Dieless digital cutting and creasing for folding carton packaging



Kongsberg XE10



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Fast and accurate dieless finishing of folding cartons

The Kongsberg XE10 is Esko's smaller format platform, designed to provide a fast, high-quality solution for samplemaking and short-run production of folding cartons. Building upon their expertise with the Kongsberg large format digital finishing systems for corrugated and other packaging materials, Esko has incorporated a number of features from the architecture of its widely popular digital cutting and creasing tables.

With the Kongsberg XE10, users can expect a digital finishing solution that outclasses others in both productivity and precision. Assisted by a rack-and-pinion X/Y drive with precise motion control, a new, fast servo system and completely new tool set, the Kongsberg XE10 tables can deliver high operational speed and precision — with easy operation.

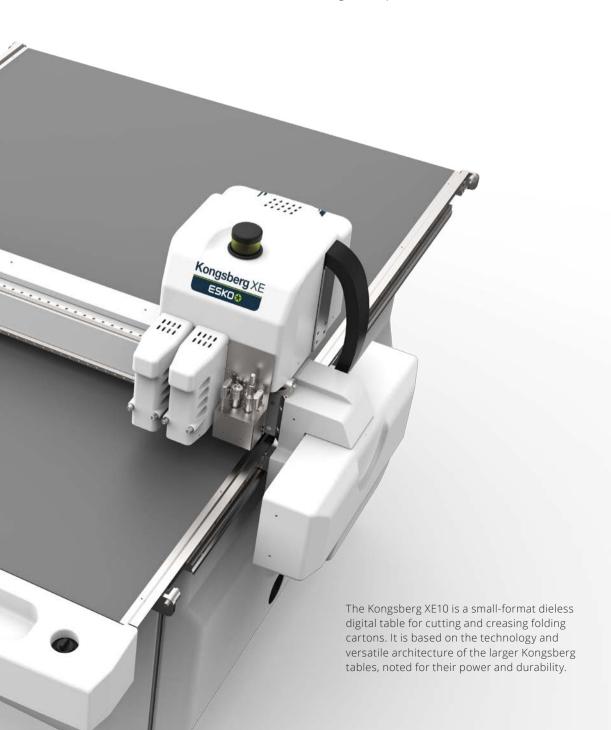
The Kongsberg XE10 has a space-efficient, small footprint. Its work area measures $31.5" \times 43.3"$ / $800 \text{ mm} \times 1100 \text{ mm}$. It can accept materials as large as $39.4" \times 59.1"$ / $1000 \text{ mm} \times 1500 \text{ mm}$.



Tooling system

The Kongsberg XE10 features a tooling system which has been modified to satisfy folding carton requirements - and is fast to install and maintain.

The lightning-fast motion, combined with superb accuracy, increases finishing productivity and quality. The tooling system was designed for fast, trouble-free tool exchanges or replacement.



Tool stations

Static knife tool

The static knife tool can cut through thin, rigid material such as carton board, polypropylene and polyethylene. Different knife blade adapters are available.



HiForce Knife tool

The HiForce knife tool is a general purpose tool suitable for cutting a wide range of materials. As the name indicates this tool can apply a higher tool pressure than the Static Knife Tool.

The tool is prepared for a wide range of knife blades.

A pressure foot is included to reduce material tear and also to keep the material down as the knife is extracted.



Crease tool

Along with the 15 and 26 mm wheels, it's easy to crease folding carton and corrugated board. The Kongsberg XE10 offers a maximum vertical tool force of 200 N (45 pounds), which means that even the most rigid boxboard materials can be sufficiently creased.



Psaligraphy knife tool

The Psaligraphy knife tool is made especially for cutting fine and intricate details in paper and folding carton.

A user friendly spring loaded detachable plastic foot prevents lifting, moving and destroying the material while cutting.





VariCut tool

The VariCut tool is helpful when you want partial and complete cuts of folding cartons and varnish blankets. With servo-controlled cutting depth accuracy, the VariCut tool can be used to micro-cut with exceptional depth precision — and cut completely through the material — on the same job. The tool is equipped with a base that hovers above the material, providing a reference check for the cutting depth.



VibraCut tool

With the help of an electric motor, the VibraCut knife tool oscillates back and forth to cut single-flute corrugated board up to, and including, C-flute and other fibrous materials of similar thickness. The tool features a removable weighted foot that provides additional pressure on the material, assuring a clean cut on boards with high recycle content.



HiFrequency VibraCut tool

The HiFrequency VibraCut Knife Tool is a special variant of the VibraCut knife tool for cutting a lot of different materials, such as foam board and corrugated with high-recycled content.

It runs at twice the frequency and four times the amplitude of the standard VibraCut knife tool. These properties, along with a more powerful motor, enable cutting of heavily recycled board at efficient speed. To reduce material tear and also to keep the material down as the knife is pulled out, a detachable pressure foot is included.



Flexible solution

Today's packaging design and production departments need a fast solution for sample-making and short-run production. The combination of increasingly tighter deadlines and budget pressures, along with more variation and localization of packaging projects, demands a speedy and flexible finishing solution.

The Kongsberg XE has been developed to deliver just that. Because no manual cutting nor expensive dies are needed, packaging runs from one to several thousand can be finished fast, with professional results.

Wide range of materials

The Kongsberg XE table can process a wide range of packaging materials: folding carton, single flute corrugated board, and synthetic materials such as polypropylene, to name a few.

Varnish blankets

The Kongsberg XE10 table provides an excellent solution for the production of varnish blankets for offset printing. Because the Kongsberg XE can produce partial cuts with exact depths—along with perfect registration for the printing press—it is cost-efficient for the preparation of spot varnishing blankets for commercial print work and folding carton packaging.

Adapted workflow

Work faster with smart software. Esko provides the entire workflow to process packaging design data for output on a cutting table and on a press.

ArtiosCAD is the world's most popular structural design editor for packaging. The *i*-cut Suite is a collection of software dedicated to one-up editing, preflighting, repetition and workflow automation.



Technical specifications

	Kongsberg XE10
Work area	31.5" x 43.3" 800 x 1100 mm
Maximum sheet size	39.4" x 59.1" 1000 x 1500 mm
Overall dimensions (LxW)	64.2" x 62.3" 1630 x 1580 mm
Weight	385 lbs 175 kg
Maximum speed ⁽¹⁾	64 m/min - 42 IPS
Maximum acceleration ⁽¹⁾	12 m/s2 - 1.2 G
Servo resolution	< .0002" < 0.005 mm
Repeatability	± .00078" ± 20 μm
Maximum horizontal cutting force	200 N - 45 lbs force
Maximum vertical tool force	100 N - 25 lbs force
Traverse clearance ⁽²⁾	.787" 20 mm
Control software	XE Guide
Operator safety	Included is the DynaGuard Safety System, which protects the operator and bystanders from potential machine hazards. In addition, the machine is equipped with an emergency stop button and a warning light that is lit as long as the servos are powered.

⁽¹⁾ Maximum speed and acceleration measured along the resultant of the X and Y-axis velocity vectors.

(2) Measured without cutting underlay.

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