



G+D
Currency Technology

The BDS[®] Product Family

Safeguarding asset value,
even during destruction



www.gi-de.com/ct



1,500

Our BDS solutions can be scaled to process between 20 and 1,000 kg of banknotes per hour as standard. Custom solutions can even reach 1,500 kg/hour – a rate that is unparalleled worldwide.

Confidence based on reliability

Banknote destruction is a key component of the cash cycle, and is essential to confidence in any given currency. With absolute reliability “made in Germany”, G+D supports central banks and banknote printers worldwide to ensure that the process is secure and efficient.

SECURE AND RELIABLE

Banknote destruction systems in the BDS family set international standards with respect to security, quality, and service life. Sophisticated control and monitoring solutions ensure that physical and digital access are extremely secure. Equally importantly, G+D shredder technology means that banknote destruction is 100% irreversible.

COST-EFFICIENT

Fully automated operation reduces personnel requirements to a minimum, while sophisticated technology enables maximum system availability. In addition, the extremely robust systems feature excellent service life, long service intervals, and low maintenance requirements, resulting in extraordinarily low total costs (TCO).

FLEXIBLE AND PRECISE

Our systems are available in three categories based on your requirements: the *Standard Line*, *Modular Line*, and *Tailored Line*. They can be flexibly and securely integrated even in the face of complex structural requirements.

USER-FRIENDLY AND ERGONOMIC

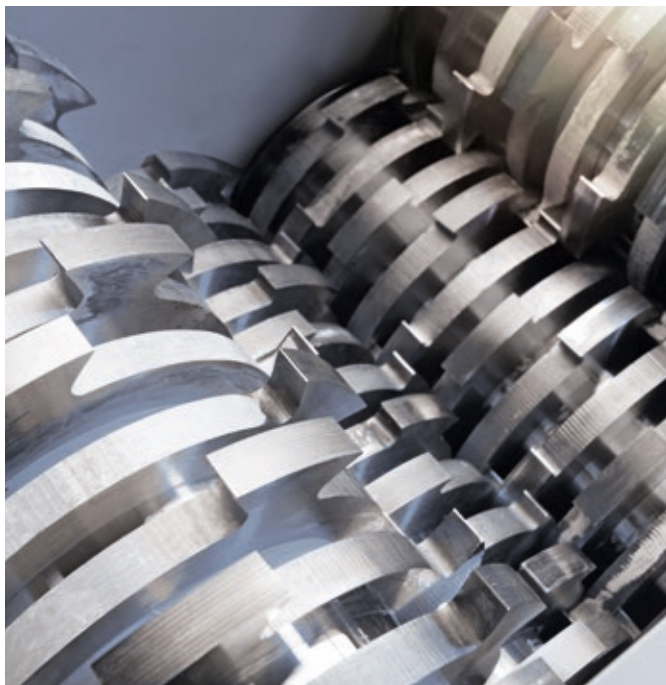
Touchscreens and graphics-supported user guidance make the systems easy to handle. Employees can use them with little training and without specialist qualifications. Maintenance is also simple and straightforward.

SUSTAINABLE AND ENERGY-EFFICIENT

The use of cutting-edge technologies sets standards with respect to reduced energy consumption. Compliance with all established environmental standards is integral to BDS systems in terms of the materials used and reusability.

Security: a matter of precision

The BDS product family comprises innovative solutions for banknote destruction as well as for shred suction and disposal. Maximum security and reliability combined with low total investment costs (TCO) is a common thread across all these systems.



SHREDDING: BDS D SYSTEMS

BDS D systems shred banknotes into very small constituent parts which cannot be reassembled. They consist of a feeding system, the shredder itself, and a monitoring and security system.

- Fully automated operation – single-person control
- Unique capacity range of 20 to 1,500 kg/hour
- Revolutionary: only one shredder stage
- Specially hardened blades; service life of up to 7,500 hours
- A multi-stage security concept for maximum security:
 - Access security via two separate locks (two-man rule)
 - Electronic access control for all doors and openings
- Ease-of-use, straightforward maintenance, and long service intervals
- Touchscreen with graphical process visualization
- Space-saving
- Extremely long service life



SUCTION AND COMPACTING: BDS SC SYSTEMS

BDS SC systems suction banknote particles and compress them into convenient briquettes. They include a storage silo, a filter system for cleaning air that contains dust, a briquetting system, and a control and security system.

The system geometry and building architecture are irrelevant in this respect – we will find an appropriate solution even in very complex or multi-level room configurations. Suction is possible both in the BDS D systems (offline) and in online shredders that are integrated into banknote processing systems. The number of intake points is unlimited.

- ▶ Fully dust-free shred transport
- ▶ Suction monitoring by sensors and transparent pipe elements
- ▶ Interruption-free briquetting in multi-shift operation
- ▶ The highest possible compression ratio for reduced storage and transport costs
- ▶ Flexible fitting, even in complex buildings and over long routes
- ▶ Shred suction performed by a huge range of banknote processing systems or offline shredders, regardless of the number and installation location
- ▶ Automatic filter cleaning
- ▶ Ease-of-use, straightforward maintenance, and long service intervals
- ▶ Extra-long service life



SUCTION AND FILLING: BDS SB SYSTEMS

Compressing shreds into briquettes is inefficient when processing small banknote quantities; also, it is not technically possible to briquette polymer banknotes. BDS SB systems are the ideal alternative in both cases. They suction shreds and – depending on the volume – load them into sacks or containers. The shred suction process is identical in the SB and SC systems.

- ▶ Sack filling for capacities of 25 to 300 kg
- ▶ Container solutions for capacities up to 2,000 kg
- ▶ Optional material separation for recycling



future-proof

From infeed to the
briquette: all from
a single source

G+D offers innovative solutions throughout the destruction process. This includes the destruction systems themselves as well as:

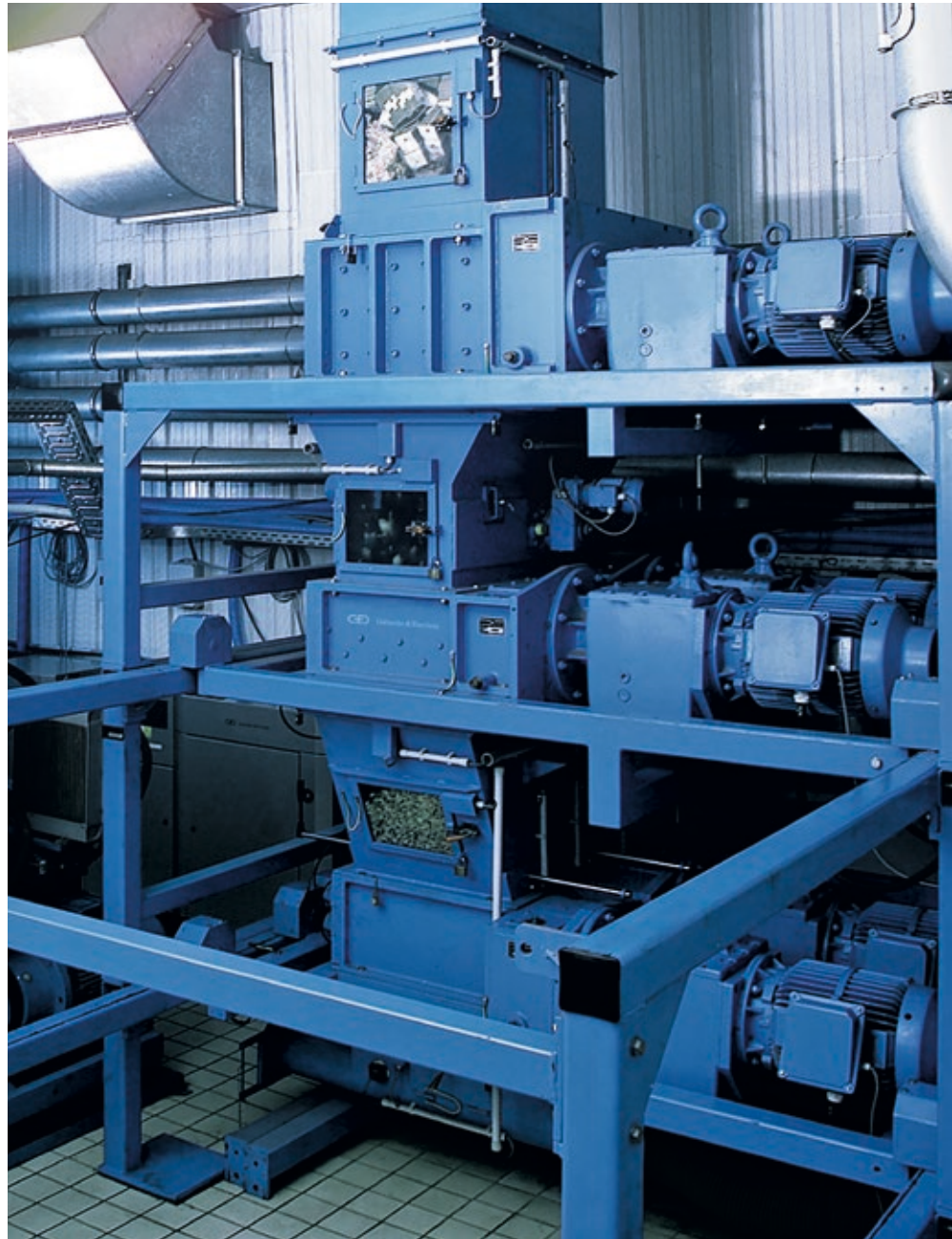
- ▶ Punch solutions for secure banknote invalidation
- ▶ Transport solutions within the cash center: full automation with Automated Guided Vehicles (AGV) or partial automation using conveyor sections
- ▶ Automated solutions for material preparation, identification, and loading
- ▶ Systems for fully automated disposal within the cash center
- ▶ Reporting and management of spare parts – with the aid of advanced *BDS Control software*

Choosing your requirements

BDS family systems are modular in structure. Everything is possible, from the compact standard to the fully tailored system. The result: solutions that are perfectly aligned to the customer's requirements and physical premises.

User benefits are threefold, comprising the technological perfection of our products, their smooth embedding into an efficient overall concept, and the most cost-efficient solution in each case.

Our promise is that you only invest as much as you really need to.



After suction and mixing in the silo, the shreds are generally compressed into compact briquettes using powerful hydraulic presses.

The BDS product family

Modular and scalable



The SC50/100/150 standard suction and briquetting systems integrate different modules: the suction fan, the shred storage silo, the dust filter and briquetting system, and the control and security system.

STANDARD LINE:

Standard systems for smaller volumes

- ▶ Compact basic systems for small cash centers
- ▶ Proven and functional best practice configurations
- ▶ Easy and quick to implement
- ▶ Space and cost-optimized

TAILORED LINE:

The customized solution

- ▶ For large cash centers with volumes of over 1 million banknotes per hour
- ▶ For particular challenges with respect to capacities and installation
- ▶ Can also be integrated into existing system environments
- ▶ From situational analysis to turnkey handover – all from a single source

MODULAR LINE:

Flexible, combinable, and cost-efficient

- ▶ For cash centers with capacities up to 1,000 kg/hour
- ▶ Custom configuration and scalability
- ▶ Different designs available
- ▶ Wide range of equipment options

THE COMPLETE SOLUTION:

More than the sum of its parts

Customers can use the BDS family systems as standalone partial solutions depending on requirements. Alternatively, they can select a custom complete solution that perfectly meets their needs. Bridging larger distances between rooms, levels, or different parts of buildings is also possible and straightforward.

G+D SOFTWARE SOLUTIONS: A FIRM GRIP ON PROCESSES

Sophisticated BDS Control software controls the individual units, monitors the entire process, and records all system, operating, and production data in order to ensure seamless documentation.

These systems can also be connected to Compass VMS® cash management software via protected interfaces.

Touchpanel on the BDS



Compass VMS

BDS Control

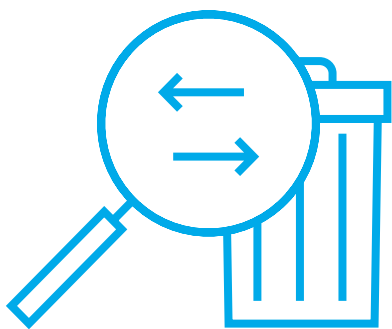
Remote-Service



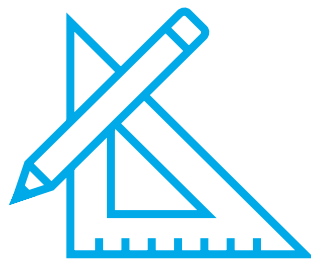
Client-PC

Meeting your needs is our mission

Our experts work closely with our customers and fully analyze their requirements. Their aim is always to achieve a solution offering the maximum benefit to the customer – with the individual elements working smoothly and effectively together. In doing so, they put to use our comprehensive experience from decades of collaboration with central banks and cash centers.



1



2



3



4

The four stages to achieving the ideal solution

1

ANALYSIS

Our experts identify all the parameters that are relevant to successful BDS system operation, such as:

- ▶ Incoming banknote volumes
- ▶ Personnel and system requirements
- ▶ Automation potential
- ▶ Spatial aspects
- ▶ Security requirements
- ▶ Internal rules, processes, and specifications
- ▶ Existing systems and infrastructure
- ▶ Software requirements

Result:

A full requirements profile



2

SOLUTION DESIGN

We work with the customer as we proceed step by step – from initial preparations through to detailed planning:

- ▶ Developing possible solution models
- ▶ Presentation with illustrations of custom-tailored options
- ▶ Incorporating best practice in every subsection
- ▶ Discussing the ideal solutions model, and customer decision
- ▶ Detailed planning, including all processes, systems, equipment, software, and automation solutions

Result:

Detailed concept and tailor-made offer



3

IMPLEMENTATION

We put great emphasis on prompt roll-out for every project:

- ▶ Installation and commissioning by our experts
- ▶ Customized integration into existing processes
- ▶ Detailed instruction for operating and supervisory staff
- ▶ Acceptance test preparation and support during its implementation
- ▶ On request: on-site support during the start-up phase

Result:

Maximum productivity from the outset



4

SERVICE

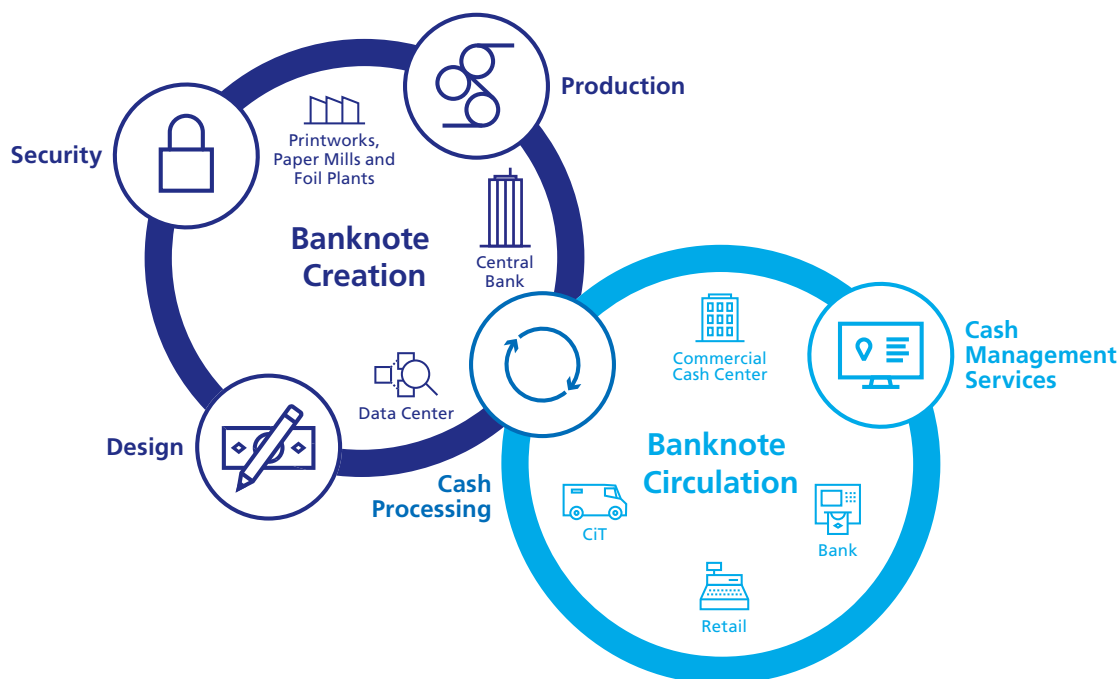
You can rely on our service – globally and at any time:

- ▶ Technical support provided by our reliable service teams (on-site or via the support line)
- ▶ On request: remote service to provide instant insight and the quickest response times
- ▶ Systematic inspections, and preventive and corrective maintenance
- ▶ Repair service carried out by experienced specialists using high-quality, genuine spare parts
- ▶ Practical training
- ▶ Service package tailor-made to customer requirements

Result:

Optimum availability throughout the useful life





Securing Values: Giesecke+Devrient Currency Technology

G+D has played a significant role in advancing the development of banknotes since 1852 – always with the aim of offering our customers a crucial advantage.

We are now an end-to-end provider for the whole cash cycle and have unique and thorough expertise in each application area: from attractive banknote design and highly efficient banknote processing, to reliable banknote destruction. This extensive knowledge is incorporated into all we do for our customers.

A LEADER WORLDWIDE – INCLUDING IN BANKNOTE DESTRUCTION

G+D is also a pioneer in the destruction of banknotes. In 1979, we were the first company worldwide to start developing and producing professional banknote destruction systems.

Today, more than 80 central banks and banknote printers put their trust in us in this area, so we are committed to constantly advancing the security, efficiency, and reliability of our solutions.

Are you ready for a new level of efficiency and security?

What specific challenges are you facing?
And how can we help you find the ideal
solution for your needs?



Let's talk!

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When destroying a banknote, it is essential that it cannot be reassembled. Our BDS systems guarantee this 100% – while also meeting the highest demands with respect to security, efficiency, and ergonomic use.



Dr. Oliver Koop
Director
Product Segment Manager BDS



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