

The most versatile cutting tables  
for signage, displays & packaging



The Kongsberg X Series



## KONGBERG X

# Complex production made easy on the industry's **most flexible platform**

In a world with rapid technology changes it is important to invest in equipment that offers the flexibility to cover your future needs.

With the Kongsberg X, you can invest in the equipment you need today with the confidence that you can easily upgrade as your business grows. Add new materials, new applications, or more capacity so that you can add volume and enter new market segments.



## Shared Resources technology

Simplifying is also replacing complex manual tasks with automation. The 'Shared Resources' functionality in the *i-cut* Production Console analyzes incoming files and automatically selects the right tool, the correct table settings and the cutting sequence.

The result? Fast and consistent production, no matter who operates the table. You no longer need to wait for the most experienced operator to produce your more complex jobs.

With Shared Resources, you can deliver the short turnaround time your customers demand.

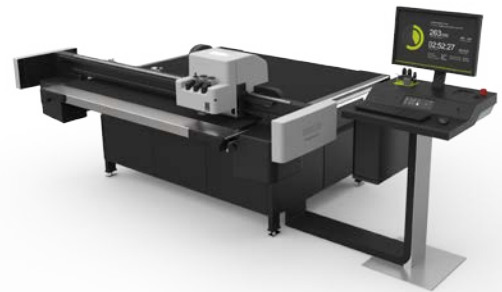
# Great engineering is key to **Versatility**

Whether your focus is Design, Signs, Displays, or Packages; 2D or 3D regardless of material, Kongsberg X will meet the challenge. Kongsberg X Designer, Sign Production, Packaging Production, and Flexo

Application Kits make picking the right configuration for your business focus easy. Additionally, a high degree of freedom in upgrade options makes the possibilities almost limitless.

## Packaging Production

This X model is optimized for Packaging and Flexo plate production. Material positioning brackets facilitate print-to-cut registration and enable cut, crease, and plot operations on both sides of the material.

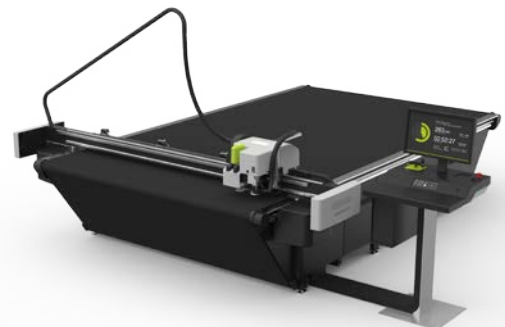


## Samplemaking

X Designer is the perfect Application Kit for Samplemaking and other Packaging related tasks where frequent job changes are common. It features a front cover with practical storage space for utilities

## Sign Production

The Sign Production Application Kit makes it easy to produce signs from flexible, roll material and rigid sheets. An integrated camera and software provide vision cutting, while advanced tools enable high quality, high speed milling and cutting of a wide variety of materials.



## Steel construction tabletop

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



## Automated sheet feeding

Automated sheet feeding permits quick and accurate loading of both paper and plastic based sheets. Multiple feed cycles per minute enable a continuous flow of material ensuring uninterrupted production.

Automated roll feeding is also available and it's even integrated with sheet feeding to meet production volume needs with diverse material requirements.

# Kongsberg X Toolheads: **Powerful and versatile**



## **MultiCUT-HP**

The MultiCUT-HP (High Power) is equipped with a super-strong, liquid-cooled milling spindle delivering several times higher productivity than less powerful alternatives. The combination of high power and efficient cooling makes this a great choice for shops that need extended milling duty cycles and/or who work extensively with heavy-duty materials (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. 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 excels on heavy duty material (double wall, triple wall and recycled board, environmental boards...). It features 150 mm (6") diameter crease wheels and additional scoring pressure with the equivalent of 50kg (110lbs) down force. The large wheels enable creasing high recycle content boards without breaking the liner. The knife adapter also offers V-notch cutting, enabling mitered and extremely precise folds when producing heavy-duty containers, 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 $\frac{3}{8}$ "]. 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.



# Bits & Blades that **Make a Difference**



## Quick and error free Tool Exchange

Exchanging tools on a Kongsberg X is fast, simple and error proof. Just insert a tool and hit Start. Every tool is identified by a unique bar code with tool parameters stored in memory, preventing any operator errors.



## Psaligraphy knife tool for the finest details

The Psaligraphy knife tool easily cuts any intricate detail in paper and folding carton, at a unprecedented quality level. Make products like greeting cards, invitation cards, promotional items and folding carton samples with high precision, burr-free cuts.

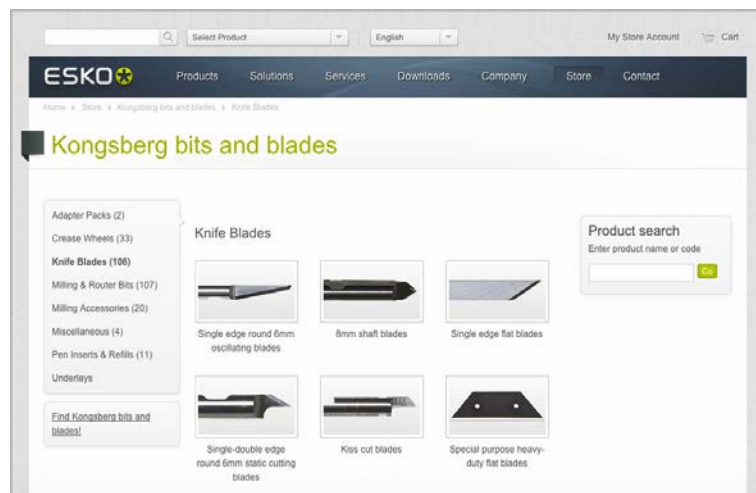


## CorruSpeed tool for the best quality

The CorruSpeed is a high impact tool for corrugated materials. It cuts without oscillating and delivers amazing quality at full machine speed. Corruspeed handles material thickness up to BC flute.

## Buy bits & blades online

Quickly order the right bits and blades for the right material on the Esko Store. Use the intelligent bit & blades finder on [www.esko.com/store](http://www.esko.com/store).



# Kongsberg X Starter bundles

## Upgradable to fit your future business needs

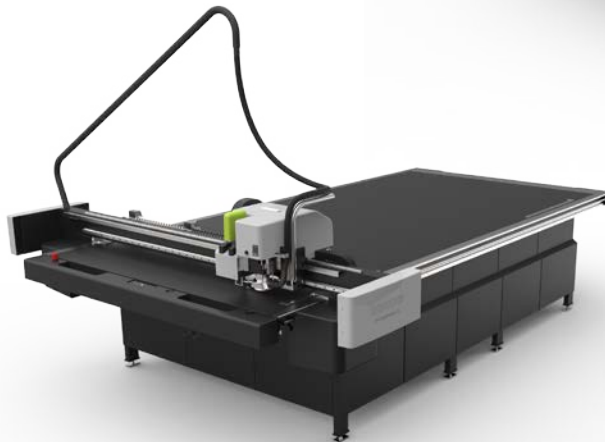
Kongsberg X starter bundles are tailored to make samples or perform short production runs. The X Starter bundles share platform, tooling equipment and production console (iPC) with the standard Kongsberg X .

The Starter bundles are upgradable; more speed can be added at a later stage (Speed Upgrade) when your business needs more

short run capacity or if your business expands the range of materials that needs to be cut.

Kongsberg X Starter is a safe investment with Kongsberg's long lifetime and high second hand value. Some call it the Kongsberg Experience for less.

**Kongsberg X24  
Designer Starter**



**Kongsberg X24 Sign Starter**

**Kongsberg X20 Flexo Starter  
(Exclusively 20 size)**





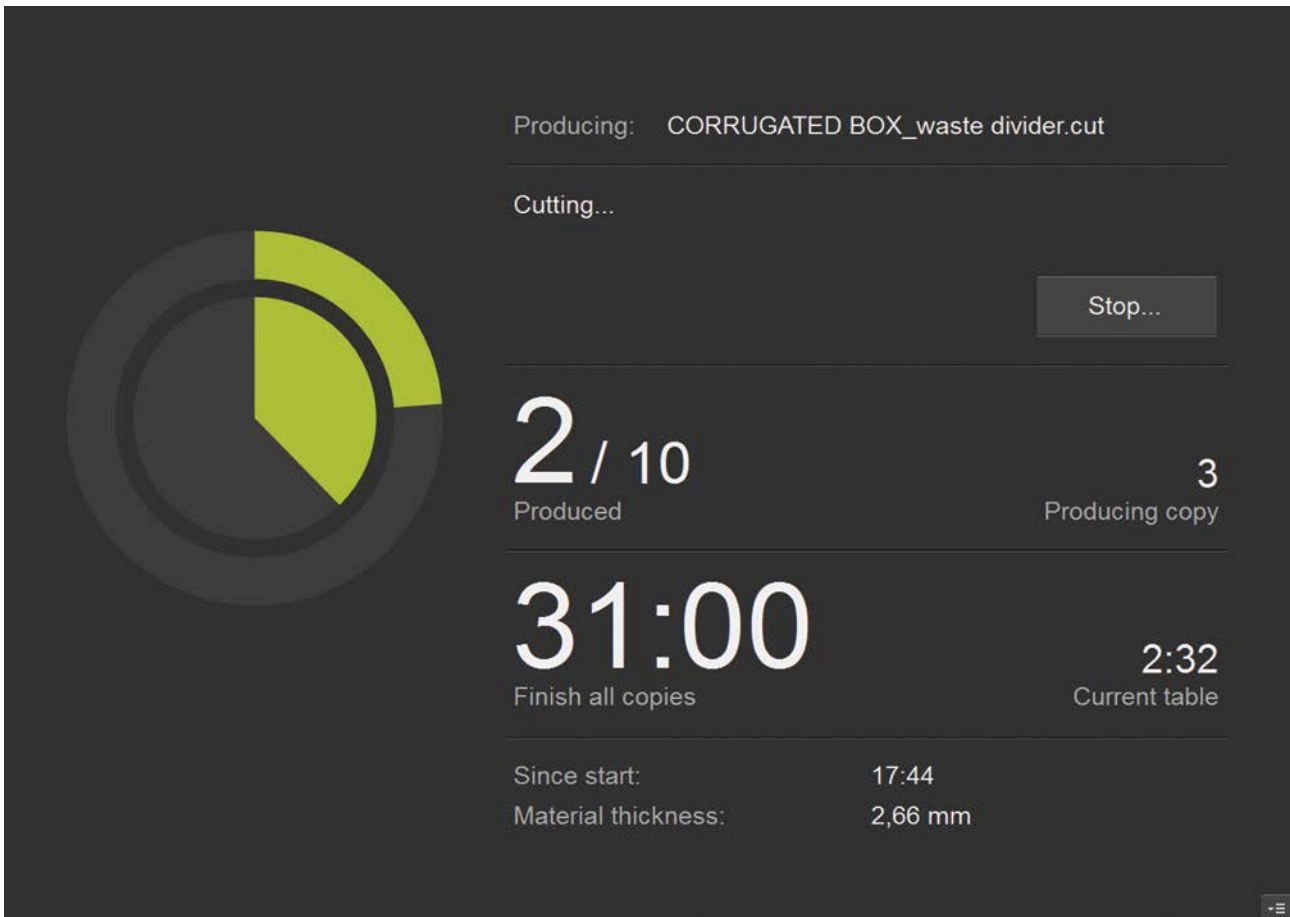
BUNDLE DESCRIPTION	TOOLHEAD	IPC
<b>Designer:</b> Quick and easy from design to cut. Cost efficient option for professional sample making.	FlexiHead	iPC Basic
<b>Flexo:</b> Tailored workflow from plate making to cutting. Small format, working back to back with CDI	FlexiHead	iPC Flexo
<b>Sign:</b> Optimized for handling the large Variety of materials and applications in the signage business.	MultiCUT	iPC Sign Std.
<b>Sign Light:</b> Option for signmaking when milling is not required. A wide range of knife tools supported.	FlexiHead	iPC Sign Std.

## Upgrade when you are ready

SPEED UPGRADE	THE SPEED UPGRADE OPTION INCLUDES	
Speed	X Starter: 30 m/min - 20 IPS	X: 50 m/min - 33 IPS
Acceleration	X Starter: 3 m/s <sup>2</sup> - 0.3 G	X: 5.6 m/s <sup>2</sup> - 0.56 G

VERSATILITY UPGRADE	THE VERSATILITY UPGRADE OPTION INCLUDES
Design Starter	<ul style="list-style-type: none"> <li>• Upgrade to two (X20) or four (X24) vacuum zones</li> <li>• Q-Vac</li> <li>• System and HW adations to enable all full X options</li> </ul>
Sign Starter, Sign Light Starter	<ul style="list-style-type: none"> <li>• Upgrade to two (X20) or four (X24) vacuum zones</li> <li>• Workstation upgrade</li> <li>• Upgrade from iPC Sign Standard to Sign Production</li> <li>• Ability to add conveyor feed option, enabling automated sheet- or roll feeding</li> <li>• Q-Vac</li> <li>• System and HW adations to enable all full X options</li> </ul>
Flexo Starter	<ul style="list-style-type: none"> <li>• Upgrade to two vacuum zones</li> <li>• Workstation upgrade</li> </ul>
All Starter bundles	<ul style="list-style-type: none"> <li>• Allowing extended traverse clearance for materials up to 86 mm</li> <li>• Allowing adding other toolheads like PowerHead and FoamHead</li> <li>• Allowing iPC license upgrades</li> <li>• allowing conveyor belt option</li> </ul>

# An unsurpassed user experience

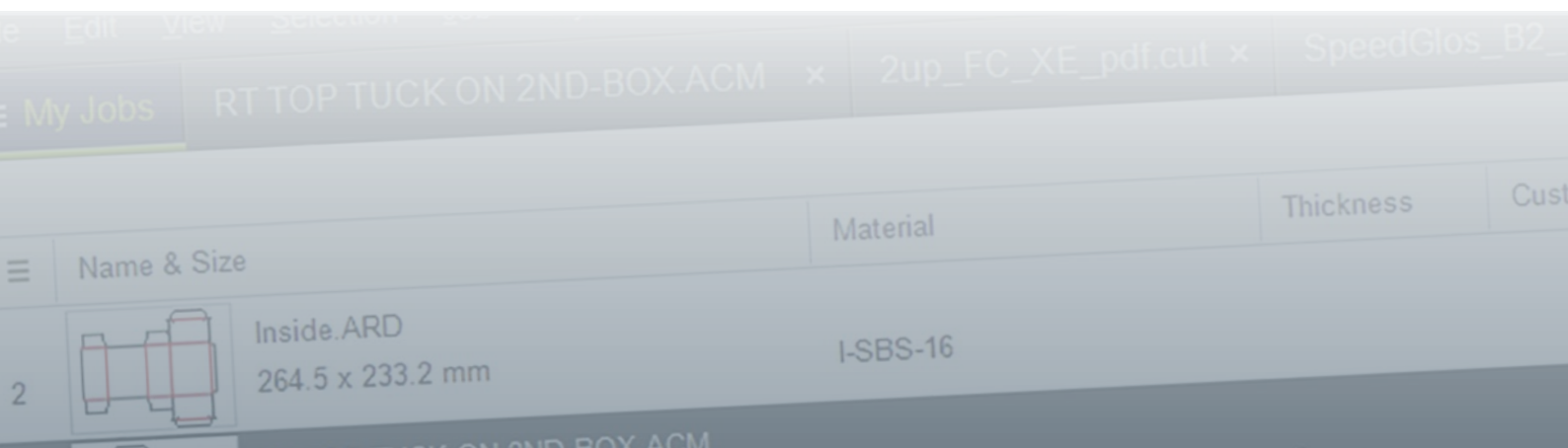


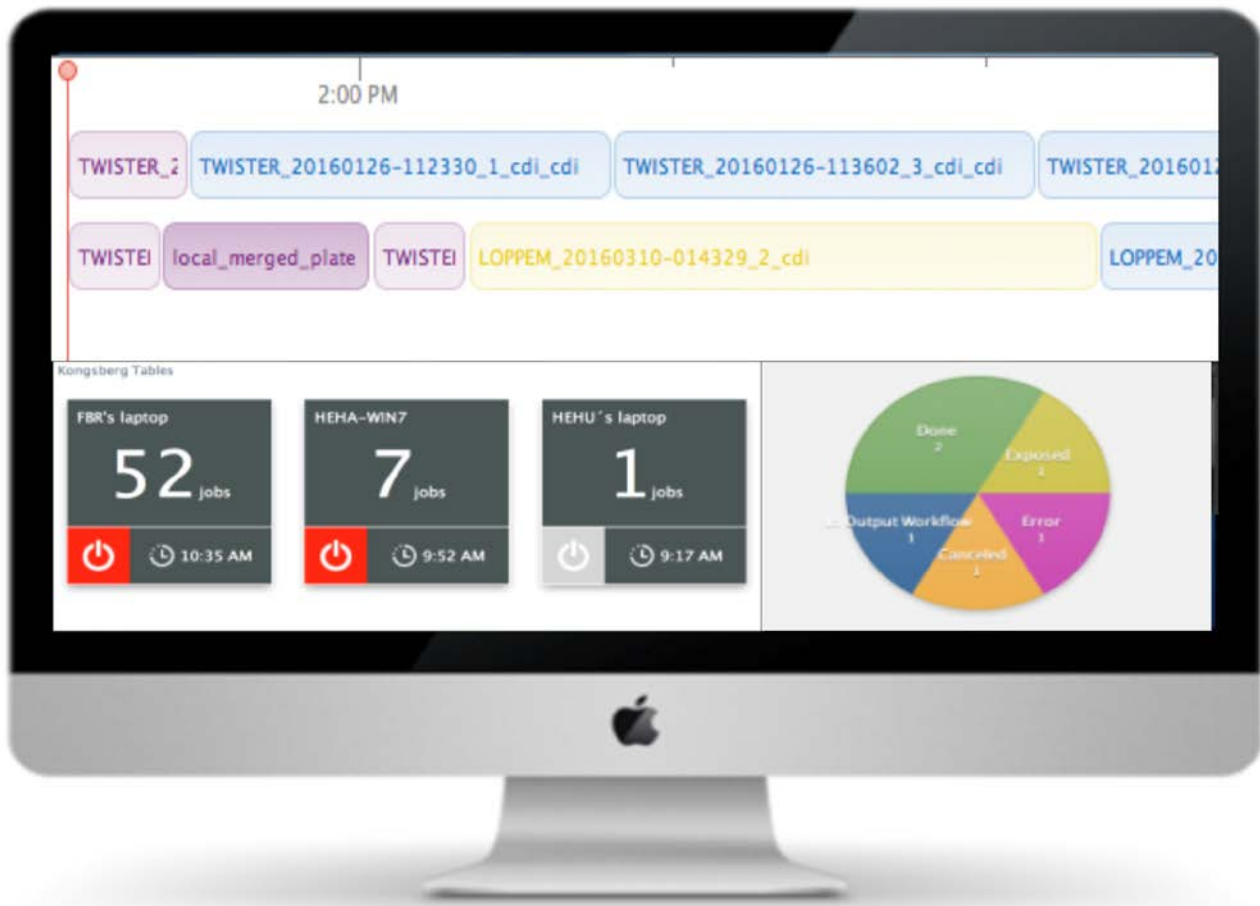
## User Experience personalized

The *i-cut* Production Console, the front-end for the Kongsberg X, works with a graphical icon based communication which allows the operator to supervise production from a distance. A separate operator login ensures personalized language settings and job list management.

## My Job List

Full editing rights from estimating and production planning to job/batch countdown increase efficiency and ensure on time delivery. History jobs can be recalled and reproduced.





## Device Manager

The Device Manager offers machine visibility from everywhere. It shows all ongoing jobs and lets operators distribute those to optimize the use of the Kongsberg table(s). Device Manager helps reduce lead times and eliminates material waste; it enables managing short production runs intelligently and optimizes equipment performance. Device Manager is an option for *i-PC*.

Customer	Priority	Estimation	Modification Date	Added	File Type
	1	32 seconds	19-Apr-13 1:15:58 PM	10-Mar-16 9:39:14 AM	Ard
	1	1 min. 33 sec	19-Jul-12 11:31:40 AM	10-Mar-16 9:41:12 AM	Acm

# Eliminate waste from your production

Waste is normally found at each production step. Waste can be files waiting in a mailbox, idle production equipment, rejects, overproduction, lack of shop-floor communication etc.

Esko's modular shop floor solutions turn your shop-floor into a lean production unit with consistent production from design to ship.





### 1. Visual job progress

in *i-cut* Production Console with active communication ensures full production control from anywhere on the shop floor.

### 2. Visual workflow control

Device Manager provides job estimation, planning, tracking and reporting. Operators can manage and control the job queues.

### 3. Shared resources

Automatically adjusts the table setup, the cutting sequence and the correct tools.

### 4. Structural design workflow

ArtiosCAD, the world's leading software for packaging and display design communicates with smart metadata and allow the Kongsberg cutting table to optimize cut speed and quality.

### 5. Prepress workflow

Powerful preflight and nesting by the easy to use *i-cut* Suite software. Ensure no rejects from press.

### 6. Design to ship

Integrated Cape palletization ensures easy, optimized packing, stocking and shipping.

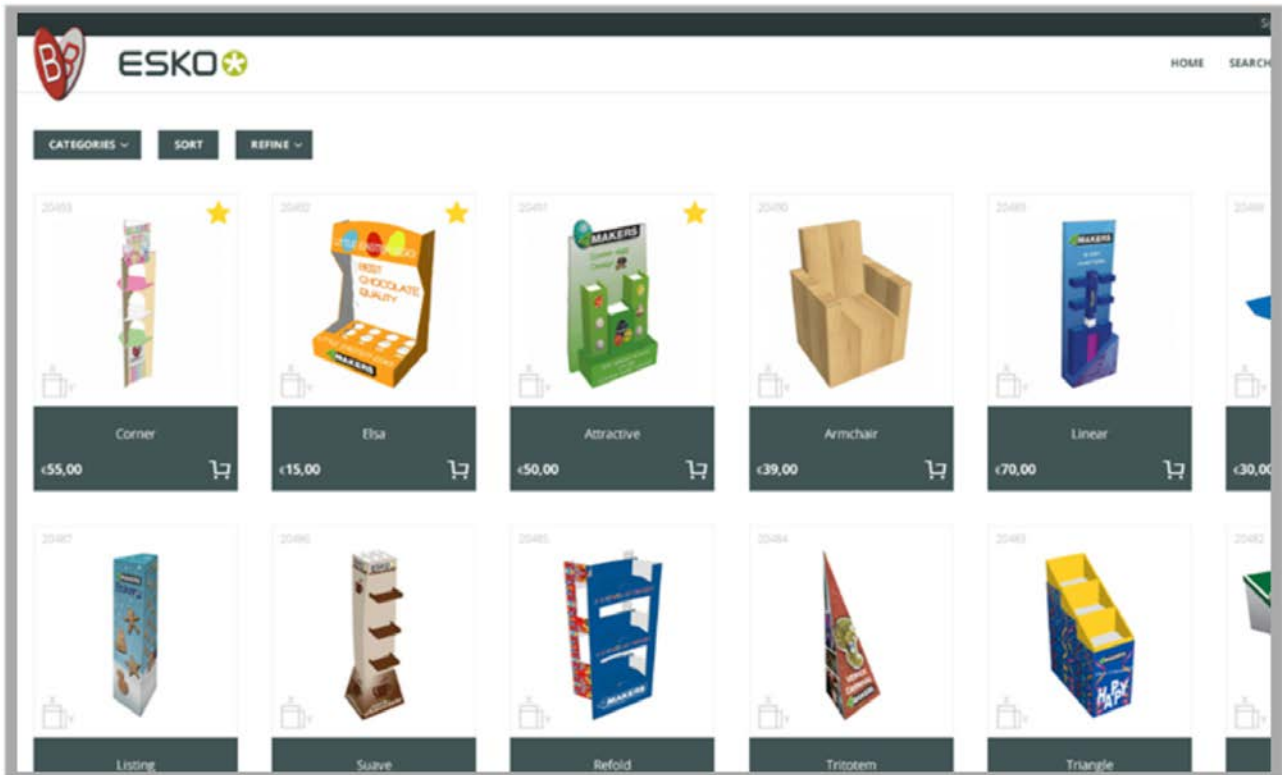


### Visit

[www.esko.com/solutions/digital-finishing](http://www.esko.com/solutions/digital-finishing) to find out how to save waste and improve production workflow.



# Get even more out your workflow



## ArtiosCAD Display Store

Display design made simple. Pre-built templates are ready to use (ArtiosCAD designs) and be cut on a Kongsberg table. Buy once, create endless variations. Assembly video is included. You can start producing POP displays right away; there's no need to be a CAD expert! Available on [ww.esko.com](http://ww.esko.com).

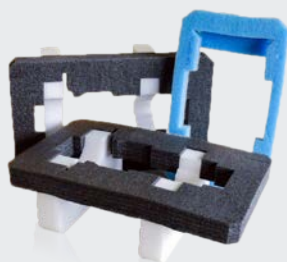
## Quick Box

Make any box in three easy steps. You select one of 15.000 box standards and add Length x Width x Height. Perfectly fit shipping boxes on demand. No design skills required. Optional to iPC.

## Point of Purchase



## Cushioning/foam

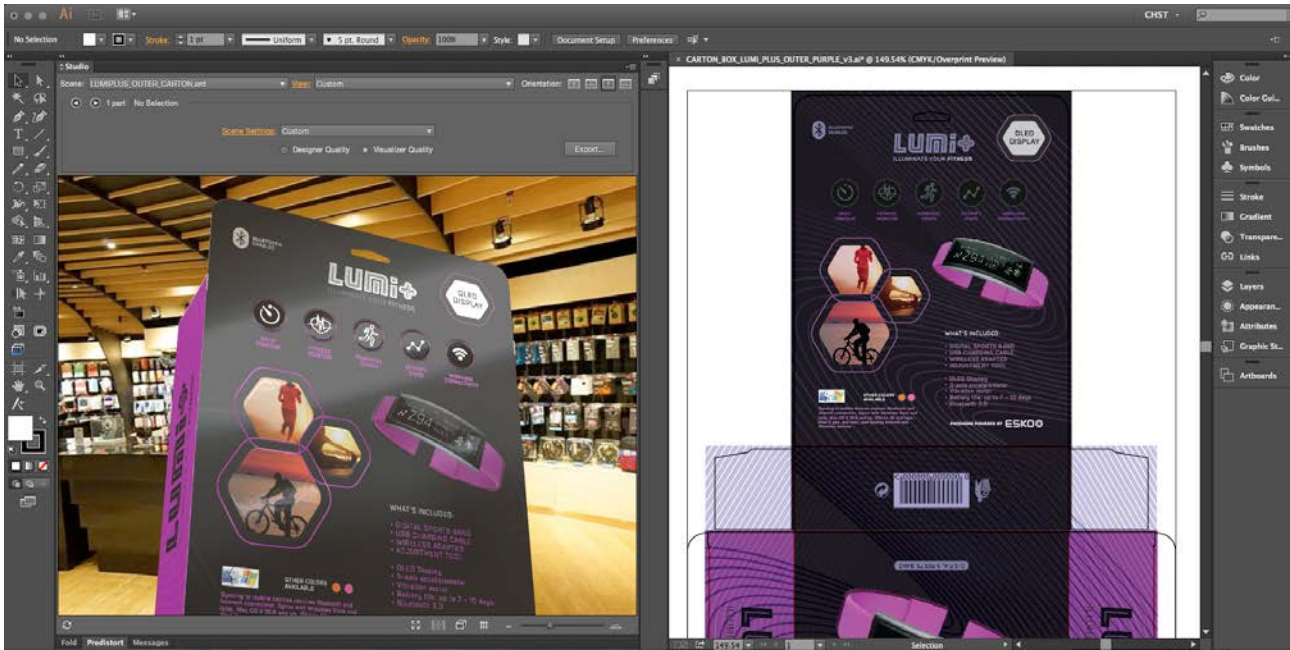


## Corugated Display



## Banners





## Studio for packaging designers

There is no more need to cut, fold and glue print-outs all the time because you see the 3D packaging model on the screen. You will find yourself working faster and more creative. And the packaging artwork that you deliver is technically more correct, so that your design does not get compromised during production. You might still make conventional mock-ups, but with Studio you have a new option: faster and cheaper virtual mock-ups.

## Barcode production

One-piece-flow by barcode production ensures consistent production and final quality. Especially recommended when several unique jobs are lined up. The camera reads barcodes and automatically applies correct the tooling and production settings.



- QR
- Data Matrix
- Code39

Folding carton



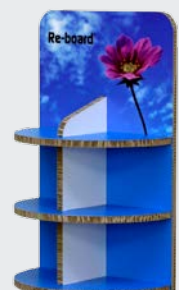
Corrugated Plastic



Protective Packaging



Papercore Display



# Technical specifications

		X20	X22	X24	X44	X46	X48
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 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 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	N/A
Overall dimensions w/ front panel	mm In.	2800x2200 110x85	2800x3100 110x122	2800x4100 110x161	3330x4100 131x161	N/A	N/A
Overall dimensions w/ RWS(1)(2)	mm In.	3610x1900 143x75	3610x2850 140x111	3610x3850 143x151	4140x3850 165x151	4140x5550 165x217	4140x7200 165x283
Weight	kg lbs	455 1000	525 1150	630 1390	815 1800	1150 2540	1485 3270
Position accuracy (3)		±200 µm ±.0078"			±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 <sup>2</sup> - 0.56 G			5.4 m/s <sup>2</sup> - 0.54 G		
Vertical tool force		Standard tool stations: 220 N. PowerHead crease station: 500 N					
No. of vacuum sections		2	2	4	4	4	4
Standard traverse clearance(5)		50 mm - 2" or 95 mm - 3 ¾", depending on Application Kit and model size					
Optional traverse clearance(5)		High clearance 95 mm - 3 ¾", available for models with 50 mm - 2" clearance as standard					
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 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. Ref. to Technical Specification booklet for further details

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