

HPC – HIGH PERFORMANCE COUNTING

B10 Double Head Counting Machine



köster
Maschinen- und Werkzeugbau

Featuring:

State of the art HPC Disc Counting Machine

Stationary HPC double head counting machine for use offline or inline as part of a production line offering:

- High speed - Up to 300 sheets / second
- High efficiency - With optional air-blower no compressed air required
- High accuracy - 99%
- High flexibility - GSM range 35 – 500
- High durability - Lowest maintenance costs

State of the art HPC Disc Counting Technology

Counting direction from top to bottom grants:

- Lowest possible impact to the product

Different counting positions, sheet corner and sheet edge assuring:

- No damages to the sheet corner or sheet edge
- No folding to the sheet corner or sheet edge
- No marks to the sheet corner or sheet edge
- Sheet to sheet misalignment within high tolerances can be processed
- Up and down corner curl within high tolerances can be processed

All kinds of substrates used in the global security printing industry can be damage-free counted on highest speed and highest accuracy:

- Cotton based substrates
- Coated substrates
- Hybrid substrates
- Laminated substrates

The two lengthwise electrically adjustable counting heads allow the operator to avoid critical security zones on the substrates as security threads, holographic, applications, codes, intaglio printing, etc.

State of the art HPC Disc Segment Recognition System

The built-in disc segment counting position recognition system assures that the disc stops accurate depending on the different counting operations definitely to avoid miscounting or mismatching due to non counted but already separated next sheet.

Featuring:

State of the Art HPC PLC Control

Integrated various range of counting operations and equipment functions:

- **Security Counting**, both results are compared, on mismatch the product is not automatically released.
- **Counting at 4 positions**, after the 1st two positions counting the product is turned by the operator, the 2nd two positions counting is performed, the result of all 4 counting positions is displayed and on value mismatch the product is not automatically released. Counting positions can be lengthwise setup individually for 1st and 2nd counting.
- **Layers batching**, a preselected amount of sheets can be easily batched to a layer. The counting discs are used as separation to provide the operator a gap for easy layer unloading.
- **Tabbing using the optionally available HPC Tab Inserter**, high speed tabbing of a preselected amount of sheets with by competitors unreached precision. Due to the special design of the tabbing unit, damage-free tabbing is assured. Easy to handle change of the tabbing magazine included tabbing stripe reel monitoring. Tabbing can be independently activated for one, both or none counting heads, and can be supplied for one or both heads.
- **Easy counting heads format size adjustment**, both counting heads are adjusted through direct format size input by the operator, into the counting heads integrated sensor control units avoid damage to the product on faulty set up. Using the internal format size storage, the operator calls the processed format size and the counting heads are automatically adjusted to the correct size.
- **Counting heads can be activated or deactivated**, single or double head counting can be performed depending to product size.
- **USB firmware or program update**, updates of firmware or program version are very easily performed using an USB memory stick.

State of the art HPC Micro Perforated Airflow Table

The micro perforation allows easiest ream sliding up to 50 kg weight:

- Almost none noise pollution
- Almost none air breeze
- Almost indestructible
- Non-glare black colour hard ionized surface
- Maintenance free

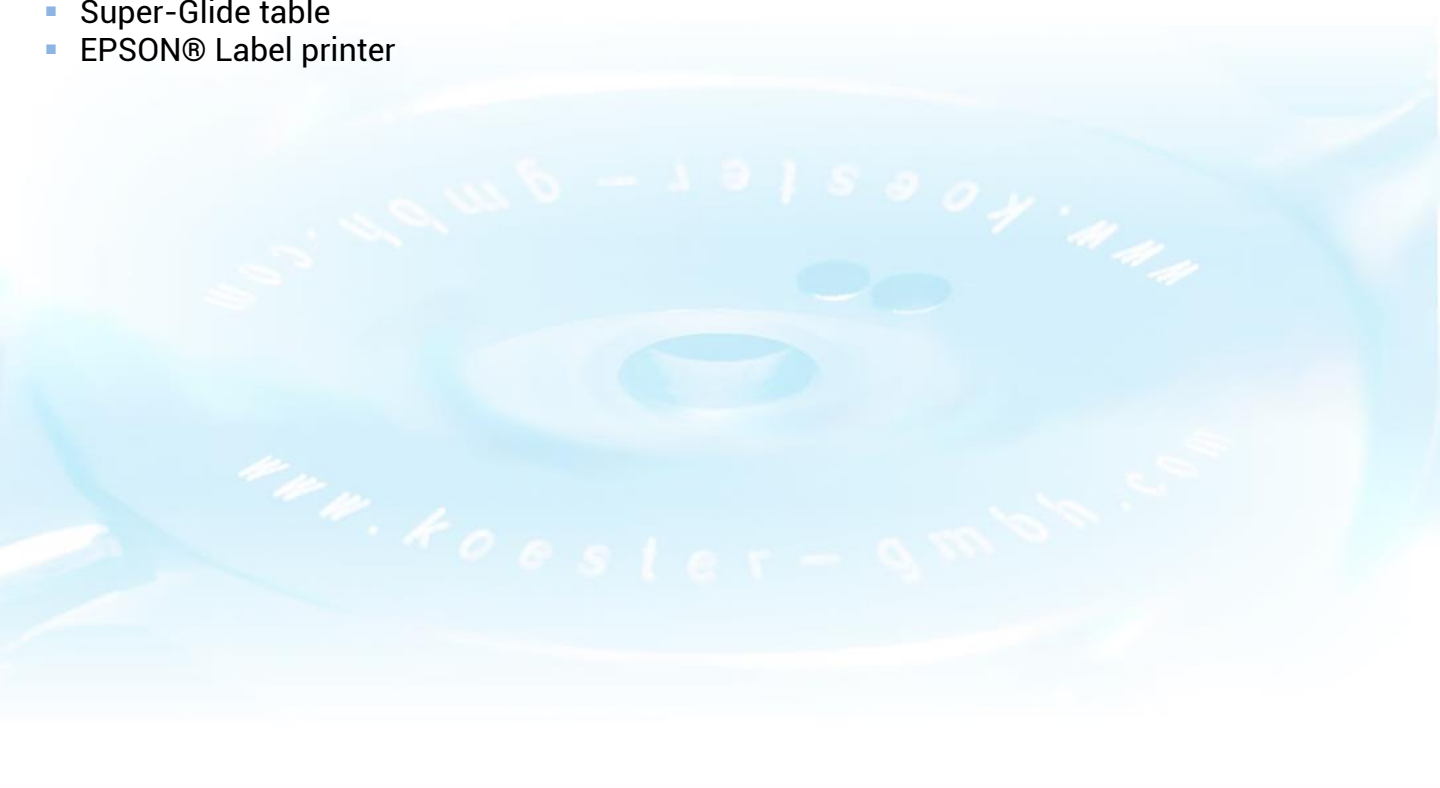
Featuring:

State of the Art HPC Machine Design

- The welded, steel base floor unit contains the switch cabinet, the vacuum pump and the optional side channel blower.
- Maintenance access is granted from the machine front, all supplied components are high class products from global manufacturers, mostly available ex stock.
- The non-sophisticated machine design assures easy to handle maintenance, lowest grade and costs as well as highest production availability.
- The counter head is guided on hardened shafts with recirculating ball bushings, the precision-ground drive shaft is mounted in generously dimensioned ball bearings. The robust and precise structure in steel and aluminium including lowest production tolerances results to the high performance machine capability.
- Due to the modular machine design different table tops in various dimensions can be supplied assuring highest flexibility for production line integration.

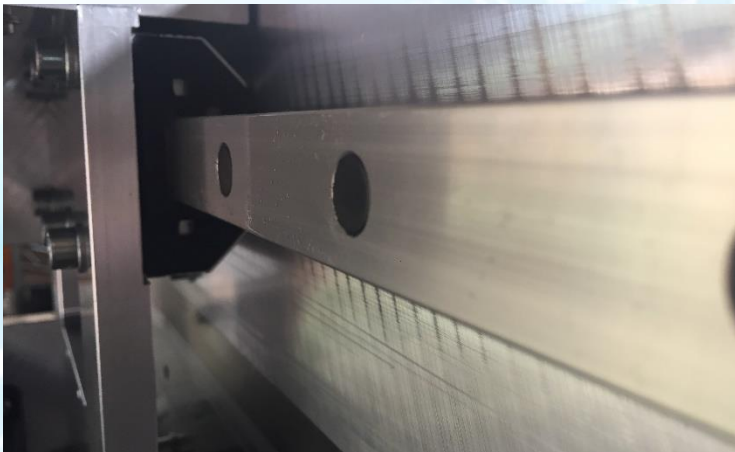
Available Options:

- Warranty extension 24 months except wear parts
- Tab inserter at one or both heads, left or right side
- Counting speed upgrade to 3000 rpm
- Casters
- Air-Blower
- Super-Glide table
- EPSON® Label printer



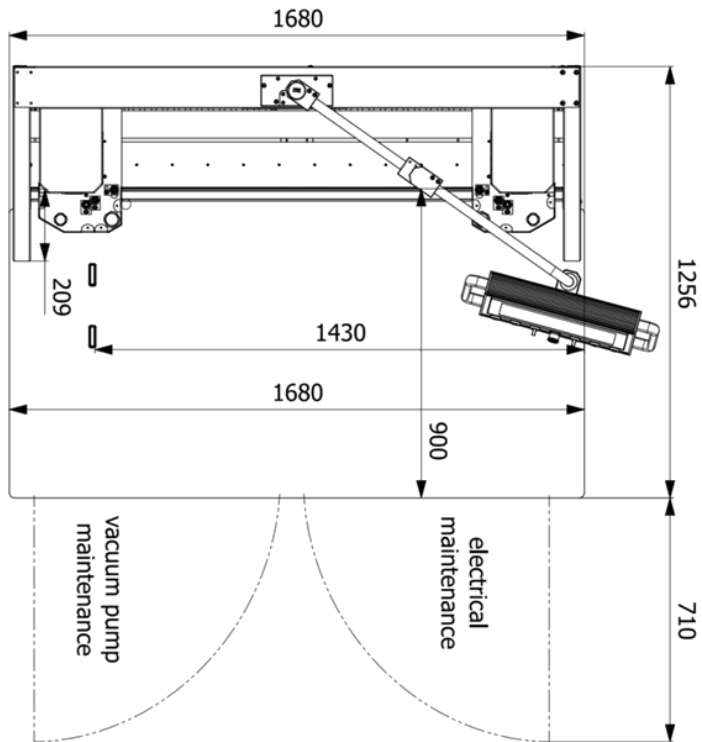
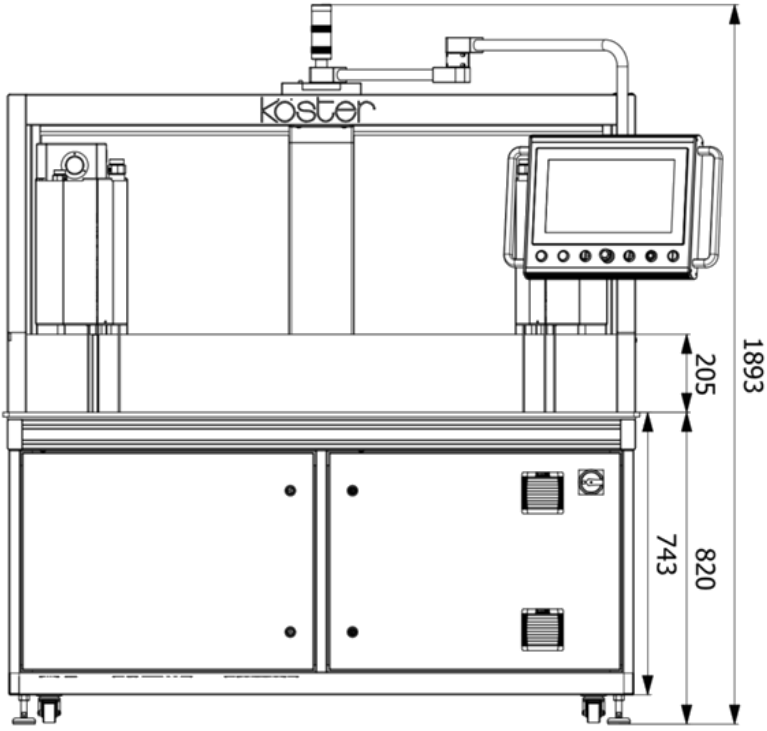
Technical Specifications

Dimensions		L	W	H		
Floor unit (mm):	1650	1000	750			
Over all (mm):	1680	1265	2030			
Table (mm):	1680	900				
Machine weight	Min.	Max.				
Machine weight range (kg.):	400	600				
Working height	Min.	Max.				
Working height adjustable (mm):	820	950				
Supplies						
Electrical connection:	Single Phase 230 V ± 10% AC ~50 Hz. / IEC C14 socket plug & play					
Compressed air:	Only required if optional Air-blower not installed.					
Format sizes						
Minimum layer height (mm):	10					
Maximum layer height (mm):	200					
	without tab inserter		one tab inserter		two tab inserters	
Minimum format size (mm):	L	W	L	W	L	W
Corner counting:	158	80	186	80	241	80
Edge counting:	209	80	252	80	295	80
Max. format size (mm):	L			W		
Corner counting:	1250			900		
Edge counting:	1300			900		
Tab inserter (optionally)						
Configuration:	One or two heads, left, right side or both					
Minimum sheets between tabs:	1 sheet					
Counting Technology						
Counting method:	Disc					
Counting direction:	Top to bottom					
GSM and disc range	Min.	Max.	Disc Type	Counting position		Optionally
GSM (g/m ²):	40	200	S6	Edge		Standard
GSM (g/m ²):	35	150	C2	Corner		Yes
GSM (g/m ²):	300	500	S1	Corner		Yes
Values are subjected to rigidity sensitivity and quality of processed products. During processing of the products values might differ.						
Counting speed standard	RPM	Disc Type	GSM range	Segments	Sheets / min.	Sheets / sec.
Rated RPM (rpm):	2000	S6	40 - 200	4	8000	130
Rated RPM (rpm):	2000	C2	35 - 150	6	12000	200
Rated RPM (rpm):	600	S1	200 - 500	4	2400	40
Values are subjected to rigidity sensitivity and quality of processed products. During processing of the products values might differ.						
Counting speed optionally	RPM	Disc Type	GSM range	Segments	Sheets / min.	Sheets / sec.
Rated RPM (rpm):	2000	S6	40 - 200	4	12000	200
Rated RPM (rpm):	3000	C2	35 - 150	6	18000	300
Rated RPM (rpm):	600	S1	200 - 500	4	2400	40
Values are subjected to rigidity sensitivity and quality of processed products. During processing of the products values might differ.						
Processable substrates						
Currency Industry	Currency and documents paper, coated or uncoated, polymers and hybrids.					
Consumer Industry	Consumer paper, coated or uncoated, laminated, plastics and polymers					
PLC Control						
Brand:	B&R					
Touchscreen:	15" B&R coloured multilingual high-resolution touchscreen with pictograms					
Interfaces:	FTP (Client / Server)/USB/MQTT (TCP / IP)/OPCUA/Profinet/Profibus/Ethernet-IP/ Device Net / CAN-Bus / CAN-Open / EtherCat / X2X Link Powerlink / Modbus TCP /					
Operating Noise						
Max. db(A) at 3000 rpm:	78					
Environmental conditions						
Rec. temperature range (+°C):	15	35				
Rec. relative humidity range (%):	35	45				
Certification						
CE Certificate:	In conformation to all applicable European standards.					



B10

Machine Layout



HPC – HIGH PERFORMANCE COUNTING

Basic information concerning HPC- Equipment

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.

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.

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