

Versatile, powerful cutting tables for signage, displays & packaging

The Kongsberg XN Series



Innovative features running on the industry's most solid platform

A choice of four tool heads, a full assortment of insert tools and flexible software guarantee unmatched versatility

***i*-cut Production Console:** The brand new front-end turns the Kongsberg XN into the most flexible cutting table on the market today. The *i*-cut Production Console offers users powerful functionality for signage, display and packaging production. It ensures highly efficient production along with simple and extremely accurate print-to-cut registration, and a state of the art user interface for improved usability.

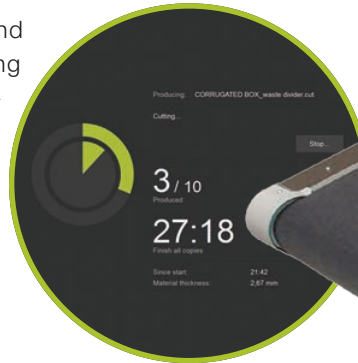


Table Mapping: Dynamic table mapping provides real-time updates to the exact field conditions. Precise automatic z-control during finishing means less damage to the underlay.

Tool exchange: Exchanging different tools is quick and error-free, because every insert is identified by a unique bar code. Specific tuning parameters are stored to avoid expensive operator errors.



Toolheads: A set of advanced, quick-change tool heads provides unsurpassed versatility, making it easy to set up the machine to process any material for just about any application.



Sandwich steel construction: The Kongsberg XN series features the famous, rock-solid Kongsberg table-top 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.





Rack-and-pinion drive system: Provides speed, durability and strength, drives through dense/thick materials with ease. Offers greater dynamic repeatability.



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



Power: The Kongsberg XN Series offers the raw strength required to process even the most rugged materials at high-production speeds. Kongsberg XN tables will keep on going when others might quit.



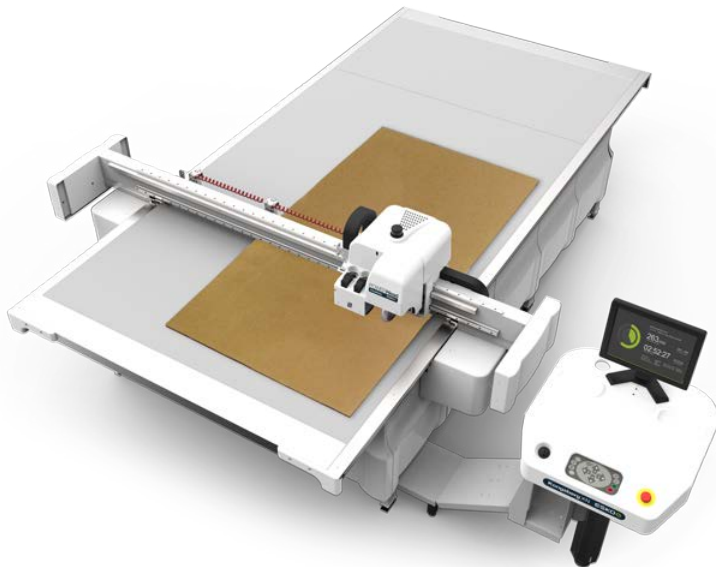
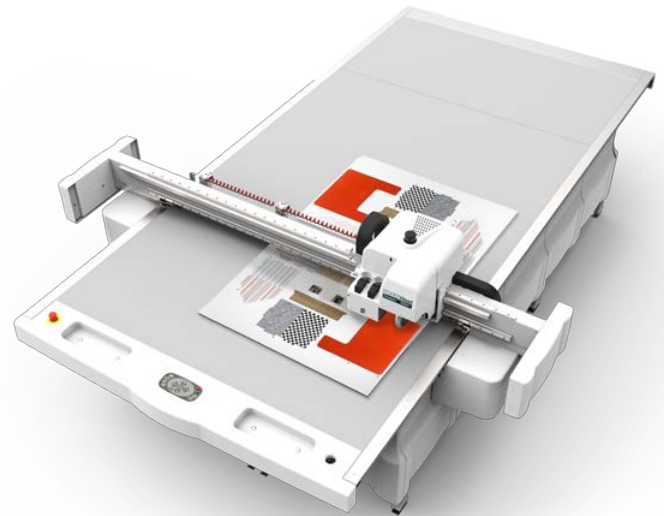
Choose your own Kongsberg XN system

The Kongsberg XN table comes in three prepackaged configurations to fit the different application needs. These configurations, combined with the *i*-cut Production Console, make the Kongsberg XN the most flexible cutting table on the market today.

Designer

The “Designer” Style Kit is a great fundament for sample making and other packaging-related tasks where frequent job changeovers are common. It consists of:

- *i*-cut Production Console: The powerful new front-end loaded with sample making and packaging functionality.
- A convenient cover in front of the machine that holds small baskets for tools and blades, offering a smaller footprint.
- Material positioning brackets facilitating print-to-cut registration and enabling cut, crease and plot operations on both sides of the material.
- 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.



Packaging Production

Those who produce packaging and flexo plates normally choose the Packaging Production model.

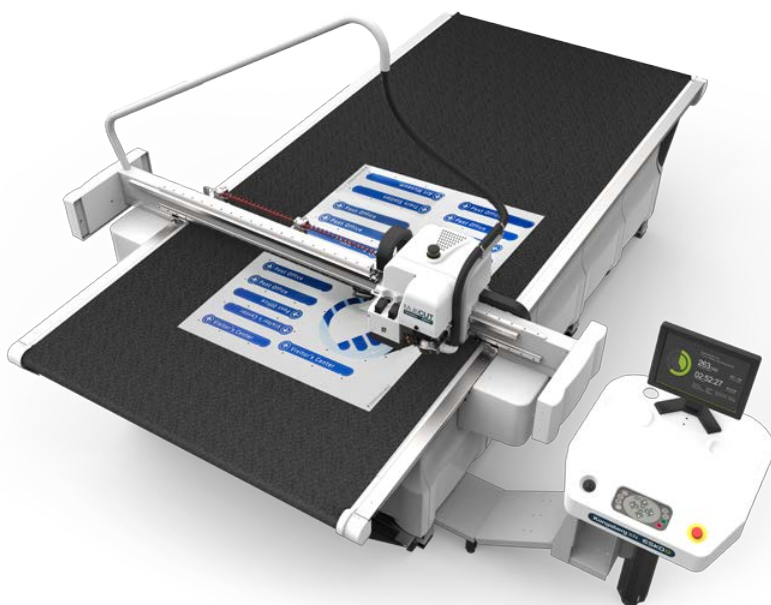
- *i*-cut Production Console: The powerful front end loaded with sample making as well as short run production support for the packaging market.
- A production-friendly rotating workstation. It includes space for a PC and provides easy access to the table front for material loading.
- Material positioning brackets which facilitate print-to-cut registration and enable cut, crease and plot operations on both sides of the material.
- PVC cutting underlay.

Sign Production

The "Sign Production" Style Kit is great for sign making and finishing of printed graphic elements.

The Sign Production configuration includes:

- *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.
- Optional conveyor feed system, sheet feeder and roll feeder unit for automated material load.

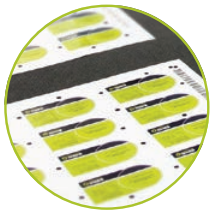


Producing on a wide range of materials

The perfect digital cutting table is expandable for the future.

In a world with rapid technology and business changes, it is important to invest in equipment that has all the capabilities you need for the present, but offers flexibility for the future.

The Kongsberg XN is easily the most versatile digital cutter ever introduced. Whether you focus on 2D or 3D jobs; on packaging, signage or displays; whether you want soft materials (like vinyl) or rigid materials (like boards or wood); the Kongsberg XN is perfect for any job or application.



Folding carton

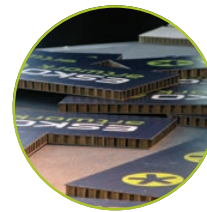
Samples from all grades of folding carton.

Powerful function to generate sample counters based on integration with ArtiosCAD



Acrylic

Engraving
Additional furniture
Trophy
Sign making
Front panels



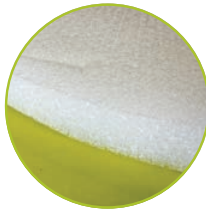
Honeycomb

Pallets
Displays
Protective packaging



Corrugated board

Short-run of boxes on demand
Sample boxes
POP displays
Wooden box replacements



Foam

Protective packaging
Sign



Flexo plates

Cut the flexo plates with or without bevel
Integration with Esko's Digital Flexo Suite is available.



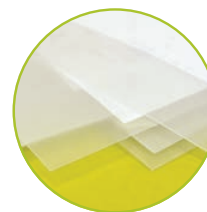
Solid board

Specialty packaging
gift packaging



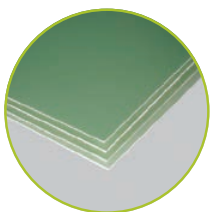
Rigid paper board Fluted core board

Furniture
POP displays



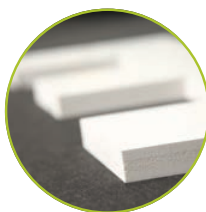
Plastics

Boxes for presents and cosmetics
Document folders
Rain covers/shading
Credit cards
Lights boxes/Pop up



Fiberglass

Sign
Special constructions
Modelling



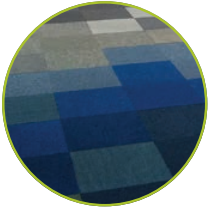
Foam board

Signs and posters
Display
Models of buildings, etc.



Corrugated plastic

Boxes
Displays



Carpet

Carpets with different forms or logos combining colors
Personalized shapes



Gaskets

Gaskets for cars, pumps, liquids...



Rubber

Die rubber (no drying time required)
Mouse mats
Complements for shoes
Magnetic foil



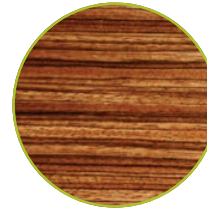
Drawing

Pre-mounting for flexo plates
Plots on paper, Mylar foil or directly onto dieboard



Adhesives/Vinyl

Labels (Short runs)
Vinyl for banners, cars, shops
Sign making



Veneer

Furniture
Signmaking
Box lining



Varnish blankets

Varnish blankets for offset print can be cut in perfect register with the printing press.



Wood

Displays
Furniture
Signage



Other materials

Please contact us for performance test



ACM*

Displays
Advertising items
Signs
Boxes



MDF**

Displays
Furniture
Sign & Display



Paper

Envelopes
Exhibitors lining
Box lining



Textile

Banners
Flags
Advertising items
Roll-up



Thin material

Displays
Sign making



Paper and carton

Psaligraphy knife tool for paper and carton details

*ACM aluminum composite material

**MDF medium-density fiberboard

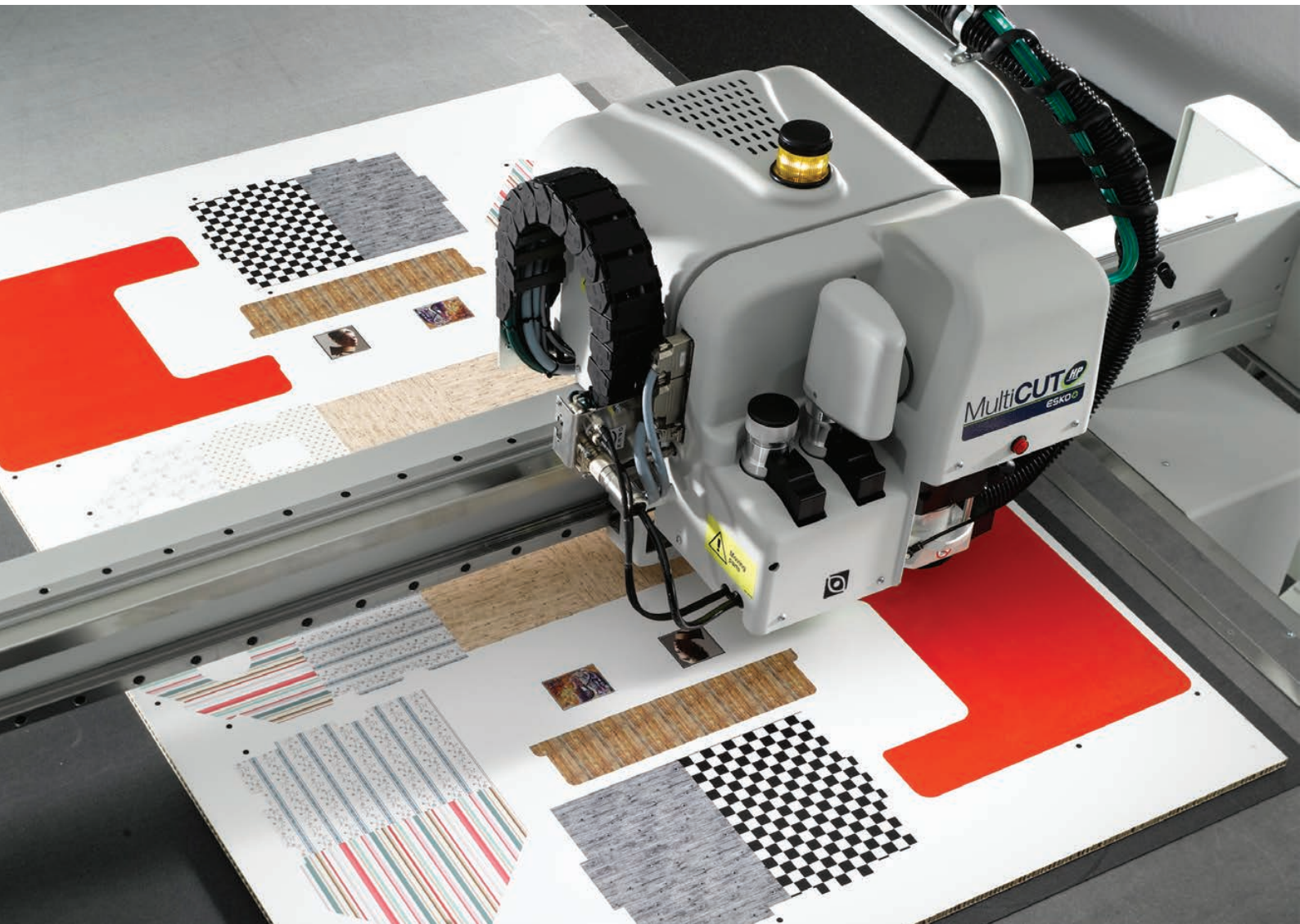
Kongsberg XN tool heads

A variety of systems compatible with a broad range of tool inserts.



MultiCUT-HP

The **MultiCUT-HP** (High Power) offers the same operating functions as the standard MultiCUT but is equipped with a super-strong, water-cooled milling spindle delivering up to three times faster milling speeds. The 3kW high power spindle is a great choice for shops that need extended milling duty-cycles and/or who work extensively with heavy-duty materials such as thick sheets of acrylic, wood/MDF and aluminum composite material.



FlexiHead

The **FlexiHead** offers highly accurate, powerful cutting — on all flexible and thin materials such as paper, folding carton, vinyl, textile and more. The FlexiHead, like all the other toolheads, is attached to a very precise servo axis controlling the tool depth when cutting, creasing and routing. Three configurable tool stations accommodate a full range of standard tool inserts. Specially designed knife and crease tool inserts are available to produce folding cartons with the same high throughput as corrugated jobs.



PowerHead

The **PowerHead**, ensures superior performance with heavy duty material such as double wall, triple wall and recycled board, plus the newest environmental boards. It features 150mm (6") diameter crease wheels and additional scoring pressure with 2 1/2 times more down force to crease high recycle content boards without breaking the liner. The PowerHead's knife adapter can offer V-notch cutting, with mitered corners and extremely precise folds for loading pallets, and container cushioning pieces, and paper core board displays.



FoamHead

The **FoamHead** uses a reciprocating knife to handle foam materials with a maximum thickness of 86 mm [3 3/8"]. With serrated-edge blades, it can also manage thick honeycomb paperboard. Three blade adapters of different lengths control the blade length so it can be matched to material thickness. And, it is easy to program accurate partial through-cuts thanks to the advanced Z-axis control.





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

The *i-cut* Production Console is the new front-end software for the complete range of 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.

The screenshot displays the *i-cut* Production Console software interface. The top menu bar includes: Selection, Job, Layer, Curves, Machine, Advanced, Help. The main window title is "KLS_D_Valo_A_cut - 4up.Cut".

Production Setup Panel (Left):

- Table 1-8: 1 copies
- Accuracy and Speed sliders
- Main Reference Point dropdown
- 0 mm input fields and a Reset button
- Registration Marks: (1 x 1)
- (Park After Table)
- (1000 mm, 1000 mm)

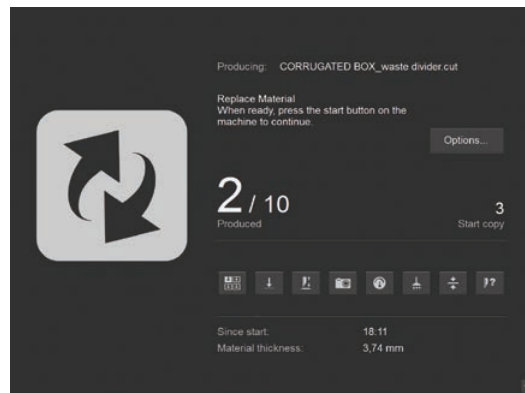
Main Work Area: A grid showing a 2x2 arrangement of table layouts with registration marks.

Bottom Status Bar:

- MC Producing
- Producing: KLS_D_Valo_A_cut - 4up.Cut
- Since start: 4:54
- Spindle power: 0
- Measured rotations: 0
- Movement length: 0
- Material thickness: 0.65 mm
- Curves: 81 Points: 801 Size: 650.9 x 948.4 mm X: 281.4
- 0 / 8 Produced/Requested
- 1 Producing copies
- 17:33 Finish all copies
- 1:41 Current table

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. With a single click the operator can switch between jobs, e.g. prepare one job while producing another.



Cutting Keys

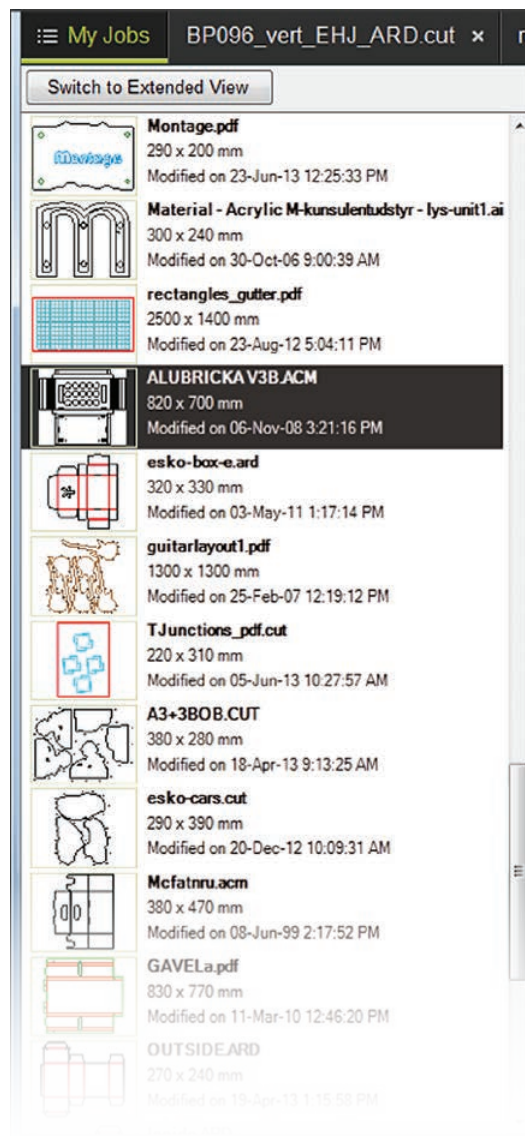
i-cut Production Console comes with about 100 Cutting Keys on board. These cutting keys contain the recommended tool setup for packaging and signage materials for consistent cutting results. The operator can save 'favorites' which allows for fast access to user selected cutting keys.

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.



The world's leading design and 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.



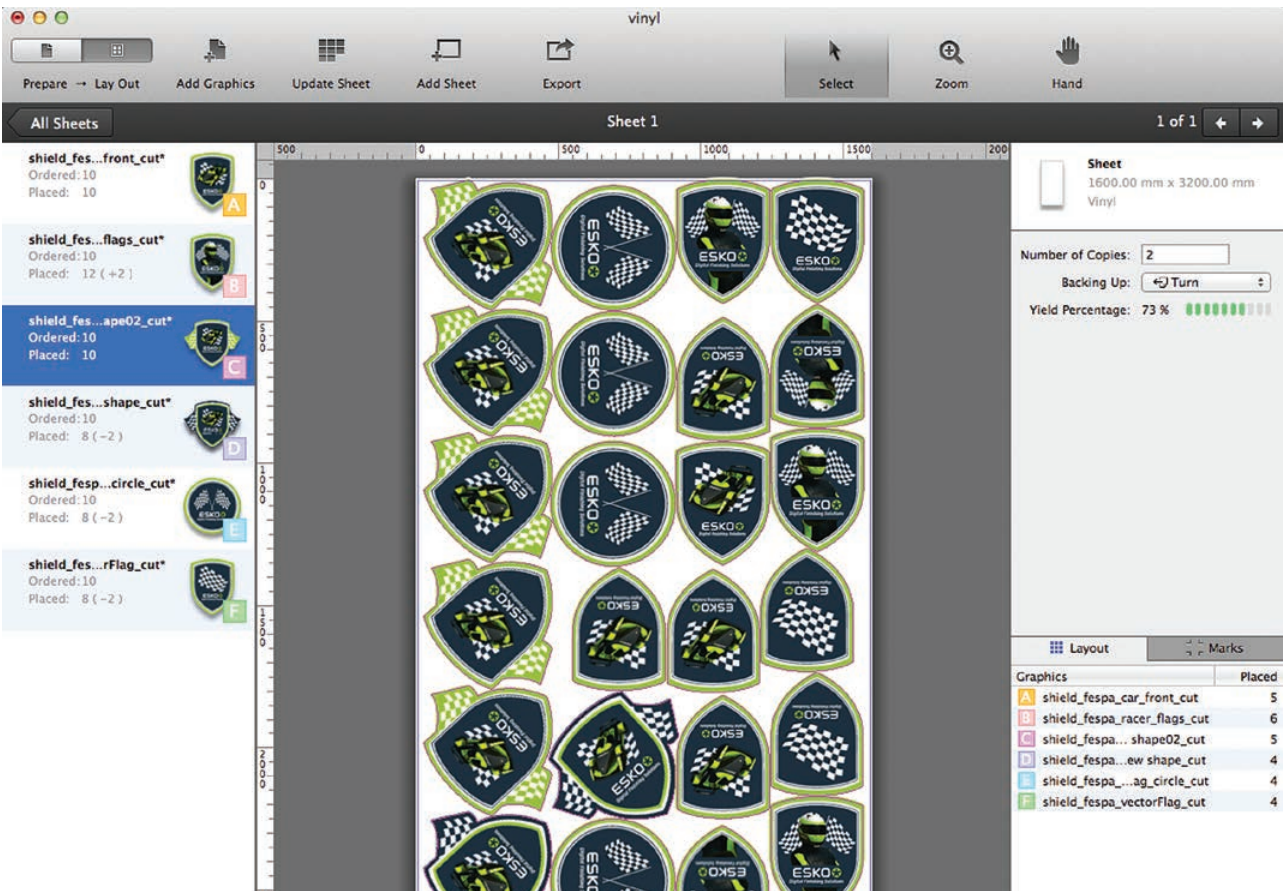


i-cut Suite optimizes your large-format production

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.



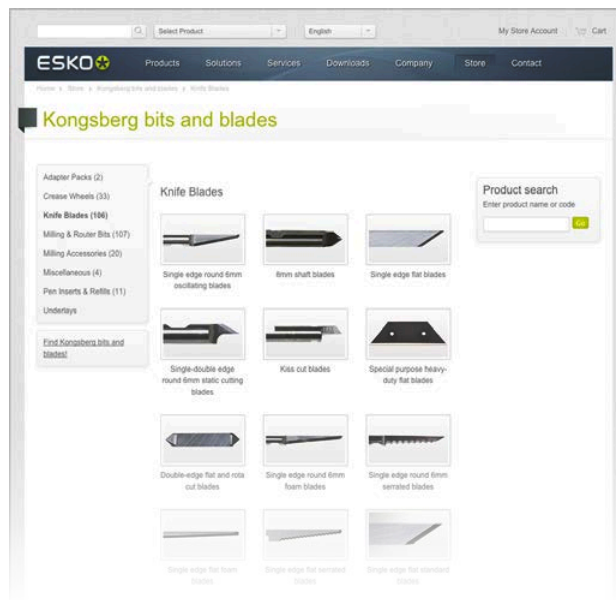
Automation (optional)

Conveyor feed option: The conveyor belt provides an automated material feed, and serves as a cutting underlay. The conveyor feed is driven by the machine traverse. A conveyor extension is also available as option, it provides operator a safe and efficient place to split and remove finished items when the machine is running.

Sheet Feeder: Automates sheet feeding by bringing the sheet from a stack onto the conveyor belt of the table, which brings the sheet into working position.

Roll Feeder: Feeds roll based material onto the conveyor system of the table. The roll feeder comes with tension brake for controlled feed of heavy rolls.

X-Pad: Device for automatic and accurate measurement of tool level for knife blades and milling bits (included with the MultiCUT-HP tool head).



Find the correct bits and blades at the Esko Store

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

Go to esko.com/store, and check out the dedicated bits and blades finder. Start by entering 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.

www.esko.com/store

Technical specifications

		XN20	XN22	XN24	XN40	XN44	XN46	XN48
Work area, all tools	mm In.	1680 x 1270 66 x 50	1680 x 2190 66 x 86	1680 x 3200 66 x 126	2210 x 1270 87 x 50	2210 x 3200 87 x 126	2210 x 4800 87 x 189	2210 x 6550 87 x 258
Max. material size	mm In.	1740x1750 68 x 69	1740 x 2570 68 x 101	1740 x 3575 68 x 140	2270 x 1750 89 x 69	2270 x 3575 89 x 140	2270 x 5250 89 x 206	2270 x 6930 90 x 273
Max. material width w/ conveyor system	mm In.	1680 66	1680 66	1680 66	2210 87	2210 87	2210 87	N/A
Overall dimensions w/ front panel	mm In.	2780 x 2450 109½ x 96½	2780 x 3040 109½ x 119½	2780 x 4050 109½ x 159½	3300 x 2250 130 x 88½	3300 x 4050 130 x 159½	N/A	N/A
Overall dimensions w/ RWS ⁽¹⁾⁽²⁾	mm In.	3600 x 2160 141¾ x 85	3600 x 2950 141¾ x 116	3600 x 3960 141¾ x 156	4070 x 2160 160¼ x 85	4070 x 3960 160¼ x 156	4070 x 5640 160¼ x 222	4070 x 7320 160¼ x 288¼
Weight	kg lbs	455 1000	525 1150	630 1390	490 1080	815 1800	1150 2540	1485 3270
Position accuracy ⁽³⁾		±200 µm ±.0078"	±200 µm ±.0078"	±200 µm ±.0078"	±250 µm ±.0098"	±300 µm ±.012"	±350 µm ±.014"	±400 µm ±.016"
Repeatability		±50 µm – ±.0019"			±60 µm – ±.0023"			
Maximum speed		50 m/min – 33 IPS						
Maximum acceleration ⁽⁴⁾		5.6 m/s ² - 0.56 G			5.4m/s ² - 0.54 G			
Vertical tool force		Standard tool stations: 220 N. PowerHead crease station: 500 N						
No. of vacuum sections		2	2	4	2	4	4	4
Standard traverse clearance ⁽⁵⁾		Standard clearance 50 mm – 2"						
Optional traverse clearance ⁽⁵⁾		High clearance 95 mm – 3 ¾"						
Operator safety		Included is the DynaGuard Safety System, which protects the operator and bystanders from potential machine hazards. The movable parts of the machine (traverse, carriage) are surrounded by a set of photocell sensors that, if activated, will immediately stop the machine and wait for the operator to resume operation.						

(1): Measured with RWS (revolving workstation) in its standard position

(2): Conveyor feed option will add marginally to the length dimension

(3): Applies across total work area, with standard traverse clearance

(4): May be reduced with certain tool- and configuration combinations

(5): Measured without cutting underlay. Max. cutting thickness is tool dependent

www.esko.com

APR15 - G2558556_US



Esko
Kortrijksesteenweg 1095
9051 Gent
Belgium
Tel. +32 9 216 92 11
info.eur@esko.com

Esko
8 Changi Business Park Ave 1
UE BizHub East #07-51
South Tower
Singapore 486018
Tel. +65 6420 0399
info.asp@esko.com

Esko
8535 Gander Creek Drive
Miamisburg, OH 45342
USA
Tel. +1 937 454 1721
info.usa@esko.com

Esko
Shinjuku i-Land Tower 7F
5-1 Nishishinjuku 6-Chome
Shinjuku-ku, Tokyo
163-1307 Japan
Tel. +81 3 5909 7631
info.japan@esko.com

Esko
Rua Professor Aprigio Gonzaga, nº 78
11º andar - Conjunto 113/114
04303-000 - São Paulo
Brasil
Tel: +55 11 5078 1311
info.la@esko.com

Esko
Floor 1, #2 Building,
1528 Gu Mei Road
200233 Shanghai
China
Tel +86 21 60576565
info.china@esko.com

ESKO

© 2015 Esko. All rights reserved. All specifications are subject to alteration.