

HPC – HIGH PERFORMANCE COUNTING

B12 Mobile Counting Machine



Features

The Machine

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

The Advantages

- High efficiency - Increased productivity through simple operation
- High accuracy - 99%
- High flexibility - Range from 35 - 200 g/m²
- High durability - Solid, high quality construction
- High cost effectiveness - Low maintenance costs

The Flexibility

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

The Substrates

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

The Formats

- Bundled or loose formats from 80 x 60 mm up to 400 x 600 mm.

The Products

- Banknotes
- Postage stamps
- Tax stamps
- ID document papers
- Visa stickers
- And many other delicate products

The Operation

- Counting direction from top to bottom.
- Best ergonomics for the operator.
 - 45° counting head configuration:
 - Prevents operator fatigue.
 - Avoids one-sided body overloading.
 - 90° counting head configuration available on request.
- Large working height adjustment range 720 – 1040 mm.
- Precise and fast product handling.
- No adapters required.
- User-friendly HMI interface with single-sided user interface.
- Equipped with castors as standard for easy use on different production sites.

The Precision

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

The Drive

- Fast - 2,000 RPM for up to 200 sheets / second
- Powerful - Torque at any speed
- Controllable - Accurate stopping on last count and exact batching

The Machine Design

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

The Equipment

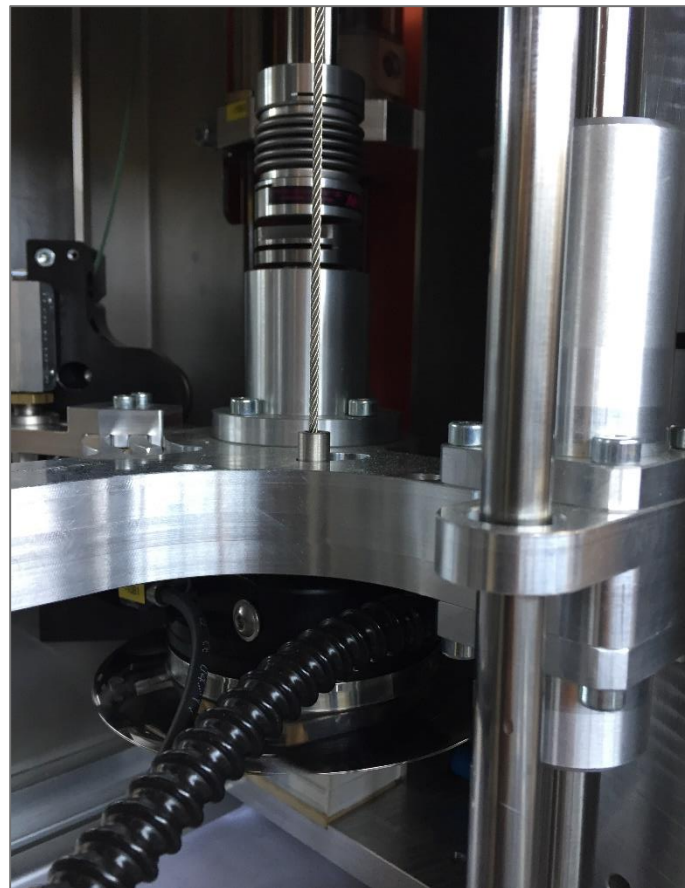
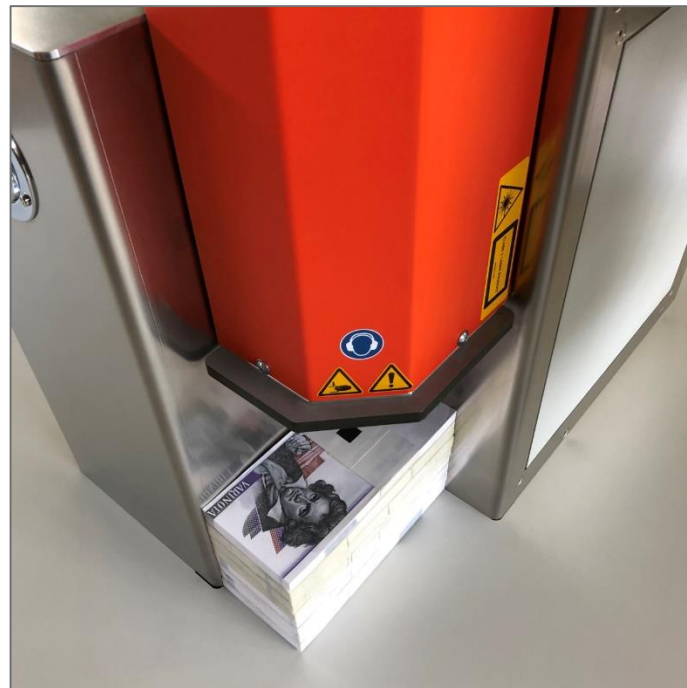
- **Security Counting:**
Results are compared with the pre-set value, if they do not match, the product is not automatically released.
- **Batching:**
A pre-selected number of sheets can be easily batched to form a layer. The counting disc is used for separation to provide a gap for the operator to easily separate the layers.
- **Firmware or Program Update:**
Firmware or program version updates are easily carried out using an USB memory stick.

The Options

- Warranty extension 24 months except wear parts
- 45° and 90° angle counting head configuration
- Tab inserter
- Counting speed upgrade to 3000 RPM
- Printer kit

B12

Impressions



B12

Technical Specifications

Dimensions	L	W	H			
Overall (mm):	1640	844 – 900	1800			
Table (mm):	1640	844 - 900				
Weight						
Machine weight (kg):	230					
Working Height						
Working height (mm):	720 - 1040					
Supplies						
Electric:	Single-phase 230V-AC / 50-60Hz / max. back-up fuse 16A / full load current 5A					
Pneumatic:	No external compressed air supply required					
Format Sizes	L	W	H			
Min. layer height (mm):				10		
Max. layer height (mm):				200		
Min. format size (mm):	80	60				
Max. format size (mm):	400	600				
Counting Technology						
Counting method:	Disc					
Counting direction:	Top to Bottom					
Tab Inserter (optional)						
Minimum sheets between inserting (pcs.):	1					
Counting Discs	Min.	Max.	Type	Position	Equipped	Tab Inserter
GSM (g/m ²):	35	150	C2	Corner	Default	Available
GSM (g/m ²):	50	200	C6	Corner	Optional	Available

Depending on the stiffness and quality of the products, these values may deviate during processing. Counting discs for processing other GSM values are available on request.

B12

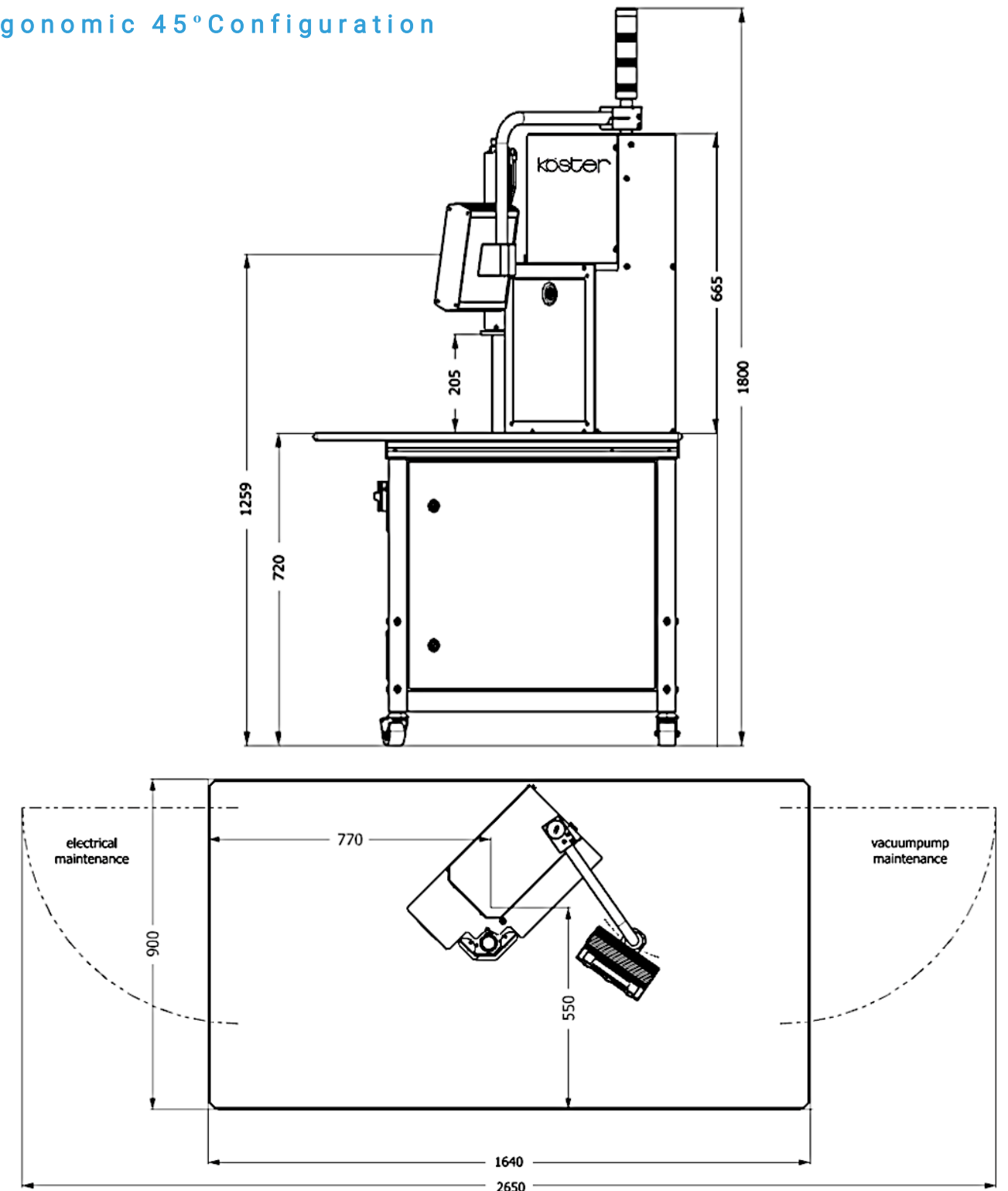
Technical Specifications

Counting Speed	RPM	Type	Segments	Sheets/Min.	Sheets/Sec.
Rated RPM:	2.000	C2	6	12.000	200
Rated RPM:	2.000	C6	6	12.000	200
Depending on the stiffness and quality of the products, these values may deviate during processing.					
Counting Speed (upgrade optional)	RPM	Type	Segments	Sheets/Min.	Sheets/Sec.
Rated RPM:	3.000	C2	6	18.000	300
Rated RPM:	3.000	C6	6	18.000	300
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 and much more.				
PLC Control					
Brand:	B&R				
Touchscreen:	10.1" B&R colored multilingual, main HMI with pictograms				
Interfaces:	FTP (Client / Server) / USB / MQTT (TCP / IP) / OPC UA / PROFINET / PROFIBUS / Ethernet-IP / Device Net / CAN-Bus / CAN-Open / EtherCAT / X2X Link Powerlink / Modbus TCP				
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 Certificate:	Complies with all applicable European standards.				

B12

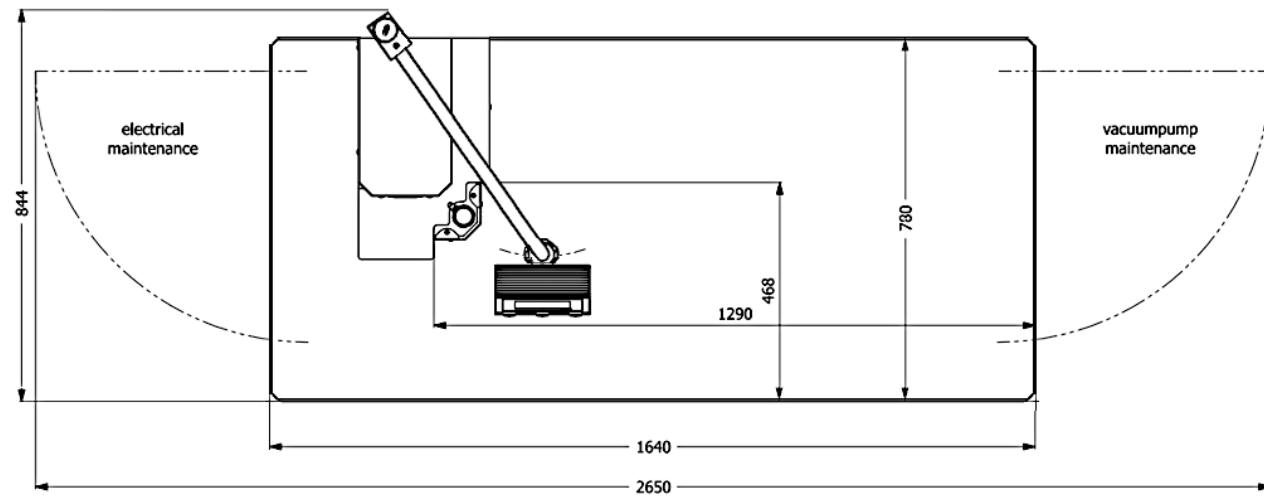
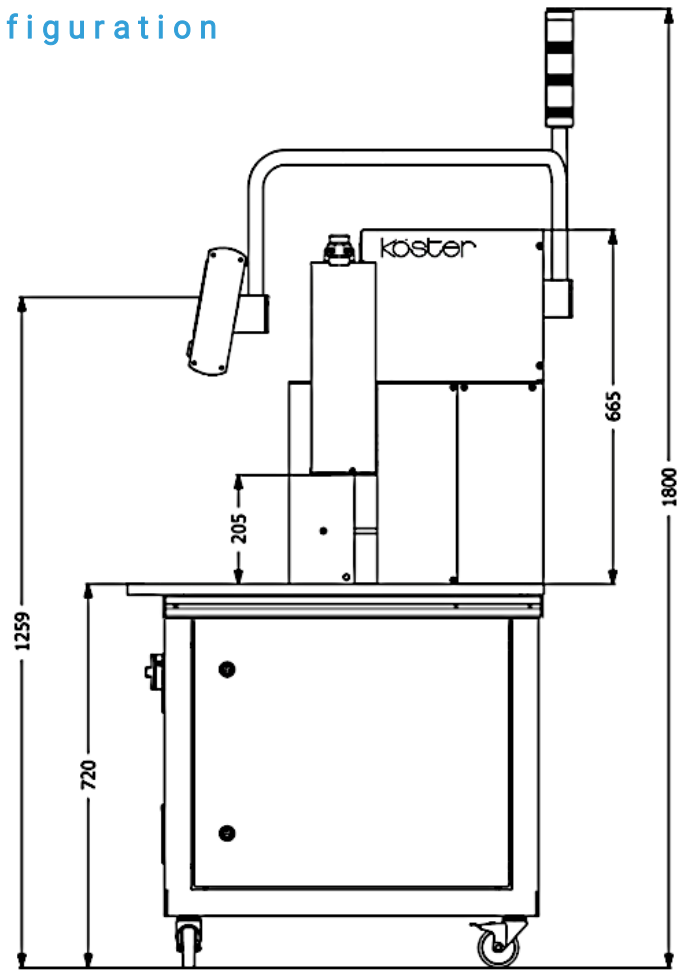
Machine Layout

Ergonomic 45° Configuration



Machine Layout

Classic 90° Configuration



Counting Discs – Since 1991



HPC – HIGH PERFORMANCE COUNTING

Basic Information

Counting 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.

Counting 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 24 months optionally available.
- Warranty coverage except wear parts.

koester
Maschinen- und Werkzeugbau

**Made in Germany –
Made for the world**