The standard for digital finishing
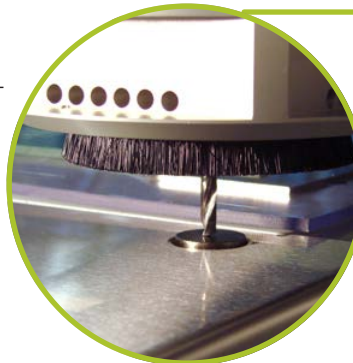
Kongsberg XP Series

ESKO✪

The Kongsberg XP

Innovative features for the industry's most solid digital finishing platform

i-cut Production Console : the new front-end offers users powerful operator functionality for signage, display and packaging production. It helps the operator to ensure highly efficient production along with simple and extremely accurate print-to-cut registration, and a state of the art user interface for improved usability.

Table Mapping: Dynamic table mapping procedure provides real-time update to the exact field conditions. Precise automatic z-control during finishing means less damage to the underlay.
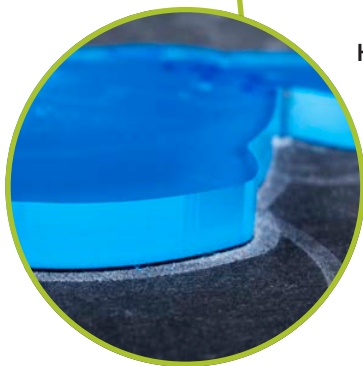
Automatic calibration: Thanks to the automatic calibration system less tool exchanges are needed.

Sandwich steel construction: The Kongsberg XP series features the famous, rock-solid Kongsberg tabletop construction that will never warp or go out of level, even after decades of heavy use.

Tool inserts: Insert knife tools are available for cutting all relevant materials ranging from thin paper over synthetic sheets to heavy-duty packaging and display material. The tooling selection also includes creasing, plotting and drilling tools.

Heavy Duty Milling: Kongsberg XP tables can be configured for milling applications ranging from light-duty routing to lengthy jobs working with heavy-duty materials — all with record-breaking productivity.

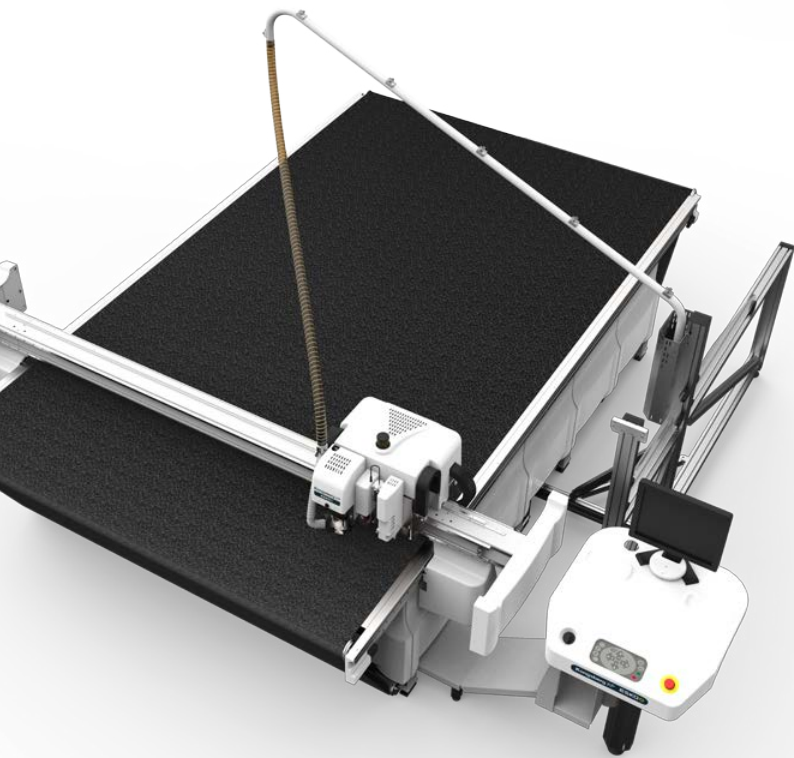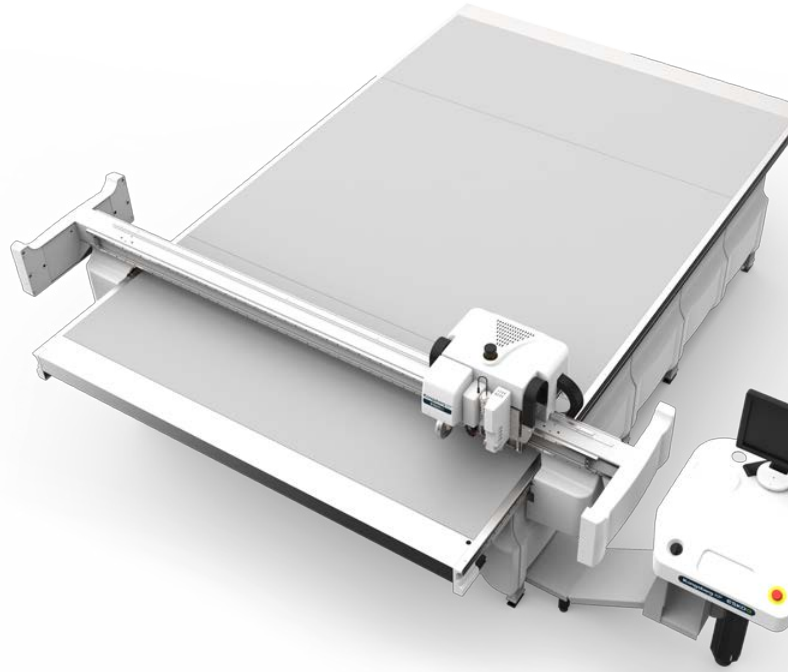**High Speed:** The Kongsberg XP is the fastest in its kind wih top speeds of up to 100m/minute.

Select the perfect Kongsberg XP

The Kongsberg XP table can be configured to fit your needs. With the *i*-cut Production Console front end, the Kongsberg XP cutting table becomes a work horse for all applications.

Kongsberg XP

- A durable PVC cutting underlay, great for corrugated and many other materials, with special requirements for creasing and high-friction hold down. It also optimizes the power of the vacuum when large sheets are used.
- *i*-cut Production Console: The powerful new front-end loaded with sample making and packaging functionality.
- Material positioning brackets facilitating print-to-cut registration and enabling cut, crease and plot operations on both sides of the material.
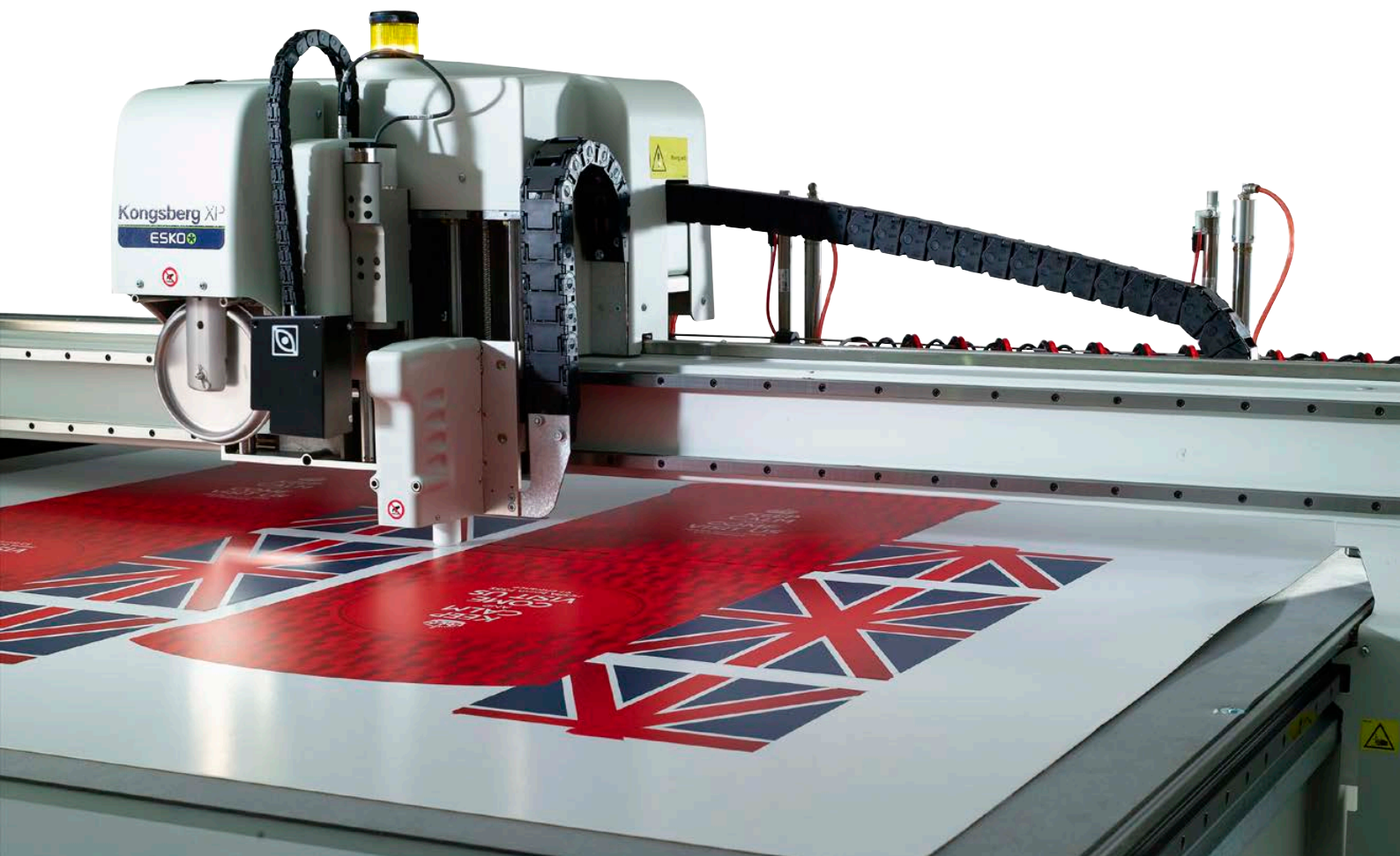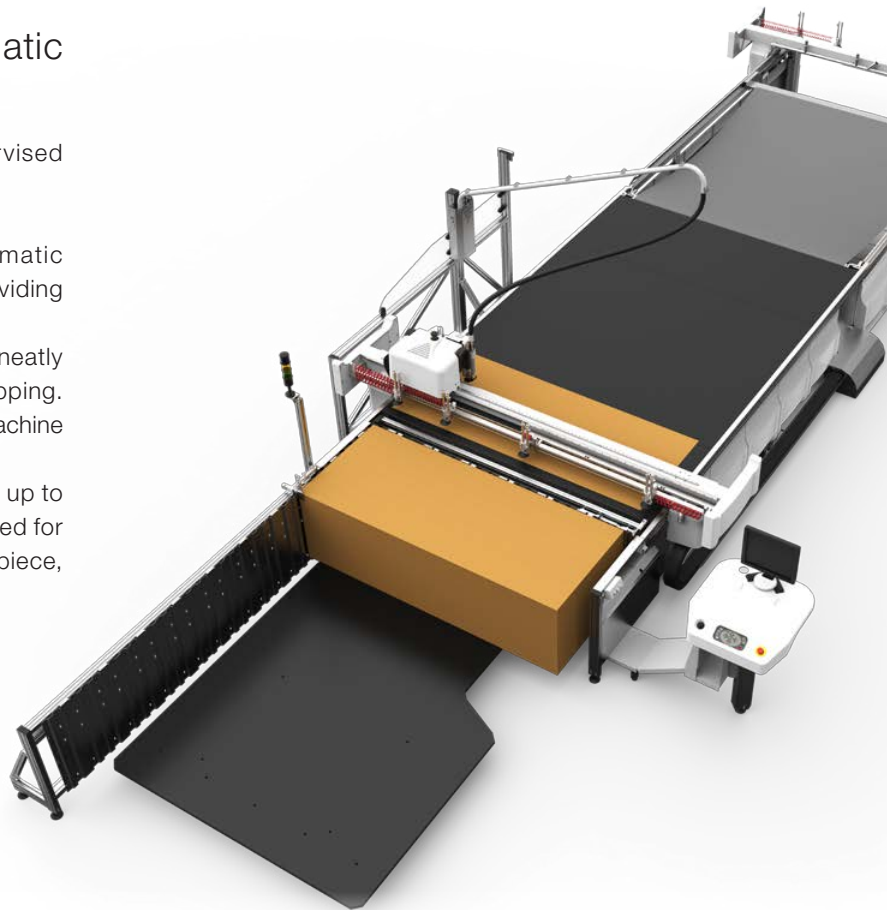
Kongsberg XP with conveyor

Perfect for finishing printed materials like signage, displays, banners…

- *i*-cut Production Console: The powerful front end loaded with signage functionality and short run production support. Comes with industry standard print to cut registration.
- A camera system for vision cutting.
- A production-friendly rotating workstation. It includes space for a PC and provides easy access to the table front for material loading.
- A soft, compact felt cutting underlay, optimized for a combination of milling and knife cutting.
- Combined with a conveyor system and a roll or sheet feeder enables you to run sem*i*-automatic production with the Kongsberg XP.

Kongsberg XP Auto: fully automatic production

The Kongsberg XP Auto is capable of unsupervised production of printed or unprinted material.
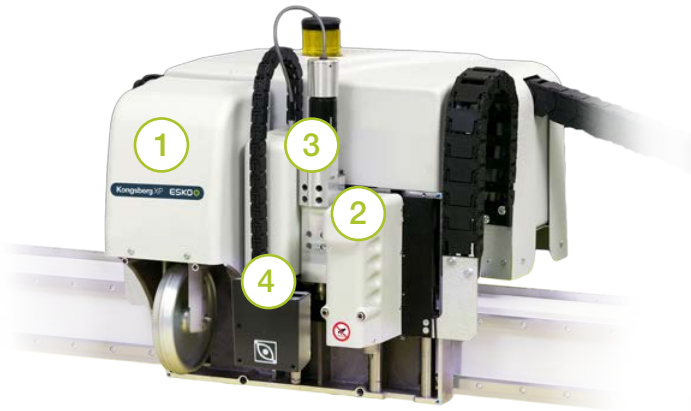
- An advanced camera system ensures automatic registering to print marks facing down or up, providing tight print- to-cut accuracy.
- In the integrated out-stack finished material is neatly stacked on a pallet, simplifying subsequent stripping. The out-stack offers pallet jack access while the machine continues to work
- The fully automatic load mechanism can handle up to half a ton of corrugated material. There is no need for an operator to load and unload sheets piece by piece, saving labor costs and reducing idle time.

One tool system, limitless possibilities

The Kongsberg XP tooling system consists of a wide variety of optional tool units. These can be quickly mounted on one of the three tool positions.

In addition, the tooling system includes a material thickness probe and an optional camera for registering to printed images.

1. Heavy duty tool position : for heavy tools optimized for power.

2. Fast tool position : for a set of knife tools optimized for fast movements

3. Insert position (optional) : accomodates inserts for either pen plotting or drilling of holes.

4. *i*-camera: enables advanced vision cutting, including compensation for material distortions.

Heavy-Duty Tool Unit

The Heavy Duty Tool Unit is capable of a down-pressure equivalent to 50kg – 110lbs; sufficient to crease triple and double-wall corrugated with heavy liners. This unit not only takes crease wheels, but also a heavy duty knife and v-notch tools.

High-Power Milling Unit

The included spindle features 3kW of milling power, and adjustable spindle speeds up to 60,000 RPM. It allows for milling, routing, drilling and engraving directly from CAD/graphics designs. Materials with thickness up to 50mm (2") can be milled.

The 3kW milling spindle offers faster feed rates than what is possible with standard 1kW spindles. This makes the 3kW spindle option a great choice for installations where extended milling duty cycles and continuous processing of heavy-duty material are required.

VibraCut Tool

The VibraCut Knife Tool is a reciprocating knife tool suitable for processing corrugated board and other light-duty fibrous materials with a maximum cutting thickness of 10mm – 3/8" at high speeds.

High-frequency VibraCut Knife Tool

This is an all round reciprocating knife tool, perfect for cutting a lot of different paper based and foam materials. The High-frequency VibraCut Knife Tool is designed specifically to process difficult materials (like heavily recycled board) at efficient speeds. The cutting thickness is blade dependent, the maximum thickness is 30mm (1 1/4").

Foam Cutting Unit

The Foam Cutting Unit features a reciprocating knife blade, which allows the cutting of foam material up to 50mm (2").

Hi-Force Knife Tool

The Hi-Force knife tool is a general purpose knife tool suitable for cutting a wide range of flexible and rigid materials. Different knife adapters allow for different knife types. The cutting thickness is blade dependent, the maximum thickness is 50mm (2").

Rigid Material Knife Tool

The Rigid Material Knife tool extends the capabilities for knife cutting of rigid materials. This tool offers excellent performance when cutting in rigid materials such as display carton, rigid plastics such as Forex and polypropylene; as well as many qualities of gasket materials. The cutting thickness is blade dependent, the maximum thickness is 130mm (5").

PressCut Knife Tool

The PressCut Knife Tool handles all kiss-cutting applications. An internal motor provides fast-response tool up/down and exact tool pressure control. The maximum downward knife pressure is 10N. There is a software function to provide speed dependent tool pressure control, which is important to ensure reliable cutting when velocity ramps up and down.

RotaCut Tool

The RotaCut Tool is specifically developed for cutting printed textiles such as banners and flags. The foot is made from a material that reduces friction to a minimum which provides the perfect hold-down for cutting textile materials.

Drill Tool Insert

The drill tool is used for light-duty drilling in materials such as Re-board, X-Board and triple wall corrugated. This tool has a 70W geared motor and spins with approximately 1000 rpm.

Ballpoint Pen Insert

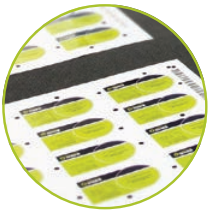The Ballpoint Pen insert is able to hold a ballpoint or pen.

Cutting a wide range of materials

In a world with rapid technology and business changes, investing in equipment that offers future flexibility makes a lot of sense.

The Kongsberg XP is ready for 2D or 3D jobs, for packaging, signage or displays production. It handlest almost every material you can dream of, form soft materials (like vinyl) all the way to hard, heavy duty rigid materials (like boards ord wood).

Folding carton

Samples from all grades of folding carton.

Powerful function to generate sample counters based on integration with ArtiosCAD

Acrylic

Engraving
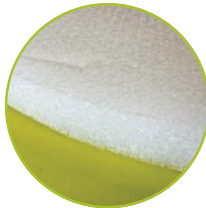
Additional furniture

Trophy

Sign making

Front panels
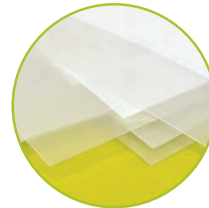
Honeycomb

Pallets

Displays

Protective packaging

Corrugated board

Short-run of boxes on demand

Sample boxes

POP displays

Wooden box replacements

Foam

Protective packaging

Signs

Plastics

Boxes for presents and cosmetics

Document folders

Rain covers and sun shading

Credit cards

Lights boxes/Pop up
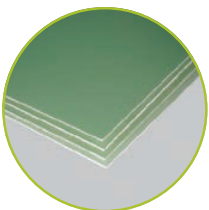
Solid board

Specialty packaging gift packaging

Rigid paper board
Fluted core board

Furniture

POP displays
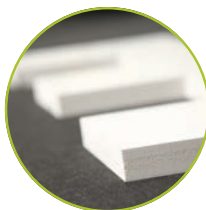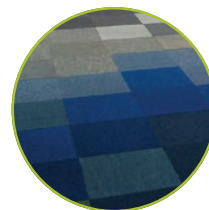
Corrugated plastic

Boxes

Displays

Fiberglass

Signs

Special constructions

Modelling

Foam board

Signs and posters

Displays

Models of buildings, etc.

Carpet

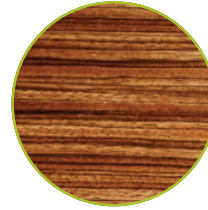Carpets with different forms or logos combining colors

Personalized shapes

Drawing

Pre-mounting for flexo plates

Plots on paper, Mylar foil or directly onto die board

Adhesives/Vinyl

Labels (Short runs)

Vinyl for banners, cars, shops

Sign making

Veneer

Furniture

Sign making

Box lining

Paper

Envelopes

Exhibitors lining

Box lining

Wood

Displays

Furniture

Signage

Other materials

Please contact us for a performance test.

ACM*

Displays

Advertising items

Signs

Boxes

MDF**

Displays

Furniture

Sign & Display

Textile

Banners

Flags

Advertising items

Roll-up

Thin material

Displays

Sign making

Gaskets

Gaskets for cars, pumps, liquids...

Rubber

Die rubber (no drying time required)

Mouse mats

Complements for shoes

Magnetic foil

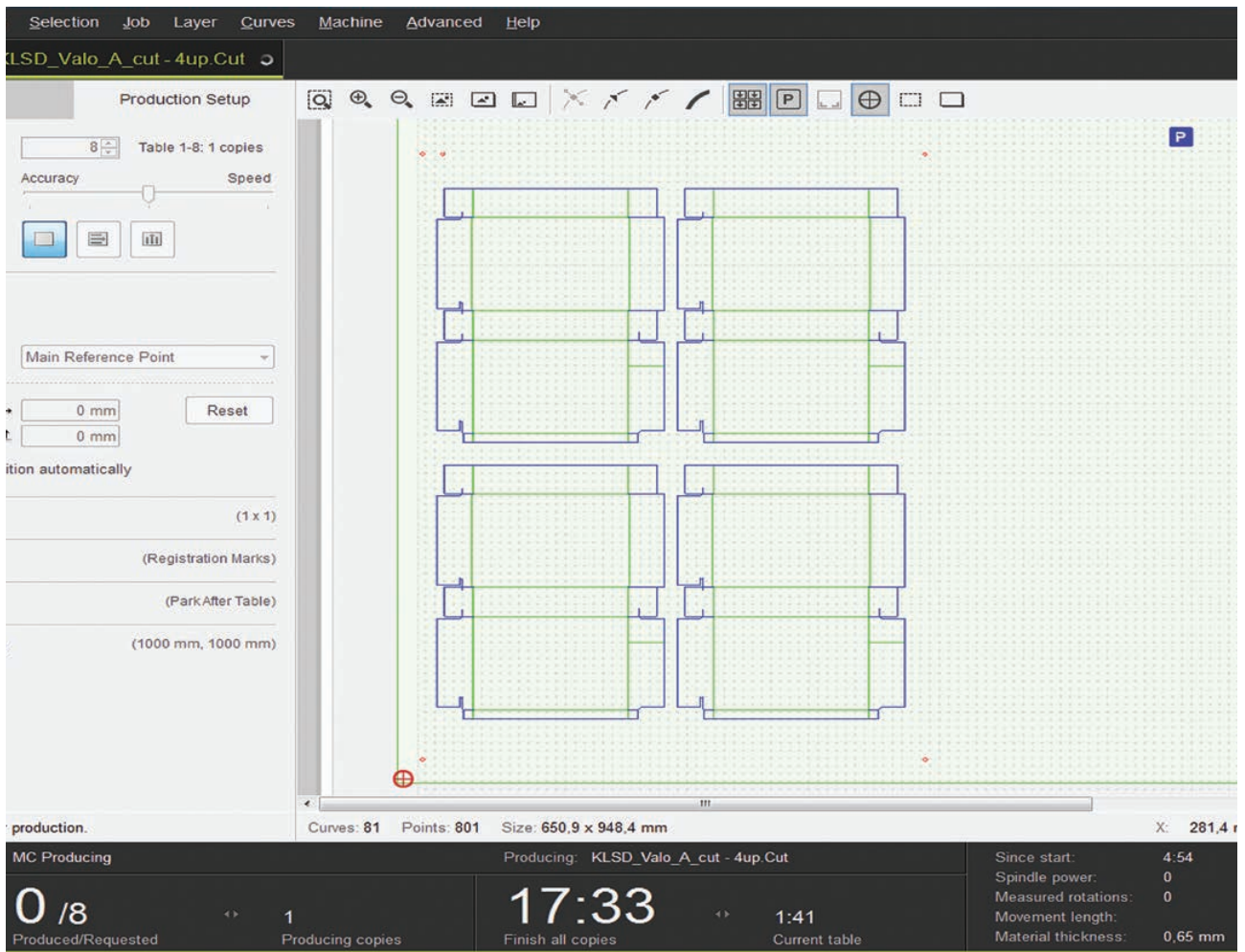*ACM : aluminum composite material
**MDF : medium-density fiberboard

i-cut Production Console:
the powerful new front-end

The *i*-cut Production Console is the new front-end software for the Kongsberg tables. It offers unprecedented functionality for signage, display and packaging production and a completely new and very intuitive user interface.
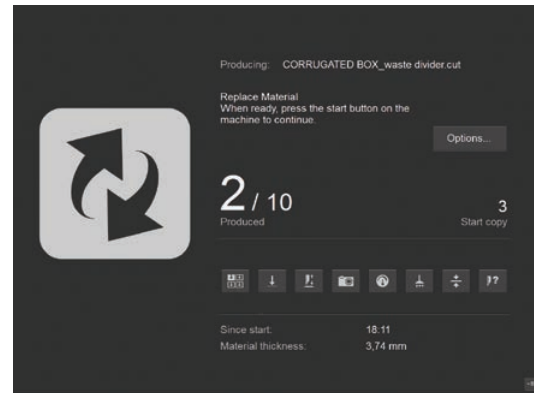
Icon based graphical user interface

i-cut Production Console uses large icons and colors to communicate with the operator from a distance. The operator can leave a running Kongsberg table but a quick glance at the 'distance view' screen will give the current production status and signal for his attention when it's necessary.

Easy job setup

i-cut Production Console makes it very straight forward to set up jobs. Import presets with Cutting Keys are available for automated curve optimization and tool setup. By a single click the operator can switch between jobs, e.g. prepare one job while producing another.

Cutting Keys

i-cut Production Console comes with about 100 Cutting Keys on board. These cutting keys contain the recommended tool setup for packaging and signage materials, for consistent cutting results. The operator can save 'favorites' which allows for fast access to user selected cutting keys.
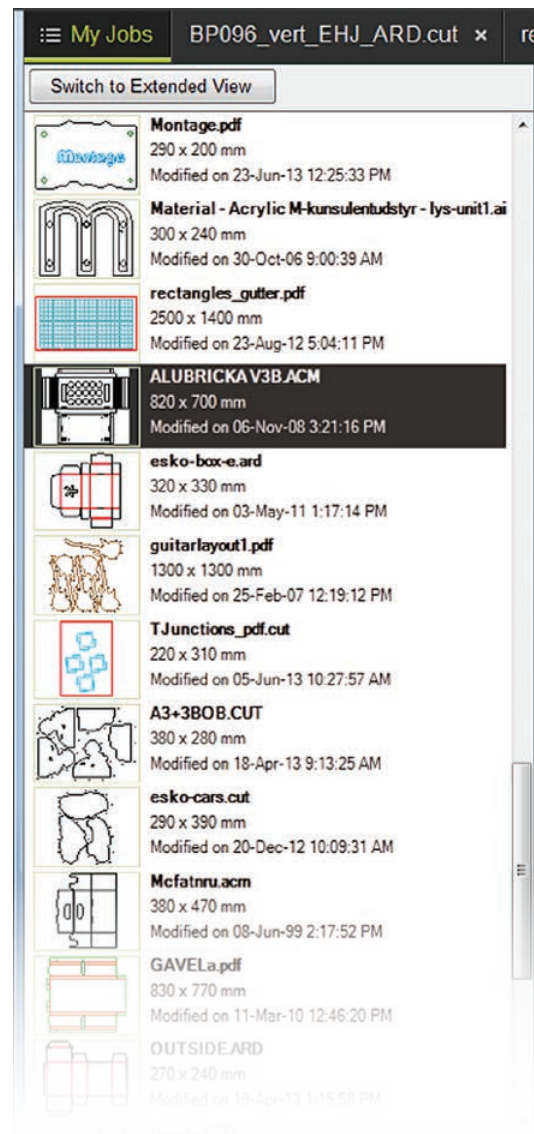
Job list & handling

i-cut Production Console presents a complete list of all the jobs waiting to be produced. This list can be sorted and comes with a thumbnail and a metadata view. Jobs can be added to the list with a customer defined preset, so jobs are ready to go right away.

Optimized cutting sequences

A set of intelligent curve optimization tools, which include „Avoid overcuts", „Remove double lines" and „Sample making optimization" reduce the cutting time and safeguard quality.

Multizone cutting

i-cut Production console makes multizone cutting possible: while cutting on one side of the table, new material can be loaded and unloaded on the other end without interupting production. Loading/unloading occurs on one side, while cutting continues without interruption on the other.

An easy to use, complete list of all your jobs makes planning production straightforward.

Get more out of your Kongsberg table with design & production software

Whether you create displays, signage or packaging, Kongsberg cutting tables become even more productive when supported with the world's leading design and production software.
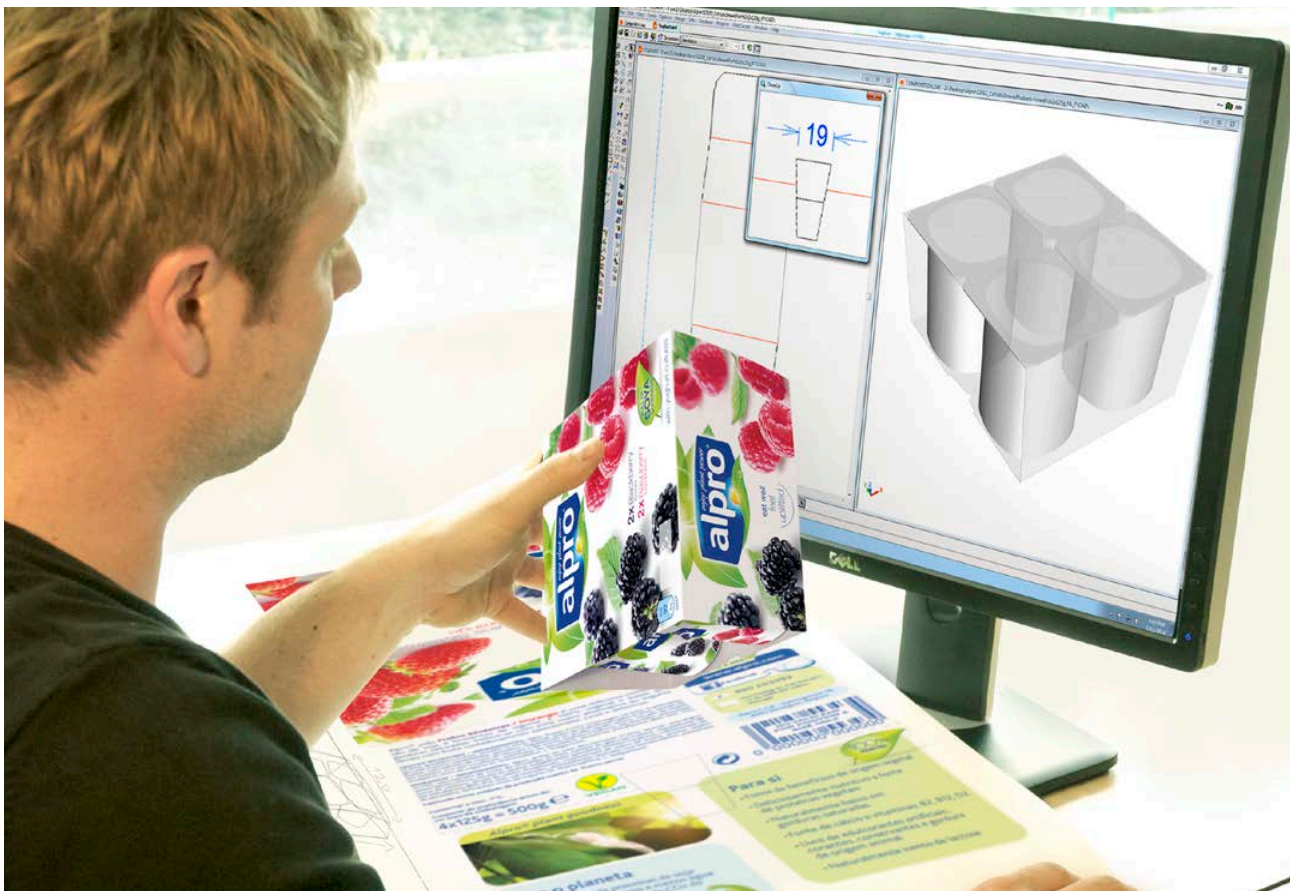
Design 3D displays and packaging with ArtiosCAD

For 3D projects, you need both graphic design software and structural design software. ArtiosCAD is the world's most popular and advanced structural design software for packages and displays.

Use ArtiosCAD to choose from more than 15 000 standard packaging designs. Or design your packaging and POP designs, from scratch in 3D. Send the structural designs directly to the cutting table.

It is the ideal product for all corrugated, folding carton and POP designers. ArtiosCAD increases productivity throughout the company and supply chain.
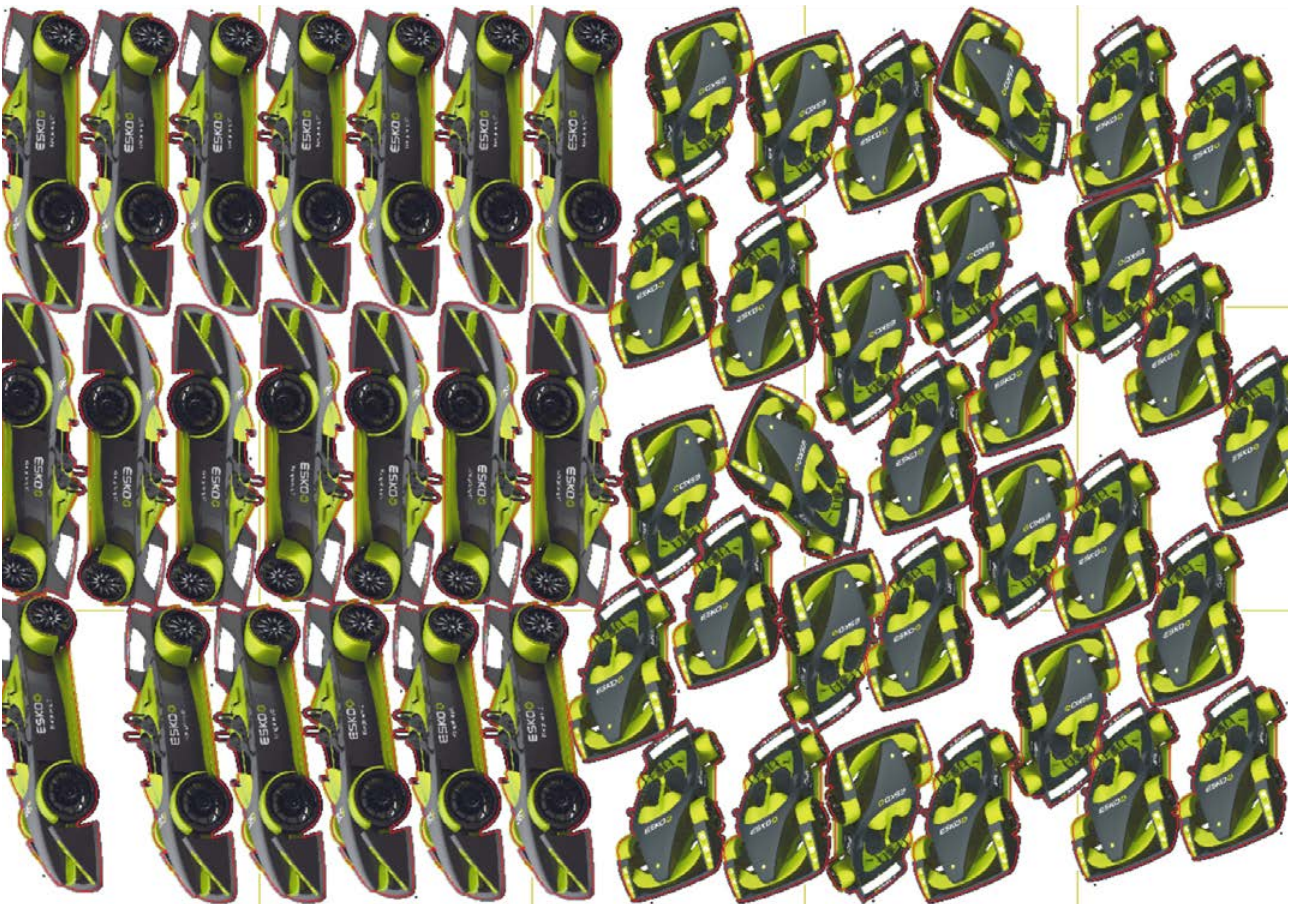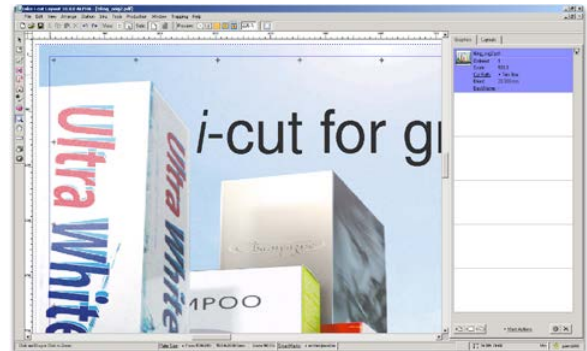
i-cut Suite optimizes your large-format production

Eliminate errors, save time and reduce waste with *i*-cut Suite, the industry standard design-to-print-to-cut workflow.

i-cut Suite standardizes the way graphical files are sent to the printer and digital cutting table. You save time, reduce material waste, maximize your printer's output, create the most accurate and efficient cutting paths for your Kongsberg table, and create great quality output — every time.

- **• *i*-cut Preflight** handles efficient preflighting and editing of incoming PDF files, ensuring that jobs will RIP and print correctly.

- **• *i*-cut Layout** offers intelligent true shape nesting and tiling, resulting in more than 20% material waste reduction.

A global service network

Esko has a widely developed service network of highly trained service engineers. Get the service your table deserves from an field engineer close by.

We maximize your profitability by providing outstanding support during pre-installation, installation and production.
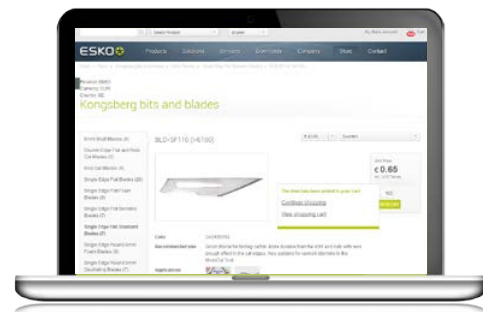
And, our Academy makes sure that your operators get the most out of structural design or workflow software so you can streamline your production even more.
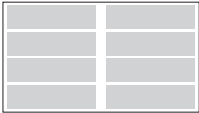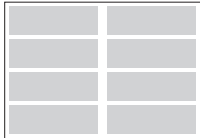
Buy your bits & blades at the Esko Store

Ordering the correct bits and blades for your Kongsberg cutting table becomes very straightforward at the Esko Store.

Go to **esko.com/store**, and check out the dedicated bits and blades finder. Enter your type of Kongsberg table and select the material you want to work on. The Bits and Blades Finder will offer you the best bits and blades for your application.
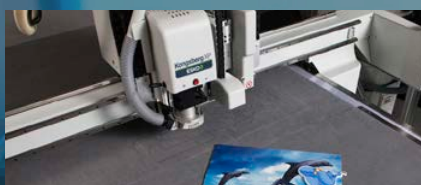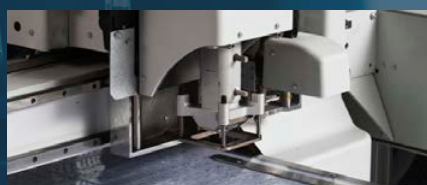
Technical specifications

	XP24	XP44
Work area	1680 x 3200 mm 66" x 126"	2210 x 3200 mm 87" x 126"
Maximum material size	1780 x 3600 mm 70" x 141"	2310 x 3600 mm 91 x 135
Maximum material size when conveyor	1680 mm x unlimited 66" x unlimited	2210 mm x unlimited 87" x unlimited
Overall dimensions including workstation	3600 x 3900 mm 142" x 154"	4100 x 3900 mm 161" x 154"
Weight	600 kg / 1325 lbs.	800 kg / 1760 lbs.
Maximum speed	100 m/min - 66 IPS	
Maximum acceleration	15 m/s^2 - 1.5 G	14 m/s^2 - 1.4 G
Position accuracy (total work area)	±200 µm ±.0078"	±300 µm ±.0118"
Repeatability	±50 µ - ±.0019"	±60 µ - ±.0023"
Standard vacuum sectioning	8 zones	8 zones
Registration and compensation	*i*-camera, *i*-cut Production Console (iPC)	
Operator workstation	Revolving workstation attached to the XP frame with operator panel and space for tooling, controller PC, screen and keyboard.	
Available tool options	Reciprocating knife tools Static knife tools HeavyDuty Tool Unit module, with inserts for crease wheels, v-notch knives and vertical HD knives High-Power Milling Unit Foam Cutting Unit Drill tool RotaCut Tool for textile material PressCut Tool for adhesive vinyl Pen plotting tools	

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