Dieless digital cutting and creasing tables for folding carton packaging

The Kongsberg XE Series

ESKO artwork

Kongsberg XE Series

Fast and accurate dieless finishing of folding cartons

The Kongsberg XE Series is EskoArtwork'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 XL large format digital finishing systems for corrugated and other packaging materials, EskoArtwork has incorporated a number of features from the architecture of its widely popular digital cutting and creasing tables. With the Kongsberg XE Series, 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 XE 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" x 43.3" / 800 mm x 1100 mm. It can accept materials as large as 35.4" x 47.2" / 900 mm x 1200 mm.
The Kongsberg XE32 has a work area of 51.2 x 63.8 / 1300 mm x 1620 mm. It can accept materials up to 55" x 68" / 1400 mm x 1720 mm.

The versatile solution from the industry leader of digital cutting and creasing tables for packaging.

The Kongsberg XE32 is a small-format dieless digital table for cutting and creasing folding cartons. It is based on the technology and versatile architecture of the Kongsberg XL tables, noted for their power and durability.

Tooling system

The Kongsberg XE Series features an entirely new tooling system which has been modified to satisfy folding carton requirements - and is fast to install and maintain. Its 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. Its two configurable tool positions easily plug in electrical and automatic tool identification connections.

Tool stations

A wide assortment of Kongsberg XE tools can finish folding carton and polyester materials, as well as substrates as thick as single flute corrugated.

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 Hi-Force knife tool is a general purpose knife 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 XE Series offers a maximum vertical tool force of 200 N (45 pounds), which means that even the most rigid boxboard materials can be sufficiently creased.

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.

Hi-Frequency VibraCut tool

The Hi-Frequency 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.

Technical specifications

	XE10	XE32
Work area	31.5” x 43.3” 800 x 1100 mm	51.2” x 63.3” 1300 x 1620 mm
Maximum sheet size	35.4” x 47.2” 900 x 1200 mm	55” x 68” 1400 x 1720 mm
Overall dimensions (LxW)	64.2” x 62.3 “ 1630 x 1580 mm	79” x 91” 2000 x 2300 mm
Weight	385 lbs 175 kg	990 lbs 450 kg
Maximum speed(1)	64 m/min - 42 IPS	
Maximum acceleration(1)	12 m/s^2 - 1.2G	
Servo resolution	< .0002” < 0.005 mm	
Repeatability	± .00078” ± 20 µm	
Addressable increment size	.00004” 0.001 mm	
Maximum horizontal cutting force	200N – 45 lbs force	
Maximum vertical tool force	100N – 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.

The XE tables equipped with the *i*-cut® vision system is the *i*-XE Series, a cutting solution for specialty graphic and screen print shops. The *i*-XE comes with adapted tools, speed and automation features suited for producing decals, labels and signs on flexible materials such as vinyl.

Flexible solution

Today's packaging design and production departments need a fast solution for samplemaking 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 Series 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 tables 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 XE tables provides an excellent solution for the production of varnish blankets for offset printing. Because the Kongsberg Series 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

EskoArtwork also provides the entire workflow to process packaging design data for output on a cutting table—as well as on printing plates or digital presses. Structural design and one-up editing, sheet preparation with repetitions and marks, workflow automation, screening and color management can all be controlled with Esko's integrated suite of packaging software.

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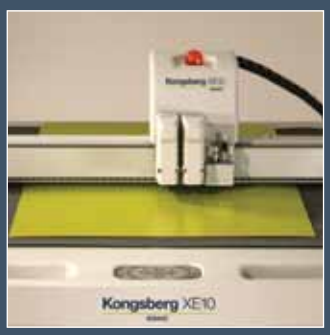

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