

HPC – HIGH PERFORMANCE COUNTING

B12 Mobile Single Head Counting Machine



köster
Maschinen- und Werkzeugbau

Featuring:

State of the art HPC Disc Counting Machine

Mobile HPC single head counting machine for flexible use on different locations within the production:

- High speed - Up to 300 sheets / second
- High efficiency - No compressed air required
- High accuracy - 99%
- High flexibility - GSM range 35 – 300
- 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

Corner counting position assures:

- No damages to the sheet corner
- No folding to the sheet corner
- No marks to the sheet corner
- 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 low impact disc design allows 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.

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Featuring:

State of the Art HPC PLC Control

Integrated various range of counting operations and equipment functions:

- **Security Counting**, results are compared with presetted value, on mismatch the product is not automatically released.
- **Layers batching**, a preselected amount of sheets can be easily batched to a layer. The counting disc is 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 an deactivated.
- **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 Machine Design

- The welded, steal base floor unit contains the switch cabinet and the vacuum pump.
- 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
- Counting speed upgrade 3000 rpm
- EPSON® Label printer

Technical Specifications

Dimensions		L	W	H			
Floor unit (mm):	1500	700	563				
Over all (mm):	1640	780	1800				
Table (mm):	1640	780					
Machine weight							
Machine weight (kg.):	200						
Working height							
Working height (mm):	720						
Supplies							
Electrical connection:	Single Phase 230 V ± 10% AC ~50 Hz. / IEC C14 socket plug & play						
Compressed air:	Not required						
Format sizes		L	W	H			
Minimum layer height (mm):					10		
Maximum layer height (mm):					200		
Minimum format size:	80	60					
Max. format size:	350	600					
Tab inserter (optionally)							
Format sizes:	No specific format sizes						
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):	35	150	C2	Corner	Standard		
GSM (g/m ²):	120	300	V13	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:	2000	C2	35 - 150	6	12000	200	
Rated RPM:	600	V13	120 - 300	3	1800	30	
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:	3000	C2	35 - 150	6	18000	300	
Rated RPM:	600	V13	120 - 300	3	1800	30	
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:	5,7" B&R coloured 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 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.						

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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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