Inserting System K1600

Short Description

Application	▪ Separate cut documents (single sheet) ex stack, portrait or landscape ▪ Reading, grouping and collating at request ▪ Folding if required (depending on application) ▪ Grouping after folding ▪ Feeding of enclosures from 1 up to 8 stations ▪ Inserting of collected document groups ▪ Close mailpiece and seal if required ▪ Diverting of incorrect mailpieces or mailpieces to be checked ▪ Divert of mailpieces according to control marks or criteria such as weight, postage etc. ▪ Marking of mailpieces ▪ Deposit of mailpieces to shingling conveyor
Functions	▪ Separate documents and feeding ▪ Grouping of documents on grouping station 1 before folding and/or grouping station 2 after folding ▪ Grouping sequence from above or below convertible ▪ For C4 processing > 20 sheets grouping of documents on the chain from above ▪ Folding unit for none-, single-, Z- or roll-fold-applications ▪ The folding length can be adjusted continuously variable ▪ Feed enclosures from 1 to 8 stations ▪ Flip-Flop operation between 2 enclosure stations in several Flip-Flop-groups ▪ Separate, open and feed envelopes (window below) ▪ Take over document stack from chain (address below) ▪ Inserting into envelope ▪ Turn over envelope with content at 180° (address above) ▪ Moisten envelope flap (packing glued / not glued according to control character or application value possible) ▪ Close envelope flap

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Functions	- Divert of mailpieces according to control marks - Diverting by weight: multiple weight resp. postage bins are possible - Marking of mailpieces according to control characters or criteria such as counter or weight (option). Max. 2 marking bins - Consequent depositing to reception stack or shingling belt

Equipment basic version

- **Single sheet feeding module EFG with integrated grouping- and folding station**
  - Sheet separator with integrated reading area
  - Grouping station No. 1
  - Folding unit for none-, single- Z- or roll fold (depending on application)
  - 4 pocket folding mechanism, upfoldable
  - Without folding pockets
  - Grouping station No. 2
  - Grouping from above or below for grouping station 1 and 2 (Material for conversion to other grouping direction is included)

- **Feeding station module ZSMS**
  - Chain transport
  - 2 feeding stations with withdrawal friction on pos. 1 and pos. 3
  - Integrated control cabinet

- **Inserting module KV**
  - Envelope feeding station with envelope belt
  - Inserting unit
  - Adjustable packing pocket for content width 210 up to 305 mm (envelope width 220 up to 353 mm)
  - Turning device for packings (address below to address above)
  - Control panel with 15.6" with touch screen
  - Water container
  - Controlable moistening device
  - Flap closing unit

- **Output** (Minimum configuration, to be ordered separately):
  - 1 Deviation module (extendable up to max. 6 deviation modules)
  - 1 Guideroller
  - 1 shingling conveyor 2m

- **Generally**
  - Emergency stop device
  - Safety/sound protecting covers with interlock
  - Base on rolls

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Options

- Automatic format setting (setting of: format length on table 1 and 2 of the EFG, width of the lateral guides of the feeding station module ZSM, width of the packing lamellas, envelope height of envelope bin and deflection before sealing unit)
- Kit for aligning the system with uneven ground
- Sound package for noise reduction
- Output reading integrated in sealing unit (mail*Factory*© required)

- **EFG**
  - Folding pocket 3mm 220 Pos. 1 to 4 with integrated deviation ruler
  - Folding pocket Auto 3mm 220 pos. 1 to 4
  - Deviation ruler pos. 1 to 4
  - Retention device for grouping on chain for C4-processing > 20 sheets ex EFG
  - Processing of short formats < 165 mm ex EFG
  - Soft folding rollers
  - Transport rollers with increased friction on sheet separator
  - Camera reading from above and/or below on feeding module EFG:
  - Matrix 300 for Barcode and Datamatrix reading, from above or below
  - Cognex IS5400 for OMR reading from above or below, incl. Vision View Panel.
  - Combination of Matrix 300 and Cognex possible (Observe mechanical restrictions during adjustment (collision))

- **ZSM**
  - Additional feeding module ZSMO (without control cabinet) with 2 stations on positions 1 and 3
    ZSMO can only be used, if on ZSMS 4 feeding stations are available.
    ZSMS always before the inserter; ZSMO always before the ZSMS
  - Additional feeding station ZSF (Friction) up to max. 8 Stations
  - Retrofit only in pairs
  - Feeding station with vacuum support
  - Processing of enclosures with thickness > 2.5 mm ex feeding station
  - Camera reading from above to feeding station (not yet available)
  - Chain bin monitoring

- **Inserter**
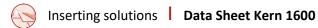 - Flap opener with blowing air assistance

- **Output**
  - Deviation bins
  - Marking bins
  - Marking rolls in red (standard), green, violet

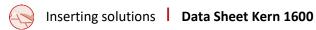- **Generally**
  - mail*Factory*© (no separate client hardware required, because client software runs on system computer)
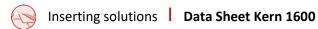
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Short Description

Control	▪ Industrial-PC processor
Operation	▪ Operator panel 15.6" with touch screen
Reading	▪ OMR ▪ Barcode ▪ Datamatrix
Monitoring	▪ Double- or missing sheet ▪ Monitoring of the stacks (envelope, ZS, EFG) ▪ Level monitoring for water container ▪ Run monitoring ▪ Document tracking
Color	▪ Signal red, RAL3001 ▪ Grey aluminium, RAL9007 ▪ Black grey, RAL7021
Construction type	▪ For continuous operation
Safety	▪ CE, GS (in progress)
Warranty	▪ 12 months

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Inserting System K1600

Technical Data

Performance	▪ Up to 12'000 envelopes/hour for C6/5 and C5 applications ▪ Up to 8'000 envelopes/hour for C4 applications ▪ Paper transport speed EFG 2.8 m/s ▪ Folding speed 2.8 m/s ▪ Packaging transport speed at output 1.5 m/s
Document format area (W x L)	▪ Min. 210 × 165 mm (210 × 93 mm option) ▪ Max. 305 × 225 mm
Paper weight	▪ 70 – 120 g/m²
Grouping thickness (EFG)	▪ Up to 4 mm (grouping station 1 up to 1 mm) ▪ Up to 10 mm for C4 applications
Folding capacity	▪ Single-Fold up to 8 sheets (80g/m²) ▪ Z-Fold up to 5 sheets (80g/m²) ▪ Roll Fold up to 4 sheets (80g/m²)
Enclosure format area (W x L)	▪ Min. 210 × 93 mm ▪ Max. 305 × 225 mm
Paper weight enclosures	▪ 70 – 160 g/m²
Enclosure thickness (Friction)	▪ Up to 2.5 mm (up to 6 mm option)
Envelope format area (W x L)	▪ Min. 220 × 105 mm ▪ Max. 353 × 250 mm (+/- 1 mm)
Paper weight envelopes	▪ 70 – 120 g/m²
Packing thickness	▪ Up to 12.7 mm
Operation languages	▪ German, English, French, others on request
Dimensions (L x W x H)	▪ Machine 4 ZS (8 ZS): 6270 (7710) × 3630 × 1380 mm ▪ Module EFG: 1990 × 770 × 1360 mm ▪ Module ZSMS: 1440 × 1100 × 1260 mm (shipping: L=2170mm) ▪ Module ZSMO: 1440 × 770 × 1220 mm (shipping: L=2170mm) ▪ Module KV-Input: 2090 × 850 × 1380 mm ▪ Module KV-Output: 2440 × 1560 × 1360 mm ▪ Deviation module: 440 × 410 × 990 mm ▪ Shingling conveyor 2m: 2240 × 450 × 970 mm

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Technical Data

Weight (without, with packaging)	• K1600 EFG-8ZS:	1500, 1800 kg
	• Module EFG:	290, 340 kg
	• Module ZSMS:	340, 390 kg
	• Module ZSMO:	200, 250 kg
	• Module KV-Input:	240, 290 kg
	• Module KV-Output:	350, 400 kg
	• Deviation module:	36, 38 kg
	• Shingling conveyor 2m:	45, 50 kg
Floor load	• 170 kg/m^2	
Point load	• 120 kg	
Power supply, frequency	• 3 × 400VAC+NE, 50/60 Hz	
	• Protection by customer side: 16 A charakteristic C / 0.035 kA plus FI 300 mA, type B	
Power consumption	• 1500 W	
Heat emission	• 1500 J/s	
Compressed air connection	• Not required in basic version	
	• Compressed air connection optional	
	- Min. pressure in operation: 6 bar	
	- Max. pressure in operation: 12 bar	
	- Unlubricated air, filter fineness 40µm	
	- Connection: plug connection 8mm / G 1/8"	
	• Option retention device (grouping > 20 sheets on EFG)	
	- Air consumption at 6 bar approx.: 1 m^3/h	
	• Option vacuum support feeding stations ZSF	
	- Air consumption per station at 3 bar approx.: 6 m^3/h	
	• Option flap opening with blowing air assistance	
	- Air consumption approx.: 2 m^3/h	
Noise emission LEQ	• 82.1 dB(A) (only valid with option P000958 sound package for inserting system K1600)	

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Inserting System K1600

Technical Data

Lifetime	▪ Details on request
Service intervals	▪ Depending on application
Service and maintenance	▪ According to instruction manual
Operation conditions	▪ Operation, min. – max. +15°C up to + 30°C ▪ Operation, recommended +18°C up to + 22°C ▪ Relative humidity 50% up to 70% ▪ Recommendation: operate installation in air-conditioned rooms
Documentation	▪ Operators manual ▪ Technicians manual ▪ Spare parts catalogue
Data sheet	▪ Subject to technical modification without advance notice
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