



#### The Task

- There is a need in the market for the physical counting of small and delicate items, such as tax stamps used in the tobacco and alcohol industry and similar products.
- Due to the high value, it is mandatory that the individual tax stamps are counted across various production steps. This is a laborious process that is done manually.

#### The Solution

- Our Köster HPC B03, a machine in which the handling of the stack to be counted has been ergonomically optimized to make it as easy as possible for the operator to use.
- The compact design as a desktop device enables flexible use of the counting machine in various production areas.
- Covers the widest possible range of products and g/m² thanks to quick and easy conversion.

# Machine Features

## **B03**

#### The Machine

- Ergonomic single head tabletop counting machine.
- Plug & Play commissioning.
- No external compressed air supply required.
- No external components required.
- Standard voltage supply Single-phase 230V-AC / 50-60Hz.

### The Operation

- Standing counting position of the counting disc.
- Best ergonomics for the operator.
- Precise and fast product handling.
- No adapters required.
- User-friendly HMI with single-sided user interface.
- Processing of bundled or loose formats.

#### The Formats

- Min. 9 x 32 mm.
- Max. 85 x 180 mm.

#### The Substrates

- Cotton based products.
- Coated products.
- Hybrid products.
- Laminated products.
- And much more.

# Machine Features

## **B03**

### The Technology

- The disc technology, the gentle disc design and the counting head with the Köster air suspension enable the counting of critical areas such as:
  - Security thread.
  - Applications.
  - Codes.
- Intaglio printing.
- And much more.

#### The Machine Design

- All installed components are high-quality products from global manufacturers.
- The machine design ensures easy maintenance and low upkeep costs as well as maximum machine availability.
- Machine's high performance and availability results from the robust and precise construction out of steel and aluminium.

#### The Functions

- Counting:
  - The entire product stack is counted.
- Comparing:
- The results are compared with the preset value, if they do not match, the number is shown in red.
- Batching:
  - A pre-selected number can be easily batched to form a layer. The counting disc is used for separation to provide a gap for the operator to easily separate the layers.

# Machine Features

**B03** 

#### The Precision

- Concentricity and axial runout of the counting disc <0.025mm.
- Smooth running and safe counting signals at any speed.

### The Flexibility

 All types of substrates used in the global security printing industry can be processed with the highest speed and accuracy.

### The Options

- Separation knife to improve gap visibility for checking the bundle quantity within a product stack.
- Not compatible with the processing of tax and postage stamps.
- 24 months warranty extension excluding wear parts.

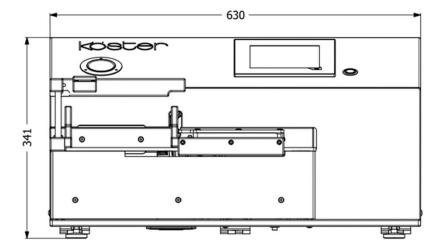
# **Technical Specifications**

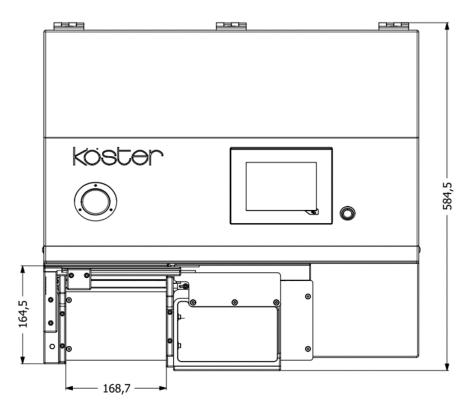
# **B03**

Dimensions	L	W	Н					
Overall (mm):	630	585	345					
Slide stroke (mm):	160							
Machine weight (kg):	65							
Supplies								
Electric:	Single-phase 230V-AC / 50-60Hz / max. back-up fuse 16A / full load current 6A							
Pneumatic:	Compressed air not required.							
Stack height								
Min. (mm):	5							
Max. (mm):	150							
Formats	Without separation knife			With separation knife				
	L	W		L	W			
Min. (mm):	32	9		100	55			
Max. (mm):	180	85		180	85			
Discs	Туре	Min.	Max.	Position	Use			
GSM:	C1	35	70	Corner	Tax stamps			
GSM:	C2	30	150	Corner	Banknotes			
Depending on the rigidity and quality of the products, these values may vary during processing.								

# **Machine Layout**

B03





# Technical Specifications

# B03

Counting technology	Disc								
Counting direction:	from left to righ	t							
Speed:	RPM	Туре	Segments	Sheets/Min.	Sheets/Sec.				
Rated RPM:	2.000	С	6	12.000	200				
Depending on the rigidity and	quality of the prod	lucts, these valu	ues may vary duri	ng processing.					
Processable Substrates									
Currency Industry:	Currency and documents paper, coated or uncoated, polymers, hybrids and much more.								
Consumer Industry:	Consumer paper, coated or uncoated, laminated, plastics, polymers, paperboards, cardboards and much more.								
PLC Control									
Brand:	B&R								
Touchscreen:	coloured multilingual, main HMI with pictograms								
Interfaces:	FTP (Client / Server)/USB/Profinet/Profibus/Ethernet-IP/ EtherCat								
Operating Noise									
Max. dB(A) at 2000 RPM.:		78							
Environmental conditions		Min.	Max.						
Recommended temperature range (+°C):		15	35						
Recommended relative humidity range (%):		35	45						
Certification	CE declaration, in accordance with all applicable European standards								

# **Basic Information**

# **Discs**

- The details of the GSM values are based on experience and tests. Depending on the product rigidity, these values may differ.
- Older produced counting discs for corner position are designated by 1xx,x for the diameter in "mm" and / or "V8 -V15" depending on the type.
- Newly produced counting discs for corner position are designated by "C1-Cx" depending on the type.
- Newly produced counting discs for edge position are designated by "S1-Sx" depending on the type.
- Warranty for the lifetime of the counting discs is not granted as the abrasive wear depends highly to the processed product.

# Machines

- Maximum counting speed refers generally to the rated maximum rpm value and the machine design.
- It is not granted that maximum speed can be attended using all kind of substrates / materials.
- Warranty time 12 months upon issuing of the acceptance certificate.
- Warranty extension of 24 months optionally available.
- Warranty coverage except wear parts.







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