

Digital Cutting Workflow Zünd Cut Center



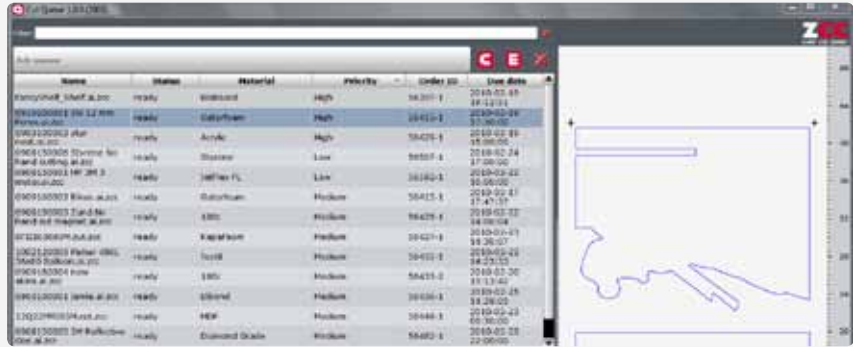
Zünd Cut Center
The new standard in software for digital cutting.

Digital cutting has never been easier.

Zünd Cut Center dynamically guides the operator through the cutting process. It minimizes set-up times, eliminates mistakes, and makes sure the cutter is running at maximum productivity levels at all times. It continually suggests best choices based on the material to be cut, available tooling, and quality requirements. Zünd Cut Center takes the guesswork out of cutting - all the operator has to do is scan a barcode and verify the suggested tooling is installed.

Start cutting in 3 easy steps

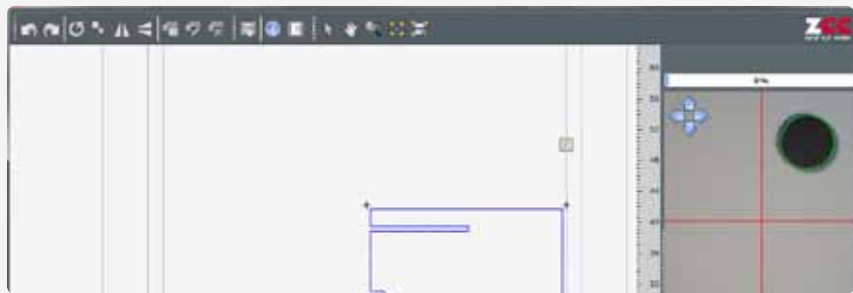
1
Select job from Cut Queue, manually or via barcode scanner



2
Verify suggested tooling is installed.



3
Locate register mark or material edge to start production.



Zünd Cut Center at a glance

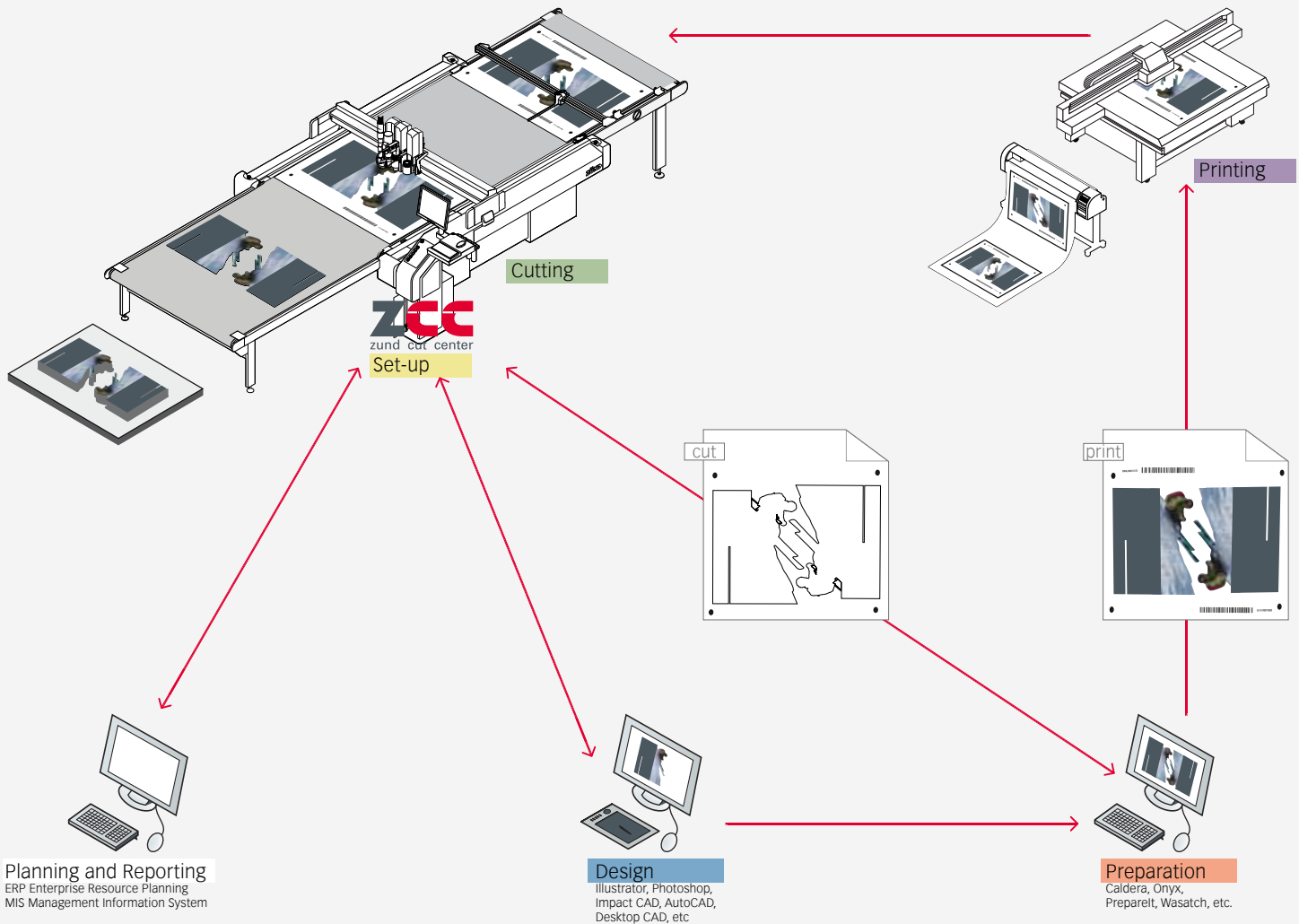
Fast
Dynamic guidance through the cutting process minimizes set-up times and assures maximum performance at all times.

Simple
Highly visual, intuitive user interface. Automatic tool selection based on material profiles and cutter configuration eliminates reliance on operator experience, trial and error.

Adaptable
New material profiles, tools, and cutting parameters can easily be added to the system in order to adapt to changes in cutting requirements.

Workflow has never been more automated.

Zünd Cut Center represents a radically new step in digital cutting workflow automation. It is the first software to offer a complete solution, from planning, and designing to nesting, printing, and cutting. Ever shorter delivery times and just-in-time production require careful planning and scheduling of resources, including design, prepress, digital printing and cutting systems. Accurately predicting total production time is essential to committing to short delivery times. Job monitoring is necessary in order to react quickly to changing priorities. Quality assurance and accurate reporting of production times are a must in calculating production costs and preserving profit margins.



Timeline

For Standard Workflow



For Zünd Cut Center Workflow



Easy, standardized method definition with Zünd Adobe Illustrator templates

Register marks and simple cut lines are automatically applied by many RIPs.

Improved nesting reduces printing time.

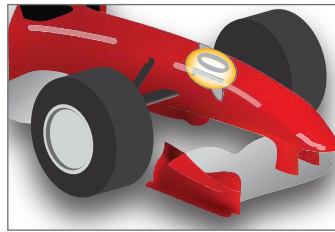
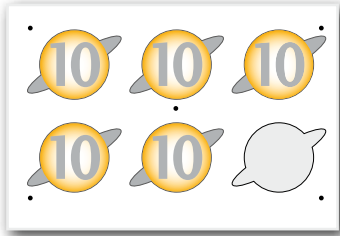
Tool, blade and cutting parameters are automatically selected based on chosen material profile.

Dynamic operator guidance and selections are based on Zünd's 25 years of cutting experience assuring optimal performance at all times.

Registration has never been more accurate.

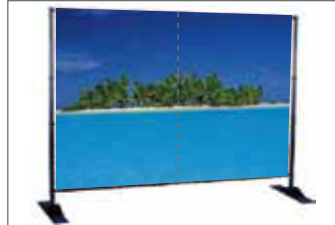
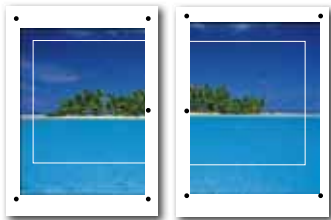
Zünd Cut Center accommodates all print applications and offers ideal registration and compensation methods for all common print and media distortions, including the extreme distortions seen with printed textiles or screen-printed vinyl decals.

No print is perfect. Distortions may arise from the printing process itself, media stretch/shrinkage, or from lamination. Different applications dictate different registration and compensation methods.



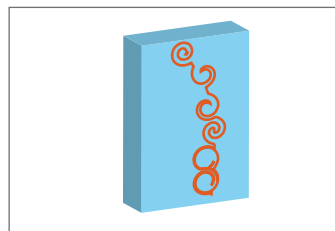
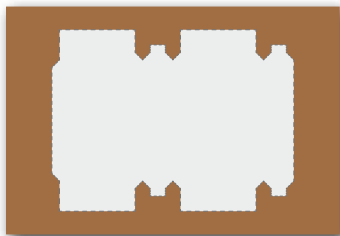
Best fit

for decals where visual appearance is more important than maintaining exact shape and dimensions of final cut parts.



Panel alignment

for panelled jobs where each panel must be cut to exact dimensions and also line up with adjacent panels.



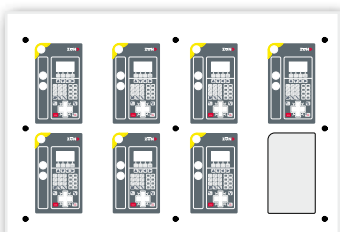
Edge recognition

for cutting and creasing corrugated sheets from the back (unprinted side).



Fit to object

for inlays and doming applications where each part must be cut to exact dimensions despite distortions.



Fit to job

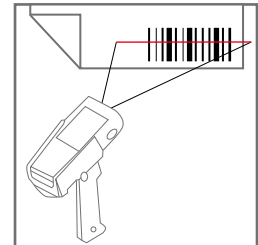
for overlays, control panels, etc., where exact dimensions for several cut-outs must be maintained regardless of distortions.

Advanced but simple

Zünd Cut Center software is packed with features especially for Zünd cutters. The software reflects the exact hardware configuration of the cutting system installed; the operator is therefore confronted only with features relevant to the cutter configuration in use. This greatly simplifies operation and enhances overall efficiency.

Cut Queue

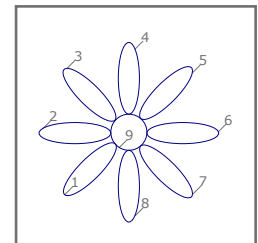
- Select job and determine rotation via handheld barcode reader
- Easily locate, check status of all pending/done jobs
- Preview job from both pending and done job queues
- Sort queue by type of material, order ID, due date, etc.
- Unlimited number of hot folders for automated import to queue
- Automatically assign material profile to define cutting parameters



Barcode reader

Cut Editor

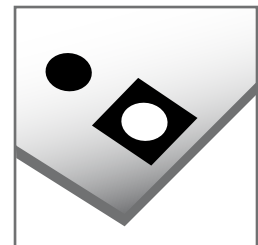
- Cut-path optimization tools
- Group and ungroup function
- Path combine and divide tools
- Move start point and reverse cutting direction
- Control cut processing mode
- Edit roll-feed position for critical cut paths
- Automatically optimize or manually define cutting order



Optimized cut path order

Camera Features

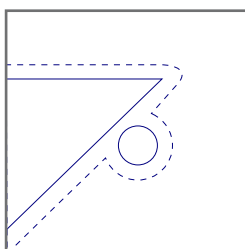
- Automatic registration with register marks or material edges
- Advanced recognition for difficult lighting conditions, reflection, and poor contrast or print quality
- Variable light source, digitally controlled (savable) camera settings
- Manual mode for manually locating register marks or material edges
- Integrated laser pointer for easy camera navigation to register marks
- Locate all register marks for all copies before cutting



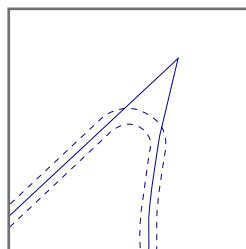
Register marks and edge recognition

Routing Features

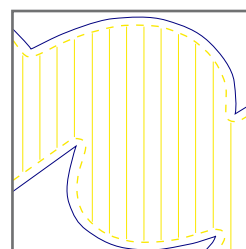
- Automatically generates and displays routing paths based on defined bit diameter
- Optimized routing paths to combine paths that cross one another
- Automatic inlay feature to create positive and negative routing paths
- Hatch and island fill for pocketing/engraving paths
- Multi-pass with continuous movement, finishing pass



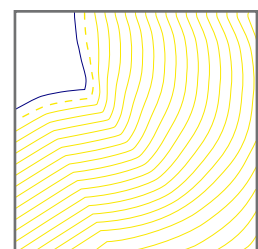
Optimized tool offset



Automatic inlay feature



Hatch fill pocketing



Island fill pocketing

Zünd Cut Center software suite

Five powerful applications designed to match the modularity of Zünd cutters and equally capable of growing and changing according to customers' needs. Each application performs specific functions, yet all have a single purpose: maximum productivity at all times.



Cut Center

- Visually displays tool/blade recommendations depending on material and quality requirements
- Registration with camera and laser pointer
- Controls output to Zünd cutter



Cut Queue

- Overview and sorting of all pending and completed cutting jobs
- Job selection and rotation via barcode reader
- Job preview
- Unlimited number of hot folders



Cut Editor

- Advanced editing tools for last-minute corrections of cutting data
- Unlimited number of Cut Editor clients can be added



Cut Server

- Comprehensive database of material profiles and tool parameters
- Facilitates integration with 3rd party CAD, RIP, MIS, ERP software



Cut Manager

- Manage new tools, material profiles, and parameters
- Define hot folders