Shown with optional noise hoods, automation and TWH twin stacker delivery

Stahlfolder TH 82: The folder that offers unmatched productivity and automation

The Stahlfolder TH 82 gives folder productivity a new meaning! Standard features alone set the Stahlfolder TH folders apart from the competition. From feeder to delivery, this new folder generation offers unmatched operator convenience, quality folding and safe production at top speed.

The modularity of the TH models allows for a host of retrofittable options previously not possible on folders, such as pre-slitter shafts and double rear-mounted slitter shafts in the 1st, 2nd or 3rd station or the new slitter shaft lifting device; the Stahlfolder TH grows with your business and at the same time keep your investment at the most economical level and provide a maximum flexibility, productivity and performance.

All Stahlfolder TH and KH models can be upgraded with automation that could include motorized fold roller settings, automated buckle plate settings and networking from Prepress to Postpress to data collection. Intelligent automation options provide the right level of automation for each bindery.

Award-winning folder technology

Stahlfolders TH/KH folder technology was recognized by GATF/PIA as one of the outstanding technologies in 2005 and awarded the prestigious InterTech Technology Award. Winning technologies have to be proven and require endorsements by users.

The TH/KH technology with its outstanding standard features, modular platform, highest degree of flexibility and a true gain in productivity were the keys in receiving this prestigious award.

HEIDELBERG
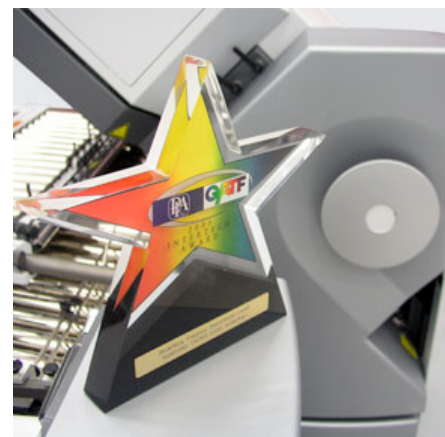
Feeder

A round continuous feeder is the standard feeder for all Stahlfolder TH 82 models. It permits continuous loading and non-stop production. The feed table capacity increases about 30% with a feed board extension that tilts up for easy access to the suction wheel area.

A 12" turning drum with individual tensioned transport belts guarantees smooth stock transfer from upper to lower feed table. The tensioned belts adjust itself to varying pile heights.

The low-profile (35") load table makes for easy and strain-free loading.

A reverse function makes it possible to move the stock quickly backward or forward to speed up change-overs.

Sheet separation: Stahlfolder TH 82 models feature a digitally controlled suction wheel that holds the suction vacuum for a pre-determined length until the sheet transfers reliably onto the register table.

An adjustable advance control detects possible gaps in the pile advance and compensates automatically the feed board speed.

The re-designed, wide 3-hole polyurethane feed wheel features bridges in the suction channels to increase the pick-up power and eliminate marking.

The suction valve is located directly at the feed head and to allow for highest cycle ratios.

A self-adjusting air-wing blower provides reliable sheet separation and an adjustable and sectioned air front bar aids the same purpose. An angular and height adjustable in-feed guide compensates for curl.

Air adjustments are located on the outside frame for easy access and quick adjustments of all settings without having to stop the folder. Fine-tuning the feeding process becomes production time and is not lost in the makeready process.

Register table: The 51" long register table continues at the same angle as the lower feed board. This feature supports smooth stock transfer. A double sheet detector at the in-feed section reliably clamps any double feed that might occur and holds the feeding cycle while the folder continues to run.

Air stream register: This revolutionary system is a patented Stahlfolder feature. It consists of a register belt that allows continuous airflow, which holds the sheet safely and, as opposed to suction belts, it does not bleed air or loses vacuum. This is especially beneficial on smaller sheet sizes.

Air settings for different paper weights can be stored, recalled and at adjusted at any time.

HEIDELBERG

In conjunction with the Stahlfolder-exclusive Prism side guide, the air stream register requires only minimal adjustments – if any.

Prism side guide: The new side guide design improves register considerably. It consists of a V-channel with a flat surface on the inside and prevents curl-up of the sheet, which can occur in a rounded sheet metal side guide.

The quick-release side guide is easy to move and makes for fast and accurate adjustments.
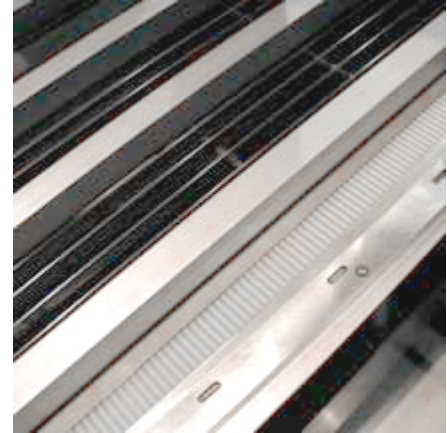
The new air-stream register system and Prism side guide. Set-up and adjustment requirements are minimized for faster change overs and easier makereadies

Controls

Stahlfolder TH 82 folders are equipped with state-of-the-art MCT modular control technology. The main control is centrally located at the register table.

Self-learning functions measure sheet size and automatically set suction length, sheet gap and speed for each unit. Only a single sheet is required to provide the data needed to calculate these settings.

Intelligent speed control takes sheet length into account or desired production speed to control all units accordingly.

The integrated counter displays speed, production, batches and lets the operator pre-determine the run length.

Electrical and Drive System

All stations and other peripheral equipment, such as deliveries, are equipped with convenient plug-in connections. Automatic circuit breakers add to the reliability and service-friendliness. The drive motors are equipped with maintenance-free and self-adjusting pulley gears and controlled by inverter boards.

The system provides convenience and allows independent speed control from either station of the folder configuration.

CAN bus data connectors provide plug-'n-play capability and make it possible to connect stations and accessories with a single plug while at the same time allow high-speed data transfer between all units. The benefit is a flawless production flow.

HEIDELBERG

Folding Stations

All folding stations are manufactured from heavy-duty cast iron side frames, equipped with their own drive and no-turn hand wheels for added safety.

Buckle plates: Stahlfolder TH 82 folders feature swing deflector buckle plates and a re-designed # 1 buckle plate in the first station which features a solid paper stop.

The solid paper stop in the 1st plate extends across the whole buckle plate width. It runs between the buckle plate ribs and connects also the stops in between.

This technology prevents damage at the lead edge of the sheet and allows for higher folding speeds at the same time.

An added benefit of swing deflector plates is the ease of incorporating segmented fold rollers for gluing applications

The new Stahlfolder buckle with solid paper stop is designed to increase speed and fold quality

Model	Standard Configurations
Stahlfolder TH 82/4	Three (3) swing deflector buckle plates in 32" parallel station. Buckle plate #1 with solid paper stop and separate deflector
Stahlfolder TH 82/4/4	Four (4) swing deflector buckle plates in 26" wide 8-page station
Stahlfolder TH 82/4/4/4	Four (4) swing deflector buckle plates in 22" wide 16-page station
Stahlfolder TH 82/4/4/4/2	Two (2) swing deflector buckle plates in 22" wide 32-page station

Fold rollers: The re-designed fold rollers feature a steel/PU ratio with wider and overlapping PU sections. The soft PU material provides superior traction, holds excellent register, prevents marking and promotes absolute parallel stock transport.

The staggered polyurethane against polyurethane configuration resists wear. All rollers are mounted in maintenance-free, sealed ball bearings.

HEIDELBERG

Helical gears: All rollers and slitter shafts are driven by helical gears, which provide an absolute synchronized drive for the whole drive train and avoids slippage on any stock. Integrated grease canisters keep the drive quite and automatically lubricated.

Festa settings: Gap settings for all fold rollers and slitter shafts are controlled with Festa settings. The configurations of these mechanics are identical and provide accuracy and longevity to the setting mechanism.
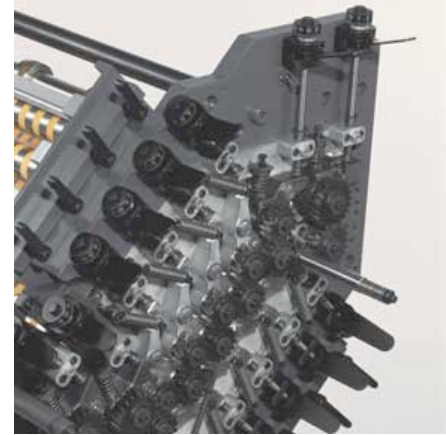
Rear-mounted slitter shafts: A pair is located at the exit of each folding station and can be used for perforating, slitting, trimming or simple transport purposes. Combination collar/blade holders serve the dual purpose of holding a slitting, perforating or trimming blade with a transport collar right next to it.

The shafts are easy to access and the blades can be positioned quickly using the patented positioning cross bar.

Precision-manufactured from stainless steel the shafts are designed for quiet running and longevity. Stahlfolders exclusive pull-out feature allows removing or installing slitter shafts in seconds.

A patented positioning device makes it easy, quick and precise to place slitting, perforating and scoring tools. The crossbar features a scale and extender that can pin-point the exact location of all slitter shaft tools. The whole bar can easily be removed to allow easy access to the rear slitter shafts.

Model	Standard slitter shaft blades
Stahlfolder TH 82/4	Two (2) slitting blades, three (3) scoring blades, six (6) perforating blades
Stahlfolder TH 82/4/4	Four (4) slitting blades, six (6) scoring blades, eight (8) perforating blades
Stahlfolder TH 82/4/4/4	Six (6) slitting blades, eight (8) scoring blades, fourteen (14) perforating blades
Stahlfolder TH 82/4/4/4/2	Eight (8) slitting blades, ten (10) scoring blades, sixteen (16) perforating blades

Pull-out transport shafts: To aid safe and controllable sheet transport to the following station, adjustable transport wheels are located on the slitter shaft. The wheels can be positioned to precisely control the exit angle, which is required for a smooth sheet transfer to folding stations or deliveries.

HEIDELBERG

Right Angle Roller Tables

Standard with Stahlfolder TH 82/4+ configurations: All Stahlfolder right angle roller tables are made for heavy-duty use. They are movable, easy to place and feature an independent speed control.

Stop, start and emergency stop allow provide safe and reliable operation from any station in the configuration. Aligning rollers are chrome-plated and driven by maintenance-free synchronized timing belts.

Adjustable marble cage: Right angle roller stations feature a marble cage that can be adjusted to move the marbles slightly off the crown of the transport rollers. This system minimizes marble bouncing and prevents marking on sensitive printed products.

Marble controllers: A set of marble controllers apply slight pressure in order to align sheets quicker. This feature allows for high-speed folding and provides excellent register.
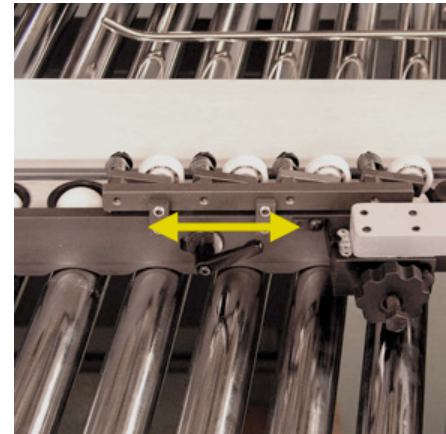
Delivery

Standard delivery is a 94 cm/37" wide stream delivery which can be used also for 2-up production. Fast-advance transport eliminates the need to feed-interrupt and increases output.

The whole folder can be operated from the delivery to stop/start the equipment and the folding process.

The delivery consists of two belt sections that operate at different speeds to create a shingled stream in the first section and a collecting stream at the end of the delivery. Adjustable catch bars are in place to rear the finished product for easy removal.

Technical data and equipment modifications subject to change without notice

HEIDELBERG

Options

Feeders: A continuous round feeder is standard equipment. To accommodate different workflow requirements the Stahlfolder TH 82 models can be factory-equipped with these optional feeders and upgrades:

- **Performance upgrade, continuous feeders:** The continuous feeder can be equipped to optimize the handling of oblong formats. The upgrade includes an additional (second) conveyor belt for the loading table, twin suction wheels, swing up cast iron wheels and arresting wheels for oblong formats.

- **Pile feeder:** For short run requirements and frequent changeovers a pile feeder offers higher productivity and flexibility, which can be further optimized in conjunction with automation features.

  - **Performance upgrade, pile feeders:** Front air blowers across the full in-feed width.

- **Pallet feeder:** This kind of feeder accepts pallets that can come directly from the press and does not require re-loading the stock. Ideal for book work or other signature folding requirements.

  - **Performance upgrade, pallet feeders:** Twin configuration of suction wheels and extra blower on the drive side provide additional sheet separation power.

  - **Standard on pallet and pile feeders: Tremat feed head:** The newly designed feed head improves operation and promotes reliable feeding.

    While a sheet is transported with the feed wheel the next sheet is picked up already. This unique system guarantees that sheets are faster separated and as such ensures higher feeding reliability than other systems on the market.

The re-designed Tremat feed-head tilts up for easy access to the feed board

HEIDELBERG

Divert gate: Instead of holding the doubles in the double sheet detector, the divert gate extracts the doubles before they enter the 1st folding unit. This feature allows for continuous production because the folder and feeding will not stop.

Only approximately 1" sheet gap has to be maintained to operate the touch-free detector which uses ultrasound to identify a double and activates the gate.

- **Other options for the divert gate:**

  - **Blank sheet monitor:** This device recognizes and diverts blank sheets in addition to the double sheet detection function.

  - **Image recognition system:** For verification purposes and ultimate safety in feeding an image recognition system takes over the functions of double sheet detector, blank sheet monitor and also detects makeready sheets if they vary too much in ink density.

Stations: Stations can be upgraded to different sizes for higher flexibility and utilization to incorporate features, such as twin-lay attachments, easier. The available standard and optional configurations for stations are:

Model	Station sizes and buckle plate options			
	1st Station	2nd Station	3rd Station	4th Station
Standard	**4 (82 cm)**	**4 (66 cm)**	**4 (56 cm)**	**2 (56 cm)**
Optional	**6 (82 cm)** **8 (82 cm)**	**6 (66 cm)** **8 (66 cm)** **6 (82 cm)** **8 (82 cm)**	**4 (66 cm)** **2 (56 cm)**	

Performance upgrade, stations: All stations can be upgraded with advanced sheet monitoring devices, which control the sheet at all times.

The software associated with the performance upgrade enables the folder to stop the paper at the entry and exit of any folding station to allow for precise adjustments of slitter shaft tools on pre and post slitter shafts.

Performance upgrade on stations include sheet monitoring devices at fold station in feed, exit and cross carrier side guides

HEIDELBERG
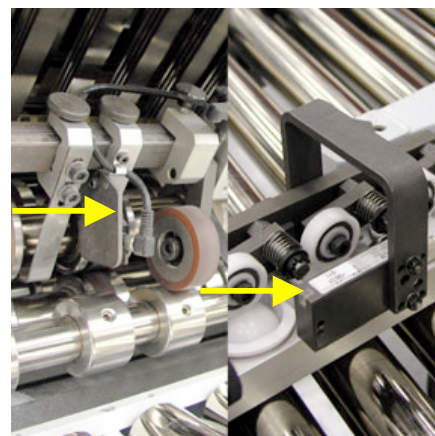
Combination buckle plates: Stahlfolder TH 82 folders feature re-designed combination buckle plates in all folding stations (Buckle plate #1 in the first station with solid paper stop and separate deflector).

It takes only seconds to convert from buckle plate to deflector function and the plates do not need to be lifted or lowered, which is required for swing deflector plates. The controls are always on the operators' side of the folder.

New and unique features make the Stahlfolder buckle plates even more valuable by saving makeready time. The following functions can be accessed and adjusted while the folder is in the makeready process or production run:

1. **Lift and lower the back pan.** This function is mainly used to compensate for down-curled stock or aid accordion fold impositions.

   Older buckle plate technology allows this adjustment as well, but it is not easy to maintain a parallel movement of the back pan and any change can cause more problems than it solves.
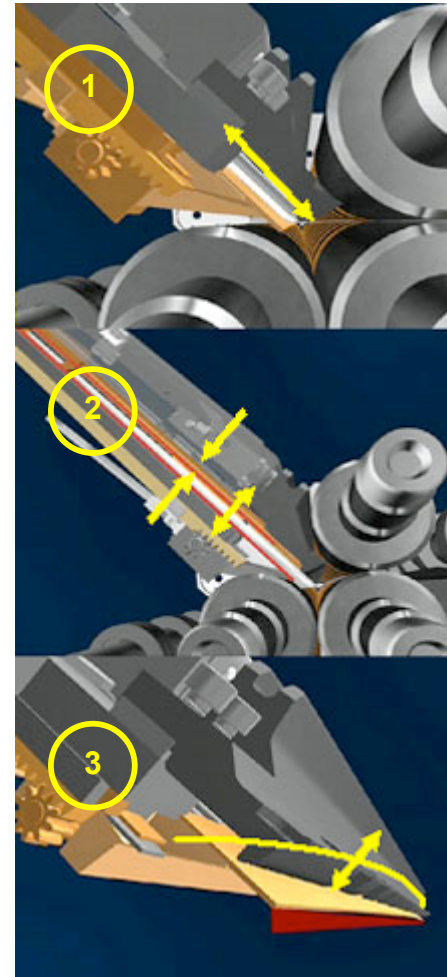
2. **Reduce or increase the buckle plate in-feed clearance.** Between different stock weights, folding patterns and for curl compensation the buckle plates can be adjusted for in-feed clearance without having to stop the folder and swap buckle plates, which is the usual procedure to compensate for in-feed height adjustments.

3. **Pre-stressing of the back pan.** An often ignored, but

   necessary adjustment that is particularly important with larger sizes and/or heavy stock to avoid bow folding. Bowed folds will create creases on cross folds and make it impossible to match the edges of signatures.

The new Stahlfolder combination buckle plate design is unique and the only buckle plate on the market that allows fine-adjustments during the run; reducing the makeready process significantly

Coupling modules: Various generations of folder equipment, such as 2nd stations or deliveries can be combined with proper interface coupling modules. Basic functionalities, such as start, stop, jam detection and emergency stop are maintained, but some advanced functionality might be lost in connection with older or newer generation equipment.

Older equipment is not necessarily obsolete. With a coupling box various generations can be combined, although functionality might be reduced or limited to basic functions

HEIDELBERG

Automation: The modular platform of Stahlfolder TH/KH folders offers different levels of automation, which range from simple operator guidance to a fully integrated data flow.

*   **Level I: Touch screen with operator guidance.** The folder is equipped with a computer and software that calculates folder settings based on imposition and sheet size.

    The operator sets the various plates as instructed, either as buckle plates or deflectors. Likewise, the correct roller gap settings are calculated.

*   **Level II: Automated fold roller settings:** The next level is to equip the folder with automated fold roller settings. The double sheet detector measures sheet thickness and connects to the integrated computer to calculate the values for proper gap settings in conjunction with the imposition at hand.
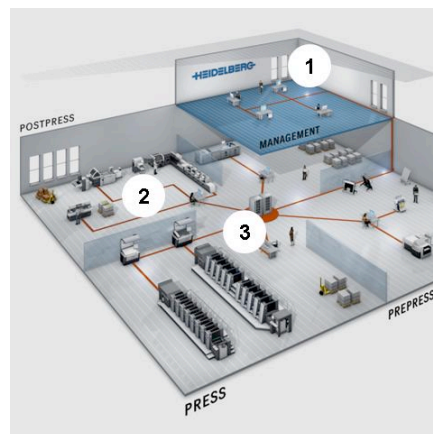
    Side guides are set with the help of a digital read-out that displays actual location and the computer-determined target position. Within seconds the side guide can be adjusted to the target position(s.) **Includes Level I Automation.**

*   **Level III. Automated fold roller settings and motorized buckle plate settings:** For even higher automation and the ultimate in speed and precision; motorized buckle plate settings provide the safety and operator convenience that make the Stahlfolder TH and KH folders truly shine. **Includes Level II Automation.**

*   **Prinect Postpress Manager:** For true jdf integration of the entire workflow and the highest efficiency Prinect Postpress Manager is required*. Standard features of Prinect Postpress Manager include:

    *   **Folder presets:** The folding imposition determined in the prepress stage can be transferred to connected folders. Once the job is loaded the buckle plates set accordingly*.

    *   **Equipment monitoring:** Connected equipment can be monitored at any time to check job status. 3 client server licenses are included in the standard Postpress Manager software.

    *   **Production Data Collection:** Networked folders and stitchers submit production data to a central server.

    The network diagram for an integrated bindery shows the data flow from input to output

    *   **Data Analyzing:** Collected data can be transformed into reports to allow management to monitor operational efficiencies.

        *   **Data Terminal**: Production monitoring of older and 3rd party equipment can be integrated with a data terminal.

    * *Postpress Manager requires Prinect Integration Manager and Prinect Pressroom Manager. For folder presets Prepress Manager also required.*

1. A job is recalled (for a re-run), created business/job planning or submitted by a customer, then transferred to production

2. Set-up data is loaded at the time required for the various postpress processes. Jobs can be fine-tuned, saved and stored for re-runs

3. Production data is transferred and used to monitor progress in real-time. The data can be utilized after production for estimating purposes, i.e. in Prinance

HEIDELBERG

Front-mounted slitter shafts: Retrofittable for 1st, 2nd and 3rd stations. The modular design of Stahlfolder TH and KH models allows to retrofit pre-slitter shafts.

Pre-slitter shafts make it easy to incorporate functions such as timed perforation, trimming and gluing in addition to be able to cut a sheet easier and with higher precision than in the rear-slitter shaft section.

Double rear mounted slitter shafts: The twin configuration of the slitter shafts controls the stock at all times during the trimming process and avoids the "fish tailing" effect, which can show up specifically on smaller products.

This feature is increasingly important because it provides the quality required in trimming and slitting on the folder and is indispensable in conjunction with smaller products.
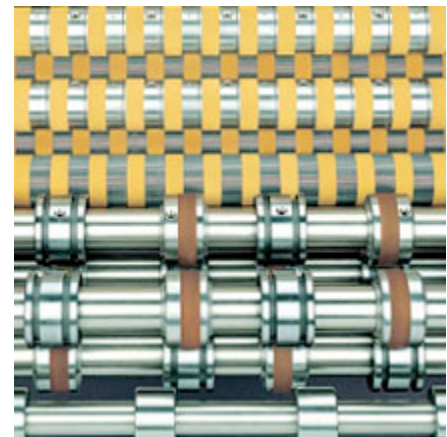
Slitter shaft lift kit: This option makes it very easy to access the rear-mounted slitter shaft to make adjustments or exchange the shaft(s).

Kick-out wheels, strippers and other accessories can be left in place and move with the slitter shafts in a convenient access position.

Most of the makeready time goes into slitter shaft adjustments and the lifting device reduces the time spent on slitter shaft adjustments to a minimum.

HEIDELBERG

Slitter shaft makeready bench: Valuable makeready time can be saved if the slitter shafts are made ready off-line for the next job, using a makeready bench.

This way the makeready process does not tie up the folder and the slitter shafts can be exchanged with minimum downtime for the folder.

Extra sets of post slitter shafts: Available in sizes 82 cm (32"), 66 cm (26") and 56 cm (22").

Finishing options: A variety of options make it possible to finish on the folder to increase productivity and fold quality.

- **Gluing systems:** Hot melt (In-plate, on-the-deck, remoistable) or cold glue applications from various manufacturers. Gluing requires modifications as follows:

    - **Segmented in-feed channel:** For on-the-deck gluing applications a segmented in-feed channel creates the space and gaps needed to allow glue entry into the fold station and maintains sheet transport.

    - **Segmented fold rollers:** Also required for on-the deck glue applications. Movable roller segments provide channels to prevent freshly applied glue being stripped.

    - **GWG counter roller device:** Provides a base for remoistable gluing applications and is available for folding stations, cross carriers and mailing tables. **Cannot be combined with slitter shaft lift kit.**

- **Preparation for Mailing.** Mailing and gluing applications require common control equipment as listed below. Stahlfolder equipment can be equipped factory-wise whit the options necessary to be prepared for the use of mailing and/or gluing equipment now and in the future. The options includes the items listed below:

    - **EAP Crossbar:** Strike/perf heads EAP require an EAP crossbar. This device consists of a heavy-duty cross bracket that can be tilted up for easier access to the cutting area on the pre slitter shaft. The bar is self arresting for added security.

       The EAP device includes also counter rollers and retainer bars to keep the stock straight and prevent pre-mature separation at perforated seams.

    - **Segmented in-feed channel:** To place a glue line anywhere on the sheet the in-feed of the buckle plate section has to be modified and the solid in-feed channel is replaced with sheet guides that can be moved and allow entry of glue lines practically anywhere on the sheet.

HEIDELBERG
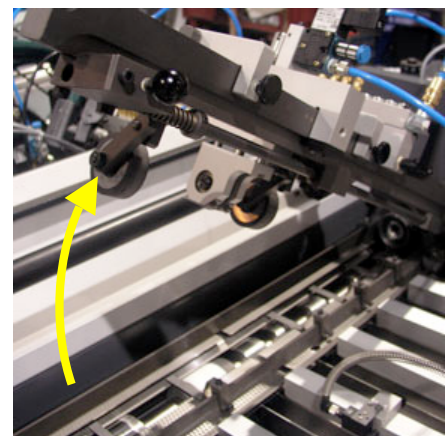
- **Pneumatics:** Is the main air regulator that keeps pressure constant between supplied compressed air and the various pneumatically driven tools.

- **Air distributor:** Distributes compressed air to gluing equipment or strike/perf heads.

- **Photocell:** Detects the presence of stock and triggers glue heads and/or strike/perf heads.

- **Encoder:** Measures and compensates for speed changes.

- **Controller stand:** Support for controller.

- **EAP strike/perforation:** A typical application is the creation of business reply cards or coupons that require precise timing to create a programmed length of cut or perforation.

Timed perforation/slitting heads are increasingly popular to finish on the folder, for example to produce business reply cards

Timing could be controlled by a Stahlfolder ACC 2.4 controller and station-integrated encoders compensate for changes in speed, i.e. between makeready and production

Gate folding: Pneumatic gatefold attachments are available for all station sizes. Complete with ACC 2.4 controller. An automated gatefold plate is available in conjunction with automated folders.

Twin lay attachments: All right angle folder stations can be equipped with twin lay attachments for 2-up production.

- **Performance upgrade twin lay attachments:** Specifically designed for sheet monitoring in stations with twin lay attachments. The system compensates for slight speed variations that might occur during transfers. This option presents a higher level of continued operation at any production speeds.

Noise hoods: Available for all stations and as pump cover.

Quality in-line finishing tools: A host of quality finishing devices is available, such as the FastFit device from Tricreaser for scoring or the Multitool for either trimming, micro perforations or both applications.

- **FastFit:** A scoring device that offers a quality comparable to letter score on most common scoring applications.

- **MultiTool:** Combines trimming and/or micro perforating capabilities in one tool.

The Tricreaser FastFit virtually eliminates cracking on the spine. With this scoring technology folders perform the high-quality scoring in-line, which is usually done in an off-line process
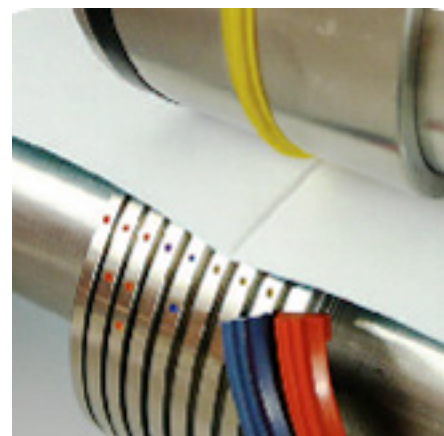
Edge and bleed trimming devices: Side and center trim kits, complete with strippers.

HEIDELBERG

Knife folding unit VFZ 52: Knife folding is a popular option to apply a final cross or parallel fold in a finished product. The unit is versatile and can be set for up quickly for up or down fold requirements. It is a flexible solution and works in-line with folders and stitchers.

36 Month Parts Warranty coverage for TH and KH Folders: Heidelberg will replace any covered defective part* for 36 months from installation.

- **Covered repair service parts*:** Cams, gears, bearings, motors, inverters, PC boards, sensors, switches, solenoids, contactors, memory modules, compressors, blowers, fans, clutches, chain guides

- **Excluded wear parts:** Belts/tapes, springs, gas shocks, suction wheels, fold rollers, brushes, knifes/cutting blocks, marbles, marble holders, paper guides

- **Excluded wear parts:** Filters, oil, lubricants, lamps, stitching wire

  * *This list is comprised of examples and should not be considered complete. Part failures due to damage, neglect, or vandalism are excluded from coverage as referenced in the Parts Warranty Terms.*

Deliveries: The right delivery is of great importance in optimizing productivity. Speed and production requirements determine the best delivery for the job at hand. Stahlfolder deliveries are designed to maximize production, maintain quality and provide operator convenience.

Deliveries	Features
SAK	Two-speed stream delivery with counting capability – **Standard delivery on TH 82**
SKP / SPH	Pressing, batching and counting stream delivery
TSH	Pressing, batching and counting vertical mark free stacker
SBP	Pressing, batching and counting horizontal stacking delivery
Speedbander	Pressing and banding delivery

HEIDELBERG

SPH pressing and batching delivery. A re-designed batching and pressing delivery offers increased flexibility and functionality. In-feed heights reach from 16" to 37", making the SPH delivery highly compatible with any station.

A set of solid pressing rollers provides quality pressing across the whole in-feed section.

Counters for two-up production are standard and reliably recognize the pre-determined count to operate the integrated batching system.

Operator convenience was the guiding principle in re-designing the operation panel, which includes starting and operating the folder. A fast-forward feature speeds up the change-over process.

Pressing deliveries provide a better product for further bindery processing, i.e. for stitching or perfect binding

The benefits of pressing are apparent in the demonstration above, showing 5 folded booklets pressed and un-pressed

TSH Vertical Stacking Delivery: The TSH delivery is based on the same modular platform as the SPH delivery and includes the pressing station as well as batching (counting) section.

The Stahlfolder TSH is the only delivery on the market which stacks products mark free; an increasingly important feature in order to process printed products economically and without delay.

An integrated eject gate speeds up the makeready process and during production delivers mis-aligned products into an eject bin.

- **SPA side delivery:** A two-level side delivery increases delivery capacity to allow for faster production and fewer intervals between loading and un-loading.

SBP horizontal stacking delivery: Like the VSA, the SBP offers the stacking benefits and can hold a much larger amount of signatures or finished folded products.

The Stahlfolder SBP is the recommended for constant high output of signatures and is designed to keep up with the long run and operation requirements to maintain high production levels.

HEIDELBERG

- **Banders:** The Speedbander is the automated banding solution in the line-up of Heidelberg deliveries and provides the speed necessary to produce small-stack bundles at high production speeds.

  Bundles as low as 3/16" can be produced to provide a finished bundle to the end user.

With a cycle speed of 600/hr., the Speedbander increases productivity at the same rate

The speed allows banding of low-stack output from folders and stitchers and the full-wide belt delivery eliminates scuffing plus creates gaps between bundles for easy removal

Specifications and Requirements

	Stahlfolder TH 82	
Sizes		
Maximum sheet size		32 ¼" x 50 3/8"
Minimum sheet size		5 ½" x 7"
Maximum fold length		24 3/8"
Minimum fold length		2 1/8"
Stations		
1st station, Parallel	4 fold plates	32" wide
2nd station, 8 page	4 fold plates	26" wide
3rd station, 16 page	4 fold plates	22" wide
4th station, 32 page	2 fold plates	22" wide
Speed		
Maximum speed		9,000 inches per minute
Electrical		
Electrical requirements		208 – 240, 3 phase, 60A
Compressed air		
Air pressure	Required for gatefold device or divert gate	6 bar
Delivery		
Maximum delivery width		37"

HEIDELBERG

Parts Warranty Terms

1. Parts Supply

(a) **Services Provided:**
Under the Parts Warranty, Heidelberg will provide repair parts determined by a Heidelberg service technician to have failed during normal operation for the first 24 months following the standard warranty of the equipment. . The repair parts may be newly manufactured parts or parts that are sufficient, in terms of quality, durability and life time, for repair purposes. Heidelberg reserves the right to troubleshoot remotely before shipping the part and the right to inspect the equipment and verify parts replaced during the entire period of the warranty. Customer agrees to provide reasonable access to the equipment for purposes of parts installation and inspection

(b) **Obligation to Return Exchanged Parts:**
To the extent that any parts being replaced in conjunction with Repair Services are covered by a Heidelberg parts exchange program, Heidelberg shall become the owner of the replaced parts. In the event that the part is replaced by the operator, the customer becomes responsible for returning the replaced part to Heidelberg.

(c) **Spare Parts Ordering and Delivery Times:**
Heidelberg's Expert Help Desk accepts and clarifies parts orders Monday through Friday from 8 a.m. to 6 p.m. EST. In addition, parts orders can be placed outside of regular service hours 24/7 throughout the year. After review of the order by a Heidelberg service technician, the parts order can be processed early in the morning of the following day. Delivery of repair parts is typically within 24 hours, if delivered through Heidelberg's American Logistics Center and 48 hours, if delivered through Heidelberg's World Logistics Center.

(d) **Exclusions from Coverage**
The following items are not covered by the Parts Warranty:

(i) Wear parts and consumables; wear parts and consumables will be always charged according to current price lists.
(ii) Software, software upgrades, software service releases and software updates.

(iii) Installation of delivered repair parts or Repair Service.
(iv) Parts needing repair or replacement due to events or circumstances outside of normal use and operation of the equipment.
 Examples include, but are not limited to: power surges, short circuits, loss of power, lightning, fire or water damage, theft, and other causes that are outside of normal use and operation of the equipment or that would normally be covered by casualty insurance on the equipment.
(v) Parts needing repair or replacement in connection with or due to improper or unprofessional operation of the equipment or use of non-approved consumables and wear parts.
(vi) Domestic accessories and non-Heidelberg accessories.

(e) **Parts Installation**
The Heidelberg Expert will also determine whether part installation should be performed by a Heidelberg service technician or whether it may be performed by the customer. If it is determined that on-site service by a Heidelberg service technician is required, standard service charges will apply. If the customer chooses not to follow the recommendation to use a Heidelberg service technician to perform installation, Heidelberg shall have the right to terminate coverage under the Parts Warranty Terms.

(f) Parts Warranty is provided in accordance with the standard and most current Heidelberg procedures, normal business hours, and terms and conditions.

HEIDELBERG

Stahlfolder TH/KH series

Developer: Heidelberg Postpress Deutschland GmbH, Ludwigsburg, Germany

(011-49) 7141-5010, www.heidelberg.com

Marketing: Heidelberg USA, Inc., Kennesaw, GA

(770) 419-6500, www.us.heidelberg.com

The modular design of the Stahlfolder series provides both an immediate startup and an expandable "future-proof" investment.

The high-performance TH/KH family of modular buckle-plate and combination folders focuses on productivity, maximum flexibility and intelligent automation to keep today's bindery output up with today's press productivity levels at a time of shrinking job sizes and reduced changeover times.

Modularity is important, say users, because the design provides for both an immediate startup and an expandable, "future-proof" investment.

Key features of the TH and KH folders include an Airstream table with patented sheet control to ensure simple, fast makeready and sheet transport without marking; a control system with user-friendly touch screen; spindle-driven motorized buckle plate adjustments' side guides with digital readouts; a servo-motor sensor that adjusts roller settings using the settings of the double sheet detector; and the choice of flat-pile, round-continuous or pallet feeder.

Optional features include a knife shaft lift for buckle plate units, which speeds job changeovers, and motor-driven folding roller adjustments.

A unique Production Data Management module provides a real-time overview of ongoing production, allowing operators to plan more reliably and managers to obtain dependable data for more precise estimating purposes.

Typical folder configuration

A typical TH Stahlfolder 82 three-station configuration might consist of a continuous feeder, a slitter shaft lift kit in the first and second station, with motorized buckle-plate settings and fold roller settings in all stations.

Stahlfolder TH technology paid off for an early adopter, Typed Letters Corporation, Wichita, KS, which bought three machines a year ago. "We can attribute some of our 30%-plus growth to the fact that we were able to get jobs out faster than ever," says VP Randal A. Johnson. "In some cases, our output has doubled and makereadies plummeted, which alone make the investment worthwhile."

He says Typed Letters is a believer in workflow integration and plans to be fully integrated soon for even greater benefits from the finishing area.

In a side-by-side comparison next to previous-generation machines at Eller + Druck, Villingen-Schwenningen, Germany, new Stahlfolder TH 82 systems achieved about 15% higher performance on two big orders, reports manager Bjorn Eller. Since the company uses several folders to produce large orders, he says, being able to easily transfer the set-up values from one system to another is wonderful since the company can cut set-up time, both for both machines and for repeat orders.

Eller adds, "Should the higher performances and reduced set-up times prove true over the next eight weeks, we will order another two folders of this type to replace our older systems.

French bookbinder adds five

Last October, SDNF, a bookbinder in Paris that is a long-time Stahl user, bought three KH folders and two TH folders. Reports president and general director R. Courbassier, "The simple set-up and fast speed allowed us to cut production time by 50%, plus change quickly from one job to another."

HEIDELBERG