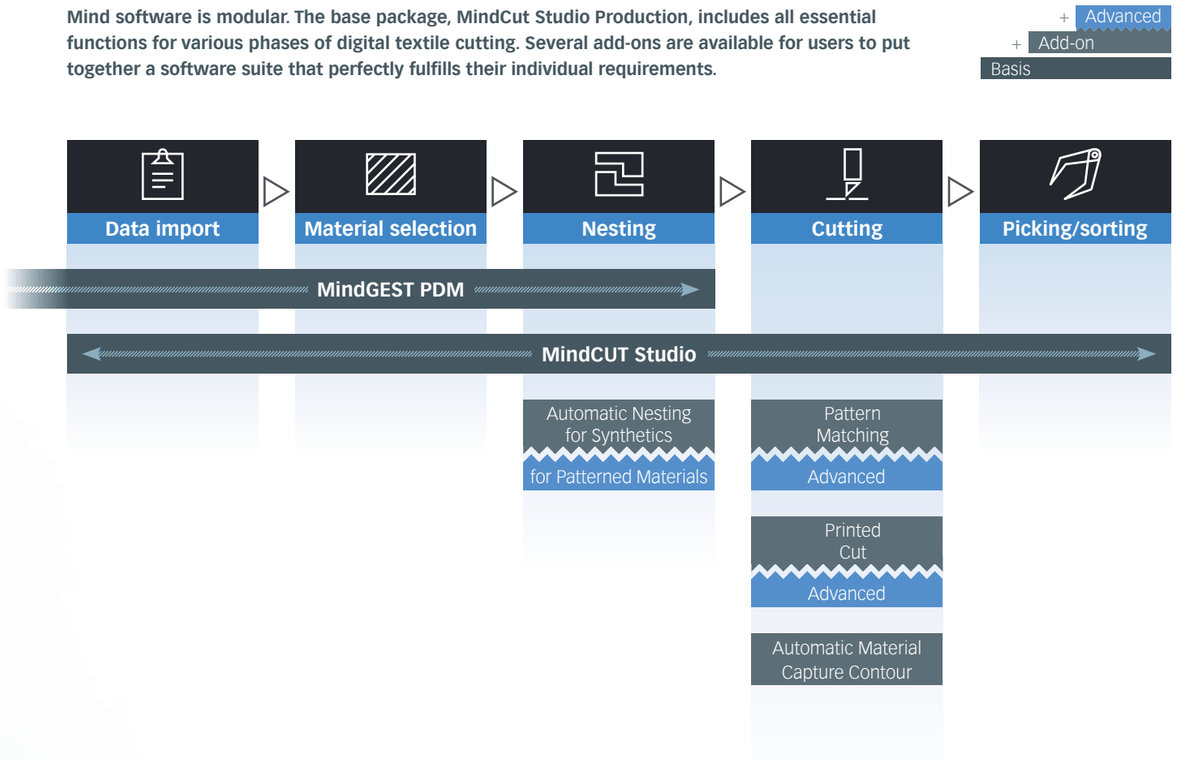
High-speed digital capture
The high-resolution optical registration system automatically captures the register marks. The entire registration process now takes place in a matter of seconds.

Find & Match
Alternatively, the Over Cutter Camera OCC is able to capture outlines placed around printed images, which enables the software to reliably recognize their position.

Creating a cut file
If no cut file is available, the system can automatically generate one.

Modular software
meets individual requirements

Mind software is modular. The base package, MindCut Studio Production, includes all essential functions for various phases of digital textile cutting. Several add-ons are available for users to put together a software suite that perfectly fulfills their individual requirements.



Processing Phase	Function	MindGEST	MindCUT Studio	Add-on
Production planning	Centralized marker generation	✓		
	Job creation at cutter, import and display		✓	
Material selection	Saving and storing material-related information	✓	✓	
	Templates for capturing, nesting, cutting, and picking/sorting	✓	✓	
Nesting	Basic nesting for automatic parts placement		✓	
	High-efficiency nesting for standard rolled materials			✓
	Automatic nesting for patterned fabrics			✓
	Automatic capture of irregular material contours			✓
Cutting	Automatic recognition of material position		✓	
	Detection of marked material defects		✓	
	Automatic pattern recognition			✓
	Registration of printed images using register marks/outlines			✓
	Cutting data generation based on printed outlines			✓
Picking/sorting	Display of information via projection or monitor		✓	
	Color projection indicating related cut parts		✓	
	Additional information displayable in plain text		✓	
	Various off-load strategies for projecting/sorting order components		✓	

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