BPS® 1000

Banknote Processing System

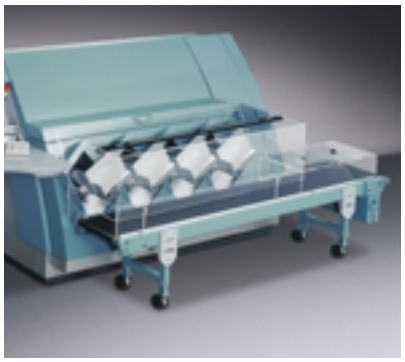
Giesecke & Devrient

Giesecke & Devrient – 150 years of experience

In the high-speed processing market, the BPS 1000 from Giesecke & Devrient (G&D), with over 700 system installations, is the undisputed global market leader. It is a new development and succeeds the highly successful ISS 300, sold widely across the world for over 20 years. The BPS 1000 is one of G&D's BPS family of coordinated products.

Our competence – your advantage with the BPS 1000

The BPS 1040 S basis version of the BPS 1000 was especially tailored to meet the needs of central banks. But the many BPS 1000 models for commercial banks, cash-in-transit companies and casinos, with up to 20 stackers, also offer our customers a high degree of flexibility and ideal configurability.

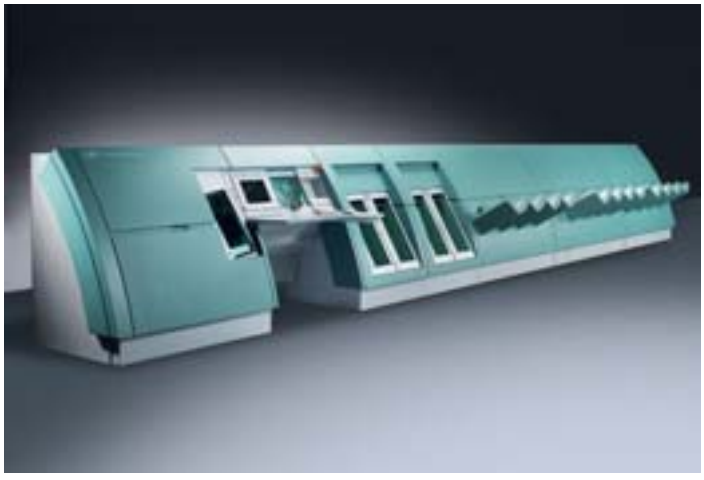


Benefits of the BPS 1000 at a glance

- Highly developed security concept
  - Online shredder for internal destruction of unfit banknotes
  - Machine and sensor software as well as sensitive customer data are protected against manipulation
  - Smart card, PIN-based access control system restricts use of the machine to authorized personnel
  - Optimum counting accuracy enhances security
- Sensor array
  - NotaScan® CCD sensors scan each banknote full-face, front or back
  - Circulated banknotes are checked for fitness, soiled or damaged banknotes are sorted out, maintaining the quality of the currency in circulation
  - Banknotes are authenticated and suspected counterfeits separated
- High flexibility
  - Several different currencies and mixed denominations can be processed in 4 orientations
  - High processing speeds allow for easy handling of large volumes (400,000 to 700,000 banknotes per system and shift)
  - A wide range of customer applications are provided or can be programmed
  - Software is easily updated for the processing of new series or additional currencies
- High degree of automation level
  - Banknotes are banded in packages of 100 (standard)
  - Online bundling (optional)
  - Automatic transport and wrapping (optional)
  - Electronic report generation and direct data transfer for fast further processing
- Ergonomically designed and easy to use
- System can be operated by one person

Standard modules and components

- Up to 20 delivery stackers possible, in combinations of
  - modules with 2 or 4 stackers
  - large delivery module with 2 stackers for up to 2,000 loose banknotes per stacker



- Interchangeable cartridges for fast and safe banknote removal
- One bundler per stacker
- Online shredder module

Sensors

- 10 sensor slots
- Customized adaptation possibilities for banknotes
- The NotaScan® CCD sensor for full-face scanning of one banknote side in red, green, blue and infra-red spectrums, detecting:
  - denomination, orientation
  - banknote size
  - infra-red properties (authenticity)
  - soil
  - stains, graffiti (optional)
  - missing parts, dog-ears
- Thickness sensor for detection of double or multiple items, adhesive tape, tears
- Other optional sensors
  - Additional NotaScan® CCD sensor for full-face scanning of the reverse side of the banknote
  - Sensors detecting ultra-violet dullness, fluorescence/phosphorescence, magnetic and mechanical properties, electrical conductivity
  - Special sensors for the G&D high-level security features (M-Features)
  - Third-party sensors can also be integrated

Bundling

- Automatic online bundling of 10, optionally 5, packages
- On-site retrofit for later upgrade possible
- Simple replenishment of consumables

Bundle delivery options

- Manual
  Bundles are ejected onto each bundler's banknote collecting plate (maximum of 3 to 5 bundles per plate) and removed by the operator.
- Automatic
  Banknote packages are automatically stacked, bundled, ejected and deposited onto a conveyor belt. Then the bundles are securely shrink-wrapped online in a G&D NotaPack® wrapping system (optional).

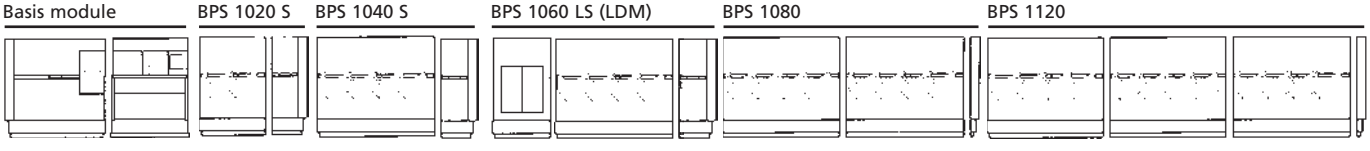
Banding

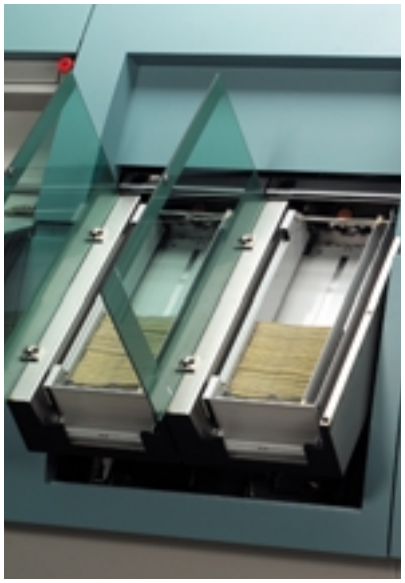
- Automatic online banding for each stacker
- Text for printing onto bands can be set individually as needed (up to 80 characters)

Banknote feeding

- Up to 2,000 loose banknotes can be placed in the singler; continuous feeding during singling is possible
- Non-stop processing of customer deposits is enabled by the use of headercards*
- Re-run of rejected banknotes reduces the time required for manual inspection

BPS 1000: Configuration examples





Reject compartment

- For direct inspection of rejected banknotes (e.g. suspected counterfeits or banknotes in poor condition)
- Capacity up to 250 banknotes
- If headercards* are used: rejects are subsequently processed together with the headercards

Hardware and software

- High-performance industry-standard computer with Windows NT® operating system, Oracle® database and GUI application software
- LAN/WAN connectivity (with Windows NT® support)
- Application based on an Oracle® database, allowing high flexibility in customer applications, e.g. data transfer, report configuration
- Large number of processing modes and reports
- Interface (XML reports) for data transfer to cash management systems such as G&D's CompassEntrée$^{CM®}$ and others

Optional equipment

- CompassEntrée$^{CM®}$ cash management software
- Extractor system for shreddings
- Conveyor belts
- NotaPack® wrapping system
- Barcode reader
- Manual inspection station

Comprehensive customer service from G&D

- Low maintenance requirement and long maintenance cycles
- Installation and training by G&D specialists
- Customized maintenance agreements

Technical Data

Based on the BPS 1040 S basis machine

Dimensions (L/W/H)
3,823 x 1,063 x 1,156 mm (can be dismantled for transport purposes)

Weight
Approx. 860 kg

BN sizes accepted
Length 100–180 mm
Width 60–90 mm

Processing speed
Optionally 20 BN/s or 30 BN/s

Transport speed
5 m/s or 7.5 m/s

Theoretical throughput
72,000 BN/h or 108,000 BN/h

Pneumatic module
Power consumption 5.4 kW

System availability
Typically >96 %
(depending on service)

Power supply
230 V/400 V, 50/60 Hz
120 V/208 V, 50/60 Hz

Power consumption
Basis machine 2.1 kW

Ambient requirements
Ambient temperature
18°C–30°C
Relative humidity
40%–80%

Noise level
67–77 dB (A)

Spatial requirements
Approx. 25 m²

Approval
CE mark

Giesecke & Devrient GmbH
Currency Automation and Services
Prinzregentenstrasse 159
P.O. Box 80 07 29
81607 Munich
GERMANY

Phone: +49 (0) 89 41 19-0
Fax: +49 (0) 89 41 19-85 20

gd.sales@de.gi-de.com
www.gi-de.com

* The headercard technology used in this product is licensed by Currency Systems International, Inc., of Irving, Texas on the basis of U.S. Patent No. 5.917.930 and further patents in other countries.

BR_BPS1000_mar03_E ZDC

Giesecke & Devrient