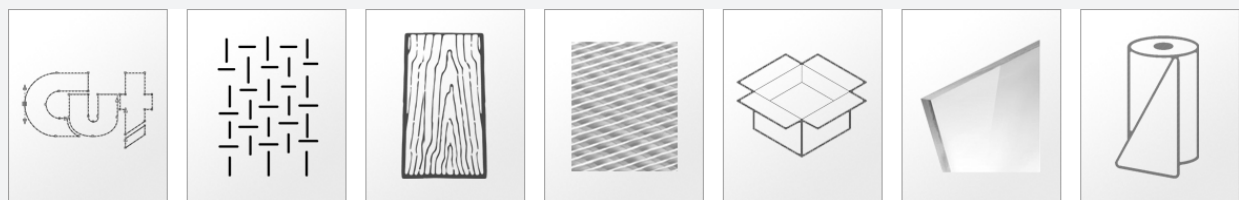# OptiScout 8

Raise Your Workflow to a New Level

OptiScout is a Software Package for Every Kind of Cut Finishing

With our modular, manufacturer-independent applications, you can increase the productivity of your processes in the long term. Especially in heterogeneous production environments OptiScout is the first choice. Thanks to our solutions, perfect integration into your existing workflow is possible.

Cutter

Laser

Milling machine
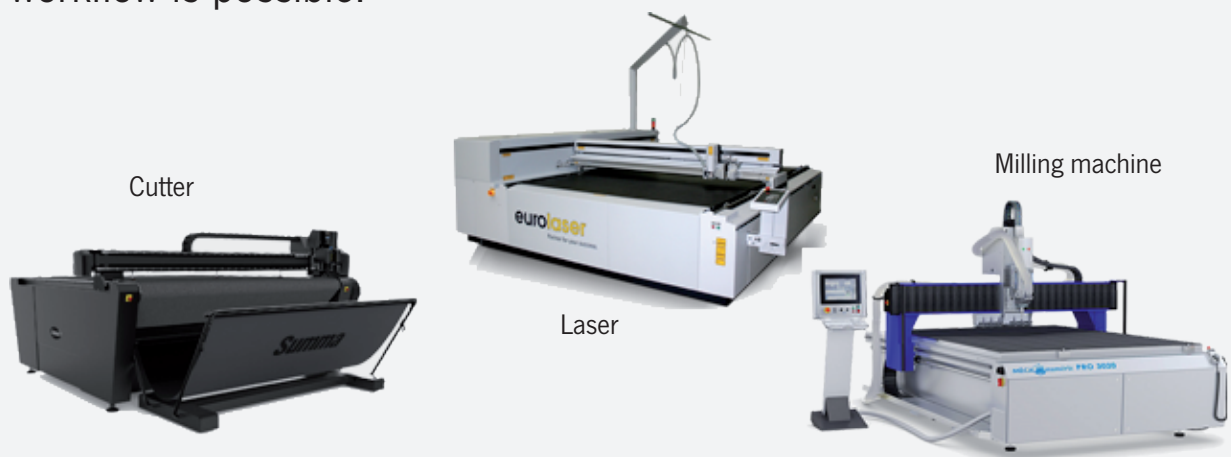
Professional Post Processors - Device drivers for many machines, tools and methods

Sectors

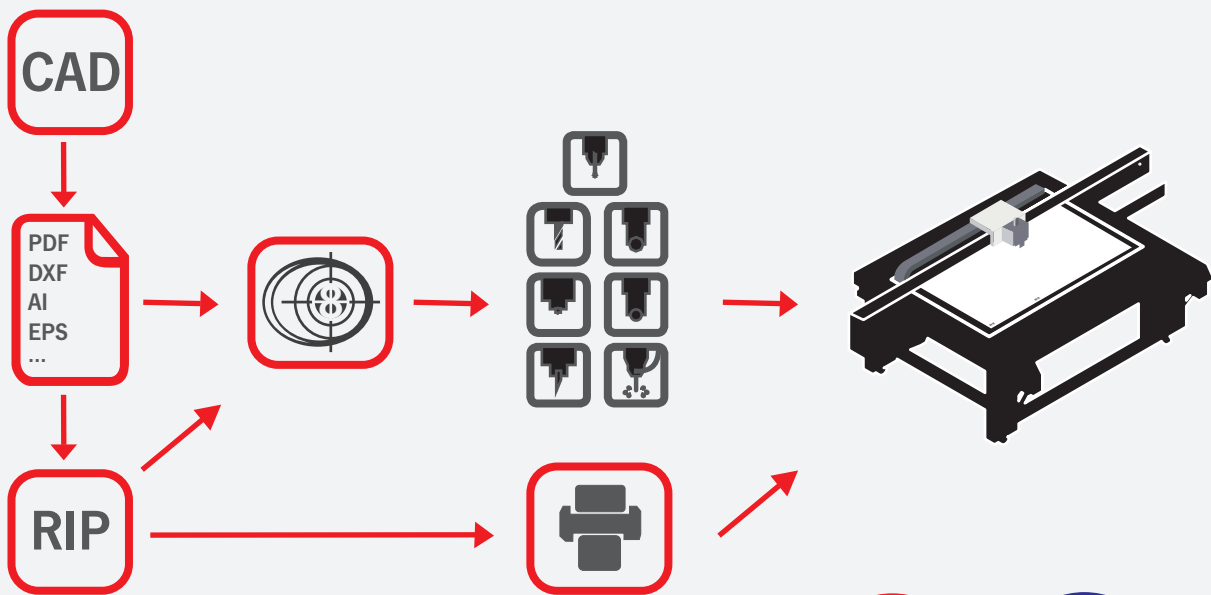Print & Cut

Textile

Wood

Tech Textiles

Packaging

Plastic

Vinyl Cut

EUROSYSTEMS
Software Supplier for the Finishing Industry

Pre Cut - Priming

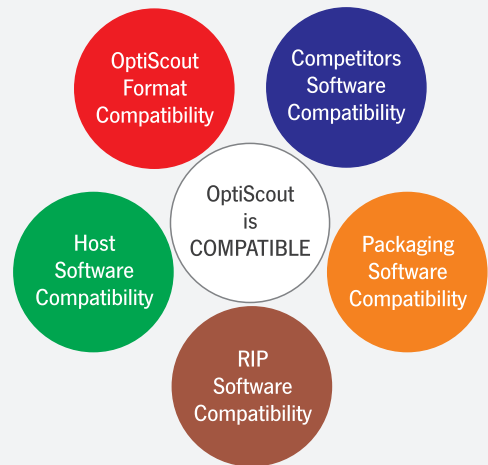Planning, Data Import, Profile Assignment, Optimization

Cut Finishing Workflow

OptiScout accompanies the user step by step through the finishing workflow - be it printed or unprinted materials. Data can be imported via defined interfaces from RIPs, CAD or graphic applications. OptiScout is a cross-platform solution for all cutting, milling or laser applications.

CAD

PDF
DXF
AI
EPS
...

RIP

OptiScout Format Compatibility

Competitors Software Compatibility

OptiScout is COMPATIBLE

Host Software Compatibility

Packaging Software Compatibility

RIP Software Compatibility

Compatibility

Compatibility is a key factor in integrating finishing solutions in mixed production environments.

CALDERA WIDE FORMAT IMAGING
ONYX
SAi FLEXI
ColorGATE
Prepare it!
AGFA
ergosoft rip solutions
WASATCH COMPUTER TECHNOLOGY
PrintFactory
CADlink TECHNOLOGY CORPORATION
efi

RIP Compatibility*

Supporting RIPs: Agfa Asanti, Aurelon PrintFactory, Cadlink, Caldera, ColorGATE, EFI, ErgoSoft PosterPrint / TexPrint, IGEPA MasterRip, ONYX, Pjannto, PosterJet, Prepare-it, SAi, Wasatch

* All trademarks are the property of their respective owners.

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Import of the Cutting Data

Individually configurable import filters ensure optimum preparation of the cut contours **during import**. For example: open contours can be closed or optimized or duplicates removed. **Individual macros** can be executed automatically before and after the import in order to optimally feed the data into the subsequent cutting process.
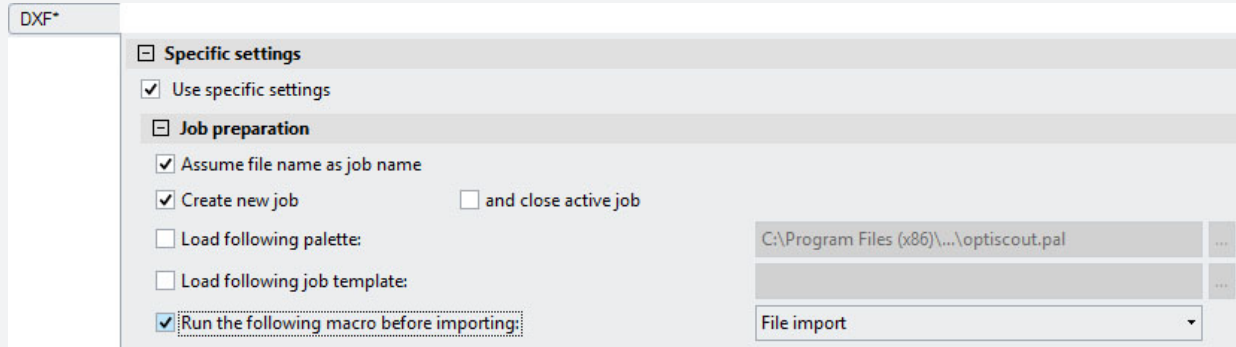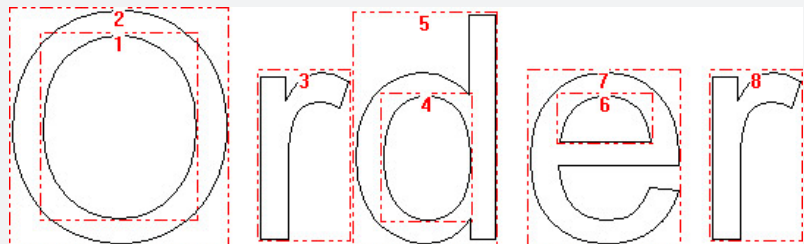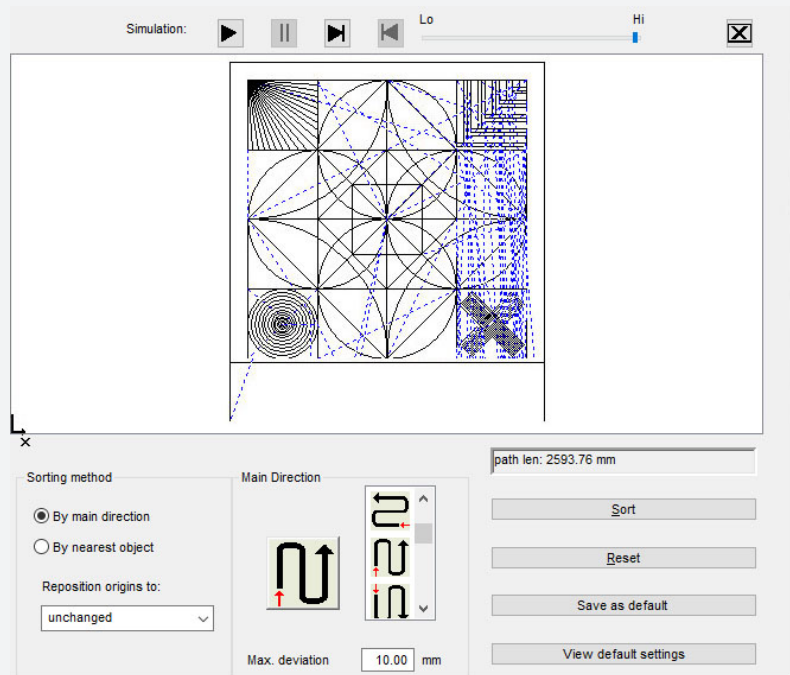

Key Features Cutting

Simulation / (Pre)Sorting

The travel path of the tool can be simulated before output.

The aim is to determine the travel path as optimally as possible. Optimizations can be made at any time and validated with a simulation.

The data is automatically optimized before each output: based on the chosen basic setting!
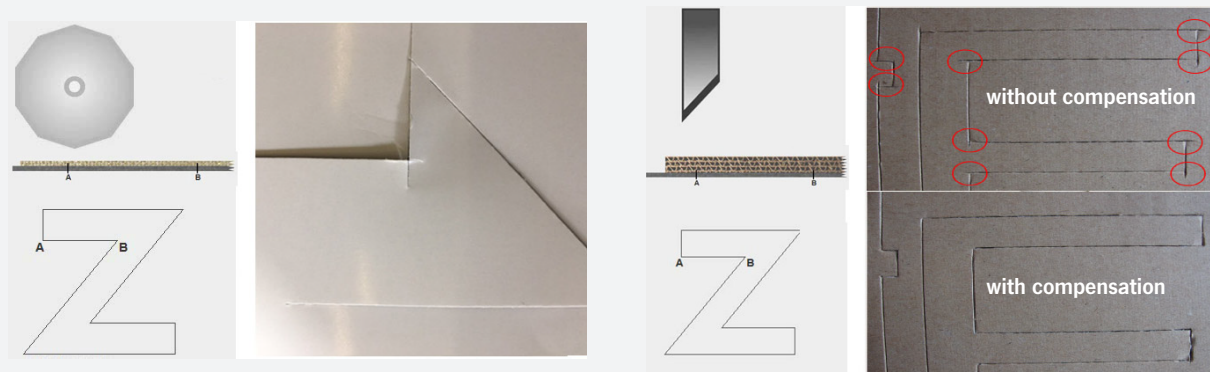
Overcut / Overcut with Compensation

Overcut (Rotary Knife)

The cut can be made with positive or negative values. For rotary knives, the overcut respectively undercut in the corners is deliberately performed.

Overcut Compensation (Tangential Knife Oscillating)

The goal of the overcut compensation is to optimize the cutting quality. The following procedures will produce the best cut for your material.

Overcut (Rotary Knife)

without compensation

with compensation

**Overcut compensation (Tangential Knife Oscillating)**

Cut Extension

Thick, soft materials like to bulge up in front of the tool. To compensate for this, the cut following the contour is extended by a certain amount. Typical examples of this case are seals and rubber rings.

Feed Optimization (Smart Feed)

The segmentation of the objects is prevented by an **intelligent feed**. If the object to be cut is larger than the existing machine table, then it is classically segmented.

When cutting textiles, oversized objects are equipped with **segmentation helpers** and then separated.

© Euro-Systems S. à r. l.
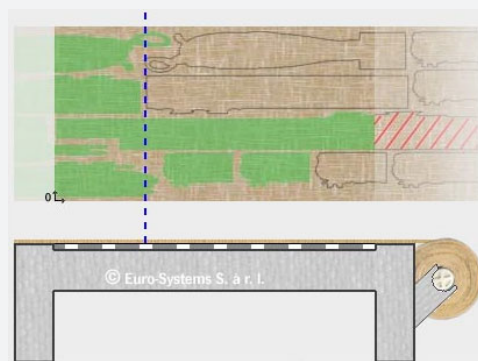
Segment Helper

The separation of contours in **textile cutting** often leads to the distortion of the fabric. What is desired is a textile cut **without running stitches**; Hook and circle are preferably used with the laser, T-cut with the rotary knife.

EUROSYSTEMS
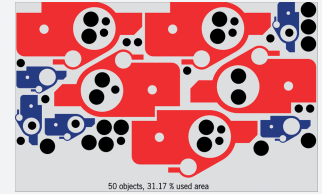Software Supplier for the Finishing Industry
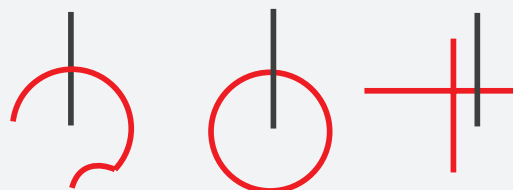
Nesting Module

Object entanglement reduces material costs through the use of powerful nesting algorithms. It nests objects into objects (True Shape) and takes into account residual plates with arbitrary shape and material imperfections.
The object distance is variable. The tool diameter is also taken into account.
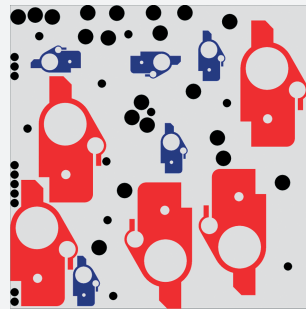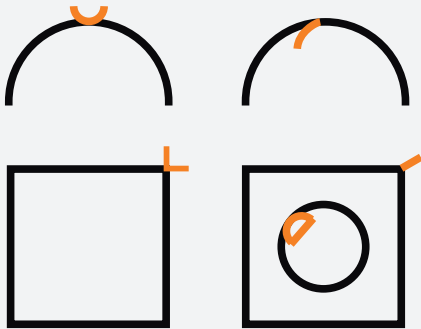
Before optimization   After Nesting

Key Features Milling

Milling and Production Tools (Selection):

Quick Layer direct access, Smart Feed - intelligent material feed, segment helper for oversizes, overcut compensation, milling radius correction with cleaning path, laser cutting gap correction

Start Tool Paths

When milling or laser cutting, it often happens that at the start or end point of an object immersion traces are visible.
For optimal machining results, the start and end points of the machining should be outside the object contour. This is achieved by additional tool paths, so-called start-up paths, which adhere to the object contour. Start tool paths optimize the immersion process during milling and laser cutting.

Dynamic Milling Radius Compensation

Automatic Milling Radius Correction displays the corrected paths in relation to the object contour on the OptiScout working area.

Cleaning Path

When the individual milling depths are executed, ridges or clearly visible traces are formed at the milling object.
In order to optimize this, a so-called cleaning run is carried out, which trims and smoothes at the end of the process.
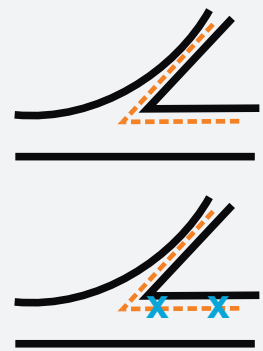
Automatic Bridges

Bridges prevent falling out of milled parts. Parameters such as length, distance and number can be specified individually. With **manual** bridges, the position can also be changed.

All previously mentioned settings are applied **directly** to the cut contours during data import!

Registration via Camera

The use of a CCD camera increases the precision of the output. This compensates printing inaccuracies and reduces waste. Flexible registration reliably processes even difficult materials.
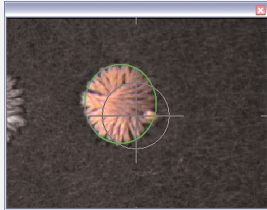
Embroidered video mark

Register Marks Variety

Before processing, the printed register marks are located by means of the camera mounted on the tool head. The **correction algorithm** compares the current marker position with the ideal position and uses the determined deviation for the compensation of the output contours.
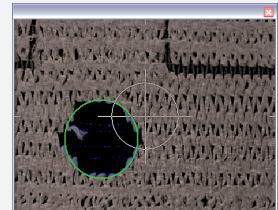

Hole mark in fabric

Compensation Methods (I. Best Fit / II. Fit to Job)

No print is perfect. Distortions are often caused by printing, stretching or shrinking of media or caused by lamination. Different applications dictate different cutting registration and compensation methods. The OptiScout system accommodates all printing applications and offers registration and compensation methods for all common printing or media distortions.

I. Best Fit

This compensation method is used eg. in decal production. The visual appearance of the sticker is more important than the exactness of the shape and size. The human eye perceives even the slightest deviation as inaccuracy (in the 1/100 mm range).
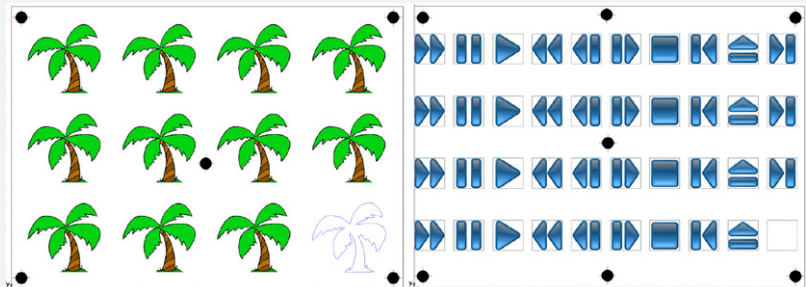
II. Fit to Job

Switching membranes and keyboard templates must fit 100% into the provided holder or keyboard. Therefore, all produced parts must have exactly the same dimensions. In this case, material and pressure inaccuracies must **not** be compensated. Another application is the contour cutting of printed textiles in flag production.
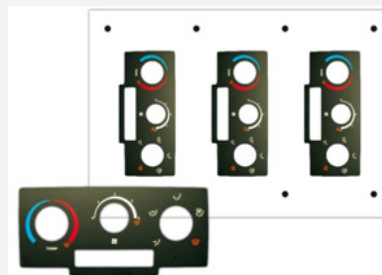
Workflow - Production at the Machine

Productivity Tools (Selection):

Job recognition via QR / bar code, registration using video marks, method assignment, tool parameterization, notification, message on interruption or job end

Cut Finishing

Cut finishing often uses machines from different manufacturers. With OptiScout several machines can be used in parallel.

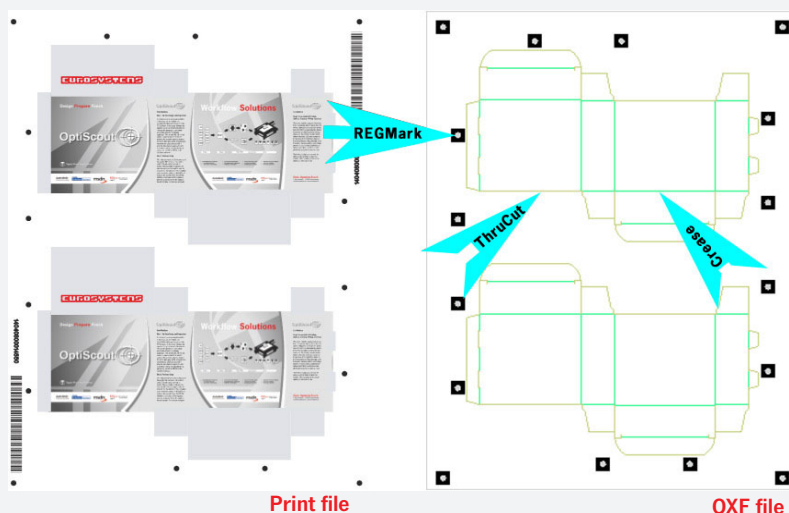The individual technology data are read from the Material Database. The database ensures that all material-specific properties are provided. This information is available at all levels of the industrial workflow - from the design phase, through process preparation, to production itself.

Print file

OXF file

Productivity Tool QR CODE Workflow

Automatic processing of roll material with different tools

Pre Cut - Import

The data required for cutting is generated via the OptiScout drivers available in the RIP software (keyword: RIP COMPATIBILITY) and stored in a production folder (hotfolder). OptiScout automatically loads the corresponding cutting file after detecting the QR code. The orientation of the job on the roll is recognized by a coding.

Cut Workflow - Job Mapping

The appropriate tool configuration, method and technology data are loaded from the Material Database. After completing the cutting process, the next QR code is approached. The next cutting operation will start automatically - without user intervention.

Completion

Throughput maximization through the use of highly optimized post-processors

Material Database

The material database is at the center of production process automation. The contents of the material database can already be accessed at the job preparation stage: material and method are already known in the pre-production phase and can be taken into account in the design - errors are thus avoided at an early stage.
The goal is the inventory of all materials, methods and machine and tool parameters. Ideally, in the material database the experiences from the practice of all production processes of a company flow together. The database is accessed locally on the client computer or on a production computer / server via LAN.
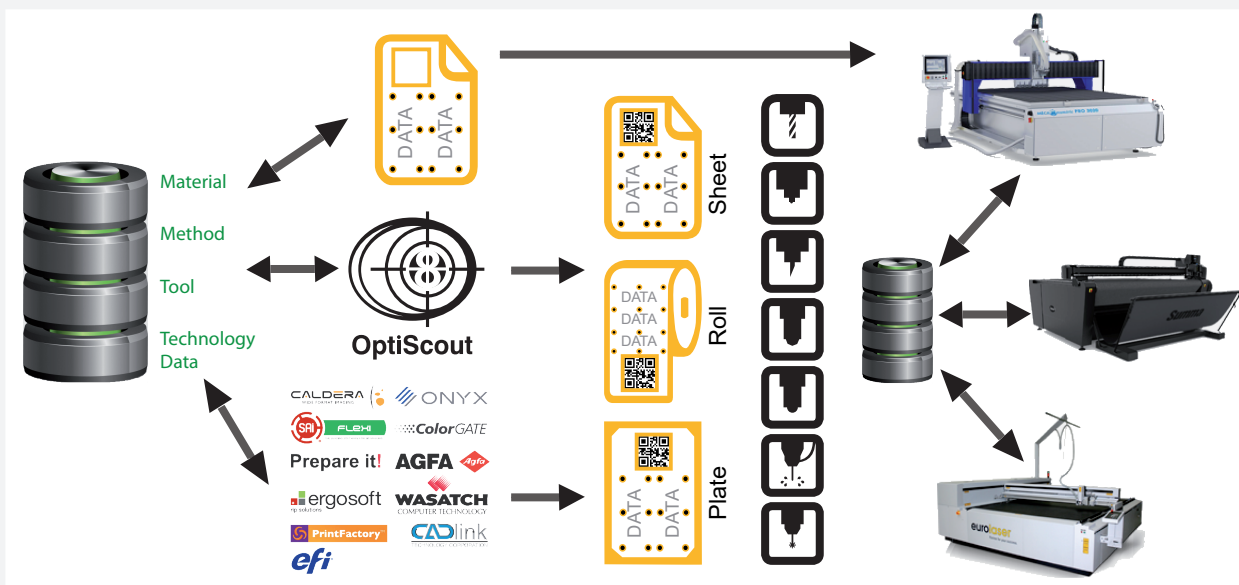
Individual Programming

Custom Application

Standard applications do not always meet all the needs of a company. Then special solutions are needed to improve the workflow, minimize waste or functions that increase productivity. Often, individual driver customizations for HPGL, GPGL, DMPL or G code machines are also in demand.

We advise you on the possibilities to customize OptiScout. Together with you we plan and implement your solution on the basis of requirements and specifications.

Reporting and Evaluation

For the evaluation of the production data our Production Information System (PIS) is responsible. In connection with the Material Database the following technical operating data is provided in a database: runtimes, interruptions, jobs, devices, worker, material, material thickness, cutting path length, empty runs, cutting time, material consumption. A connection to Manufacturing Execution Systems (MES) is possible.

Production information system — OptiScout

Time range [6 months] Language [English]

[Copy] [Excel] [CSV] [PDF]   Show [10] entries

Time	Job	Worker	State	Device
Summa OPOSCAM				
28-01-2019 16:25:21	NONAME.JOB	RCS DRUCK NEU	OK	Summa OPOSCAM
01-02-2019 09:58:38	NONAME.JOB	RCS DRUCK NEU	OK	Summa OPOSCAM
01-02-2019 10:01:53	NONAME.JOB	RCS DRUCK NEU	OK	Summa OPOSCAM
01-02-2019 10:05:53	NONAME.JOB	RCS DRUCK NEU	OK	Summa OPOSCAM
01-02-2019 10:08:26	NONAME.JOB	RCS DRUCK NEU	OK	Summa OPOSCAM
01-02-2019 10:10:03	NONAME.JOB	RCS DRUCK NEU	OK	Summa OPOSCAM
Summa S-Class 2 S75 T				
24-01-2019 08:52:30	NONAME.JOB	Guenther	OK	Summa S-Class 2 S75 T
SummaSign Pro T-Serie 75				
28-01-2019 11:30:50	Qlock50-2.job	RCS DRUCK NEU	OK	SummaSign Pro T-Serie 75
28-01-2019 11:33:32	Qlock50-2.job	RCS DRUCK NEU	OK	SummaSign Pro T-Serie 75
Zund S3				
18-01-2019 11:29:09	1404080001 OptiScout_Box_MatDB.job	Frank	OK	Zund S3

Showing 41 to 50 of 93 entries

Search: [ ]

Material thickness [mm]	Cutting path [mm]	Movement [mm]	Cutting time [s]	Material consumption [mm]
0.000	4307	1505	16	645
0.000	8351	2523	54	286
0.000	14811	5148	104	292
0.000	16378	4845	71	321
0.000	14381	4377	69	321
0.000	14378	4376	68	322
Summa OPOSCAM sum:			00:06:22	2.19 m
0.000	1304	566	0	559
Summa S-Class 2 S75 T sum:			00:00:00	0.56 m
0.000	1990	498	1	498
0.000	1990	498	0	498
SummaSign Pro T-Serie 75 sum:			00:00:01	1.00 m
0.400	3745	2113	89	313
Zund S3 sum:			00:01:29	0.31 m

Previous [1] … [4] [5] [6] … [10] Next

www.optiscout.com

Material Database (Server)

The material database is at the heart of the OptiScout software suite when it comes to **fully automating all cut processes. A central database server** (physical or virtual) is available to all OptiScout applications in the local corporate network around the clock. The client-server structure ensures high process security. The standardization of profiles, processes and formats achieves a significant increase in productivity. The data import is independent of the machine that ultimately executes the output.

AutoImport Plug-ins for AutoCAD, Illustrator, CorelDRAW, a. m.

OXF interfaces to most commercially available RIPs

8

INVENTORY

- Materials
- Tools
- Methods
- Technology Data
- BDE Monitoring
- Statistics

AUTOMATION

- Import Profiles
- Tool Profiles
- Material Profiles
- Machine Profiles
- OXF Format

Lasering

Creasing

Cutting

Milling

OS **Production**

OS **Production**

OS **Front-End**

OS **Front-End**

Area of Application: **Pre Cut** | JOB Preparation | Cut Workflow | Post Processor

OptiScout Smart Production

Optional Modules:

Software Suite for the Realization of Customized Serial Productions

Our Package

OptiScout - Front-End

Cut Workflow | Post Processor

Post processor with import plug-ins for CAD and illustration software (AutoCAD, Illustrator, CorelDRAW)
The following basic production and workflow tools are included: Import filter AI, EPS, DXF, PDF, ..., overcut compensation for oscillating knives and rotary knives, simulation and sorting, bridges, cutter radius compensation, Smart Feed, segmentation helper, bridges, separating cut, ...

OptiScout - Production

Cut Workflow | Post Processor

Finishing application for contour-accurate cutting with camera-controlled detection that compensates for the distortion of printed media; Print & Cut production software with RIP software interfaces

Includes all Front-End tools plus the following additional tools: RIP Compatibility, Compensation Methods: Best Fit / Fit to Job
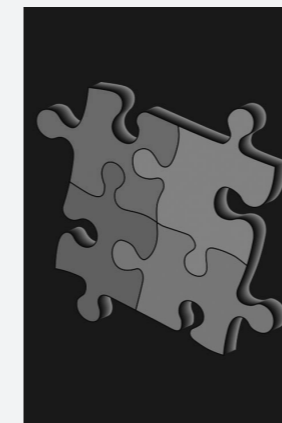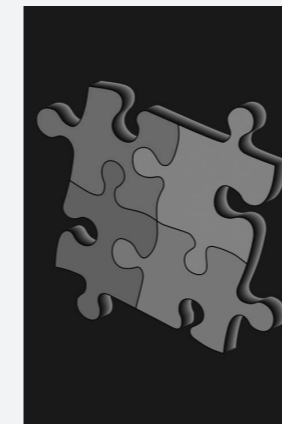
OptiScout - Roll Cutter Edition

Cut Workflow | Post Processor

Roll cutter application based on the high-end finishing solution OptiScout Production
Equipped with the drivers for Summa roll cutters, the Roll Cutter Edition is ideal if the production capacity is to be supplemented or made more flexible.

Prepare
Pre Cut

Powerful vector editor for creating, editing and optimizing the output data
Graphical vector software for creating and editing cut data
No post processor

Objectives: standardization and networked work

Material Database
Pre Cut | Cut Workflow

Inventory of all machines, methods, materials and tools involved in the production process
Interfaces to all standard RIPs provide the data in layout and production

Objectives: inventory, quality assurance

True Shape Nesting
JOB Preparation

Intelligent object placement

Objective: optimal material usage

Production Manager
QR Code Workflow
Cut Workflow

Allocation of individual production workflows (profiles)

Objectives: improved flexibiliy, quality management and automation

Job identification via QR or bar code, providing of cut-jobs, automatic start

Objectives: automation and standardization

OptiScout Prepare

Software application for job preparation - also networked (LAN)!

OptiScout Prepare has **NO** Post Processor.

Equipped with **auto-import plug-ins** for AutoCAD, Illustrator, CorelDRAW, providing cutting data is a breeze.

Field of Application: Pre Cut

- Serves job preparation on design clients
- Without direct output
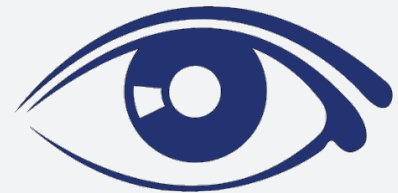- Multi user or company license possible
- Last **view control** before output
- Sorting of the output data with simulation
- Optimization of the output data
- True-Shape-Nesting (optional)

Included are many basic production and workflow tools: eg. import filters AI, EPS, DXF, PDF, ...

Plug-ins

A plug-in is a macro that is integrated into the menu structure or toolbar of a host program. It behaves as if it were an integral part of the host program and extends its functionality. OptiScout's plug-ins export data from the host program to the OptiScout desktop at the click of a mouse.
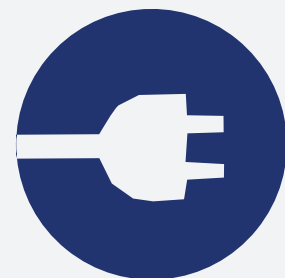
Available Plug-ins:

AutoCAD 2017, 2017 LT, 2018, 2018 LT, 2019, 2019 LT, CorelDRAW X8, 2017, 2018, 2019, CorelDesigner X7, 2017, 2018, Adobe Illustrator CC 2017, CC 2018, CC 2019, Adobe InDesign CC 2017, CC 2018, CC 2019

New in OptiScout 8

In detail see >>

Version 7 (till 11/2017)

Prepress / Design

Layout Mode
Serialization

Job Preparation

Display of the object orientation
~ shows orientation of the object contour
Dynamic Milling Tool Radius Compensation
Simulation of the output order
Simulation with Start Point Optimization
Workflow Manager
Quick Layer / Tool Assignment
Macro Player
Macro Editor
File Manager
~ facilitates the file search
Clipart Manager
~ facilitates access to standard graphics
Object Manager

Mark detection / Registration

Sheet corner detection and Edge Detection
~ important feature in material detection
Finishing

Feed optimization (Smart Feed)
~ intelligent material feed for overlong jobs
Segment helper
~ driver option for textile cutting

New from Version 8

Material Database (optional)

Industry 4.0 ready
RIP interface OXF 2.0
~ standardized interface for RIPs
Material profiles can be defined
~ individual profiles can be defined
Heterogeneous machinery
~ supports machines from different manufacturers
~ driver list on www.optiscout.com
Network capable in the LAN

Usability

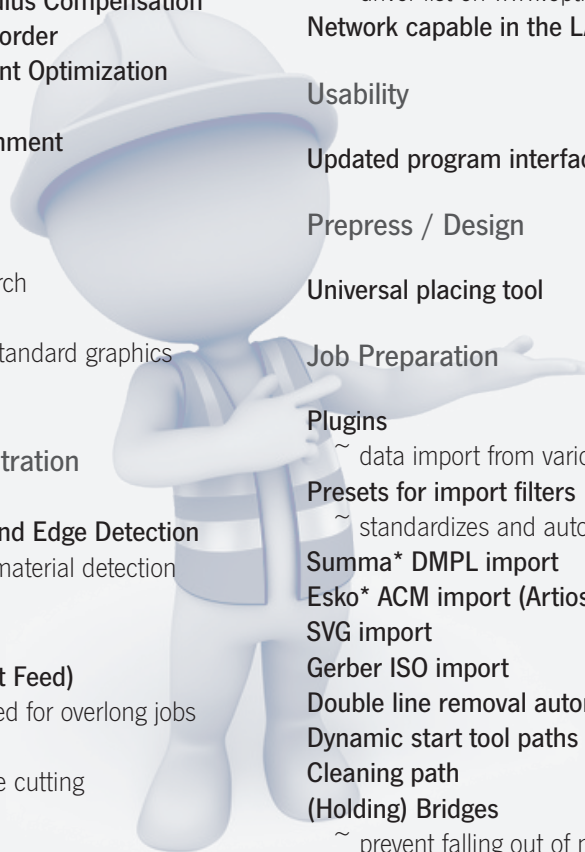Updated program interface

Prepress / Design

Universal placing tool

Job Preparation

Plugins
~ data import from various host programs per click
Presets for import filters
~ standardizes and automates data import
Summa* DMPL import
Esko* ACM import (Artios* CAD)
SVG import
Gerber ISO import
Double line removal automatically
Dynamic start tool paths (Lead in / Lead out)
Cleaning path
(Holding) Bridges
~ prevent falling out of milled parts
Display / edit object order

Finishing

Separating cut
~ separates sheets or cuts rolls automatically
Overcutting
~ contour extension for non-rigid materials
Updated and optimized drivers

EUROSYSTEMS
Software Supplier for the Finishing Industry

As of: 03/2019

OptiScout
Smart Production

Scan Me

1st choice in heterogeneous production environments

Industry 4.0 ready!

Euro-Systems, founded in 1991, has more than 25 years of experience in machine control. This unique know-how flows into program development.

Our customers are manufacturers of multifunctional flatbed cutters and commercial printing service providers in the graphics industry. Our products are used in industrial companies around the world.

The sales partners on site are characterized by: Competence, customer proximity and market knowledge. You can rely on our distributors when it comes to choosing the right software solution for your business.

Euro-Systems S.à r.l.

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E-mail: sales@optiscout.com

EUROSYSTEMS Finishing Solutions for Cutters, Lasers, Milling Machines & Engraving Machines

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