WORLD'S FASTEST MOBILE SMART FOLDERS



Providing Solutions you can trust since 1985

Presenting New Finishing Solutions For Mailroom and Pressroom Applications



https://www.youtube.com/watch?v=b-kdfww8sZs&index=1&list=UU5eA2dooF-8Xe-NT412CNDQ Press Ctrl + Click on video link: NDC Mediagroep Showcase in Leeuwarden, Netherlands.

The New 2015 SMART FOLDERS

Lovaghy Enterprise Inc. manufactures a series of customized mobile folders that give you the <u>flexibility/advantage</u> to fold copies Inline in the Pressroom, Mailroom or Offline with the finishing solutions you need <u>fast.</u> Fold a wide variety of retail inserts, financial documents, direct-mail, digest copies, magazines, tabloids and newspapers at remarkable speeds. Here is a brief list of some of the <u>money making solutions</u> we provide that can be a real advantage to you in your plant.

- Run a stream of nested shingles from the delivery to separate and fold Inline producing two or three lines of products; For more info review our Separator info;
- Run A3 size products to fold along a freshly glued spine and trim three sides In-line to produce A4 size booklets;
- Bump-turn to fold products parallel with the spine of the product and trim inline to produce multiple single copies with absolutely no wrinkling guaranteed;
- Run retail inserts with wraps and place the fold where you want it inline or offline;
- Run newspapers with the header on the bottom side or top side for choice of folder;
- Produce double parallel folds to create two digest copies and more.

To learn more just visit us on the YouTube Channel at the following link. http://www.youtube.com/user/LovaghyEnterprise/featured



List of Products Available

- **Model HQF 20 Smart Folder:** Allows you to fold a wide assortment of products inline with the press, mailroom or offline.
- **Model HQF 21 Smart Folder:** Allows you to feed products with the header located on the bottom side. Can run in-line with a mailroom delivery system or offline.
- Model HQF 30 Double Parallel Smart Folder: Allows you to produce long double parallel folds.
- Separator 2 & 3: Allows you separate nested copies.
- Jog N Crush: Allows you to jog and crush products.
- Assorted Conveyors, Dump-gates, Diverters, Flow Turns, Joggers & Crushers etc...



New HQF-20 and 21 Customized Control Panel 2015 Series

The New HQF-20 & 21 CONTROL PANEL comes with state of the art easy to understand controls.

- Actuate Roller Crusher: The top left hand yellow button is used to deactivate or activate the roller crusher as needed.
- **Jog:** Looking at the control panel on the left side you have a yellow jog button which lights up when pressed. Selector switch can be used for forward or reverse movement.
- Emergency Button: Cuts all power to the PLC which controls the Altivar 312 motor drives etc...
- **On and Off Button:** Standard on and off buttons which illuminate in the center when running.
- Plus/Minus Button: Ramp up and lower speed button.
- **Manual or Automatic:** Manual and automatic selector button. Automatic mode follows a 0 to 10Volt signal from the press or mailroom delivery system to match speeds. Manual mode allows you to run at your selected speed regardless of press or mailroom delivery speed.
- Lift Button: The Lift button is used to raise all the sections in the machine when required. It illuminates and flashes when activated in the upward position.
- Smart Touch Panel: Provides a customized touch panel that displays easy to use window screens comprising of a Main Menu, Monitoring Screen, Speed Control Screen, Copy Setup Screen and System Access Screen. A user access code is given

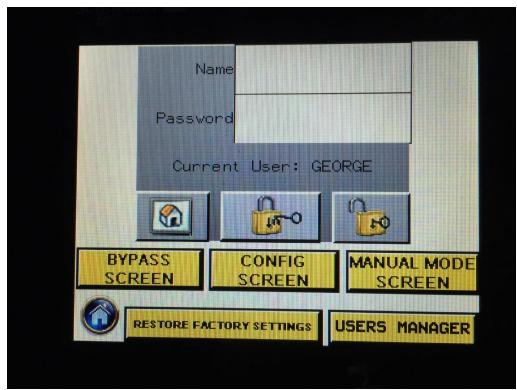
to the maintenance manager to enter the Configuration Screen, Manual Mode Screen and Sensor Bypass Screen.

• **Dump-Gate Button:** The Dump-Gate button is used to drop the dump-gate conveyor at startup to prevent scrap from entering the finishing lines.

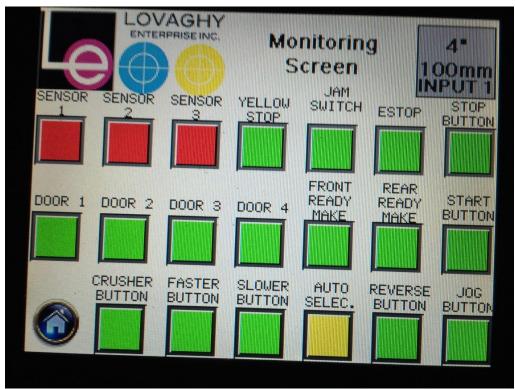




Main Menu Screen is your doorway to other windows. The Smart Folder is customized to operate in the English, French, Norweigian, Swedish & Polish language. Simply touch the country's flag and the language immediately switches over. Can be customized to operate in your language.



Window above shows the current user. A password is required to access the parameters to protect against tampering with the system. A new restore to factory settings has been included.

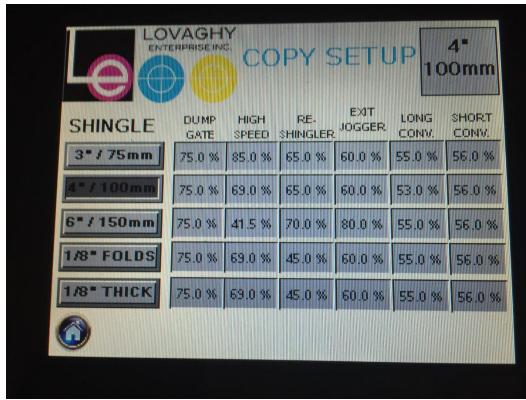


Monitoring Screen provides you with a quick view of the status of the sensors, buttons, magnetic doors and various other switches that are associated in running the machine.

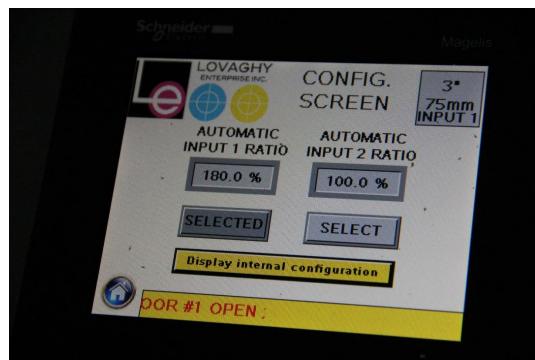
Notice the top right hand corner shows the shingle space setting as well as whether the folder is in manual or automatic tach following mode.



Smart Folder Display showing the Speed Control in Manual Mode showing (72K) mechanical speed representing 72,000 copies per hour with a 3 inch/75mm shingle spacing.



New 2015 customized Copy Setup Screen is used to select the correct shingle spacing depending on the pagination of the copies to be folded. This can be accessed by touching the top right hand corner shingle spacing number as example 3"/75mm. When the screen is locked the operators cannot change the speed ratios without a password. This is to prevent tampering with the speed ratios. Only experienced operators, technicians are given the password. The larger the pagination, the higher the shingle spacing to be used. Herea technician can change the speed ratios for each section of the machine as well as any machines which are connected to the Smart Folder such as the exit jogger, bump-turns, crusher, flow turns and other conveyors providing of course they are manufactured by Lovaghy Enterprise Inc. as the Schneider Drives are located in the Folder. This is necessary to achieve the optimum speed performance. As you can see we also now have one for a custom folder to run 1/8th Folds which can produce A5 Folds.



Configuration Screen allows you to quickly and easily enter the correct setting for tachometer following when calibrating the 0 to 10 volt signal from the printing press or mailroom delivery system. There are two inputs you can calibrate in case you have products coming from two separate deliveries. A new program allows you to use pulse signals.



Manual Mode Screen is used to set timers for the various sensors controlling

logic to the re-shingler exit conveyor and the entrance dump-gate. There is also an added conveyor timer off added when running together.



Sensor Bypass Screen used to bypass sensors used strictly by Maintenance staff.

HQF-20 Standard Features & Specifications:

- **Smart Folder Display:** The Smart Folder Display works with a programmed PLC that controls all the inputs and outputs for each electrical component and drive. By selecting & inputting the particular shingle spacing/pagination of the copy on the monitor's keypad, the Smart Folder automatically sets the optimized speed ratios for each particular drive.
- Internet Ready: With a dedicated <u>Internet connection</u> the HQF Smart Folder allows Lovaghy technicians to perform upgrades in the software and the ability to monitor the machine's performance directly from Montreal.
- **New Feature:** Four Baldor Motors: A 1/3 HP gear-motor runs the entrance dump-gate while a 5HP motor provides exceptional performance for the crusher, jogger, folder and 90 degree. A third 2HP Extreme Duty Baldor Motor handles the High Speed Section. A new gearbox with a 1HP Baldor Motor drives the exiting re-shingler conveyor.
- Four Schneider Altivar 312 Motor Drives: Independently control the speed of each separate motor which are programmed to provide you with optimum performance.
- **Tach Following:** Manual and automatic selector button allows you to choose setting. Automatic mode follows a 0 to 10Volt signal from the press or mailroom to match speeds. Can also be programmed to follow pulse signals when required.
- Voltage: 230V 50/60 Hz Operates in single or three phase power connection.
- **Approximate Dimensions:** 185.5"/471.17cm Length x 38"/0.97m Width x 69.4"/1.76m Height. 221.65"/563cm with Exit Jogger Attachment.
- Working Height: 35.5"/0.9017m
- New pneumatic lift: Secures positioning so that the folder doesn't move during production.
- Approximate Weight: 2,300 lbs./1043.3 kgs.

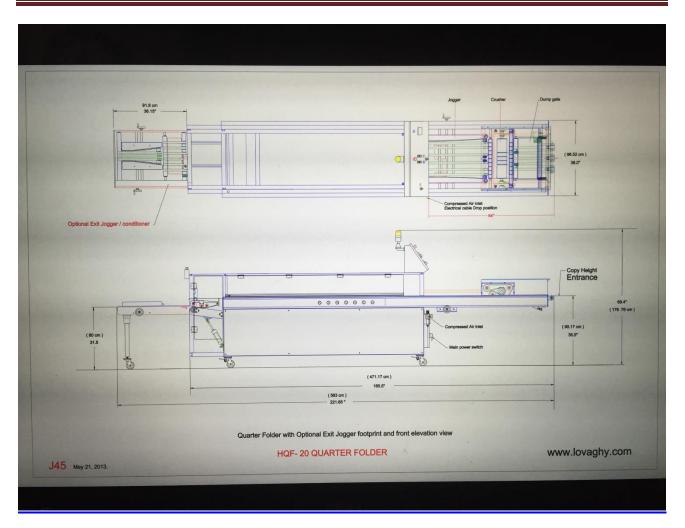
- Up to 17.5"/444mm Width: Can fold copies from 9" up to 17.5"/444mm width.
- Robust framing: Assembled with custom extruded & machined aluminum components.
- 16 Gauge stainless steel covers: Provides good protection of the machine.
- Heavy-duty swivel locking nylon castors: Provides easy mobility of the folder.
- **Top of the line PHD and Bimba pneumatics:** Control all sections of the machine with independent pressure regulators.
- Air filter, lubricator & regulator: Provides clean lubricated air to the cylinders.
- Top quality Gold Sealmaster Bearings: Assure long bearing life.
- Sprockets and timing belts: Provide positive traction & accuracy.
- Schneider Photo Electric Sensors: Provide smooth accurate performance.
- **Transparent Polycarbonate panels:** Provide very good security and maximum visibility of the product stream.
- Magnetic Security Door Locks: Provide maximum security to operators.



Above picture shows the fold quality with a finished 24 page and a 128 page final folded product.



Picture above shows A5 16 page products folded into a 32 page copy with the Smart Folder



Additional Technical Data:

- Copies per Hour: The maximum running speed for any given product is determined by inputting the <u>ideal shingle spacing</u> based on the product size, paperweight and pagination into the Smart Folder's display. As an example a 16 page 35-pound/51.8gsm, 12.5" width product with a 21.0" standard cutoff size automatically sets the maximum mechanical running speed at 50/60Hz to 300 feet/91.44 meters per minute input conveyor speed, which translates into <u>72,000 copies per hour</u> when inputting a <u>3-inch/75mm shingle</u>. With a 4"/100mm setting the maximum mechanical speed drops to 54,000 cph as there are less products within the same timeline.
- **Paginations:** The standard <u>HQF-20</u> can produce a 4 page up to a 96-Page quarter folded product with standard heat-set 35-pound/51.8gsm newsprint. For thicker page counts we recommend a <u>customized</u> folder to fold up to a 96-Page tabloid product. Large paginations require that the new spine be roller crushed after exiting the quarter folder.
- **New Product Size's:** The HQF-20 Smart Folder can be customized to fold products with a <u>new leading edge</u> as small as 4.5"/115mm x 9"/228mm <u>minimum width.</u> The maximum product size is 11"/280mm leading edge to a product width of 17.5"in/444mm. This can be further customized according to customer's needs.
- **Overlap Distance/Copy Setup:** There are now four different settings to run the folder. The overlap distance between the products in the shingle stream should be set according to the

incoming **pagination**, **weight** and type of product you want to run. A 3-inch/75mm setting is normally used for up to 24 page paginations. A 4-Inch/100mm setting is normally set for incoming copies ranging from 32 page to 48 page paginations once again depending on the grammage/weight and type of product you are folding as speed is also important to consider for optimum performance. Although the third setting of 6-inch/150mm is available in all our models, it is optimally preferable for use with the wider copies used for thicker paginations up to a 96 page tabloid product with the HQF-21 Smart Folder as the fold is superior. Each setting automatically sets all the drives to work at the preset factory setting that are determined to provide the best performance. In any case depending on the type of product you run, the high speed and exit reshingler can be easily adjusted if fine tuning is needed according to customer requirements. The new 1/8th Fold setup is used for a customized machine to produce an A5 size product.

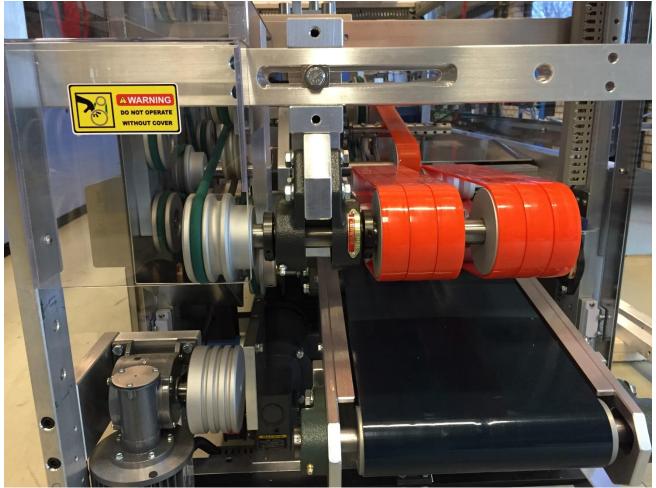
- Jogger Capability: The jogger can accurately jog any products that are less than 1"in/2.54cm out of place. The dump-gate sensors will not allow any products to enter the crusher section that are more than 1.25"/3.17cm out of place. A <u>new small micro handle</u> has been added as a new feature to fine tune the exact position you want your copies to fold.
- **Products Face Up:** Products must enter with the spine leading with the face up. **Important Note!** Please refer to the HQF-21 if the header is located on the bottom side. The HQF-21 folds the copies upwards so that the header is visible once folded.
- **Maximum Folding Displacement:** The maximum folding displacement of 2mm can be achieved with a medium width of 12.5"in/317mm providing the incoming copies are also accurately half folded. Depending on the speed you are running, a wider copy up to 17.5" inches/444mm in width will increase the displacement. The jogger can be calibrated to center the books on the run however it's also important that you deliver an accurate half folded copy meaning that the spine must also be centered. It's important to maintain the same width of products once the jogger has been set.
- **Roller Crusher:** The entrance roller crusher provides a pressure of approximately 631 pounds/286.22 kgs. at 100psi/6.8964 bar. Can be deactivated at the control panel. Must be deactivated when running a reverse shingled stream.
- Flat Bimba Cylinders: The Flat Bimba cylinders pin the machine to the floor and each provide 700 lbs./317.51 kgs at 100 psi/6.8964 bar air pressure.

How it works:

- First Station comes with a short entrance conveyor to an **air-actuated conveyor dump-gate** which runs while the <u>make ready switch</u> is either turned on or off. In the on position copies entering the machine are immediately diverted downwards under the machine, which can fall into a scrap bin or fall onto a separate conveyor that carries the product away from the machine. When the pressman is ready to fold, the **make-ready** switch is turned off and copies are immediately allowed to run through subsequent stations of the HQF-20. Copies, which are 1.25"/3.17cm or more out of position, are prevented from running through the machine. A second make-ready switch is also installed at the exit end of the machine for easy access;
- **The Second Station** comes with a roller crusher that can be pressure regulated to smooth out the stream in preparation for folding; It can also be deactivated when not required;
- The Third Station comes with a state of the art <u>high speed belt jogger</u> that accurately positions copies with widths up to 17.5 inches/444mm;
- **Fourth Station** comes with a top pinning pneumatic section that pins, forms and creases each copy with five independent wheels which creates the spine for the fold;
- Fifth Station transfers the folded copies with pneumatic pressure on one side;
- Sixth Station has a new added squeeze roller which flattens the new spine;

- Seventh Station turns the copies 90 degrees sideways so that they are laying flat for the next station; it's purpose is also to maintain and pin the exact distance between the nested shingles and high speed section;
- **The Eighth Station** is the High Speed Section which individually separates the nested stream of copies in preparation for re-shingling;
- **The Ninth Station** provides a soft landing gear driven catching system which re-shingles each copy; This section also has a dump-gate;

VIEW OF TOP NEW GEAR DRIVEN RESHINGLER



View of new 2015 top driven reshingler with bottom dump-gate.

View of Optional Jogger Attachment



View of new optional exit jogger extension.

Features:

- Easy to set-up for any copy size and position as there are handles on each side of the machine.
- Mounts directly onto any Smart Folder and is plugged in and programmed with the control panels' plc that can be synchronized to match the folder speed or set at your own custom setting.
- Individual motor is mounted inside of the Smart Folder with its own Schneider drive.

Main Proven Advantages over Conventional Quarter Folders:

• **Faster Startup:** The HQF-20 Smart Folder has proven to reduce the amount of time needed to make setups when compared with conventional quarter folders. Excellent for small runs.

- <u>Flexibility in the Pressroom</u>: Having a <u>mobile</u> folder in the pressroom gives your pressmen added flexibility. The HQF-20 can be quickly rolled in-line with any other web press or offline whenever needed.
- Fold Opposite Side: This flexibility allows you to create other products for your customer.
- Double or Triple your Production: The HQF-20 increases the efficiency of your printing system by enabling you to run with separators/deserters in-line with your high-speed web press. This allows you to double or even triple your production of folding copies. Each HQF-20 is mechanically geared to run 72,000 copies per hour at 50/60HZ with a 3-inch/75mm shingle with a 21 inch cut-off, however the operating speed for optimum production will vary with paper grammage (GSM), size of product, increased pagination, press-man-ship and consistency of the delivery of three-inch/75mm shingles. Depending on your quantity of work the increased efficiency can allow you to:
 - a. **Return your investment** within the first six months of operation with a quantity of 500,000 folds per week;
 - b. Lower your cost per folded copy;
 - c. Reduce delivery time;
 - d. Allow you to **bid** on printing jobs previously considered unprofitable;

Main Advantages of the HQF-20 Smart Folder Over Competitive Models:

1) **Run wider range of Product Size's:** The Standard HQF-20 Smart Folder can fold products with a <u>new leading edge</u> as small as 4.5"/115mm x 9"/228mm <u>minimum width.</u> The maximum product size is 11"/280mm leading edge to a product width of 17.5"in/444mm. This can be further <u>customized</u> according to customer's needs.

2) More Accurate Folds: Our proprietary V shaped polyurethane endless belt produces a better product on the inside of the fold.

3) **Run products with a standard shingled stream:** The HQF Smart Folders do not rely on guided tracks to fold the products as we have a greater margin to work within our folders. Every production has the odd copies that turn over or become skewed for one reason so it's important to be able to deal with these copies without tracks that would normally jam their machine.

4) <u>Crusher Roller:</u> A roller crusher is an added feature that helps to <u>flatten/precondition</u> the copies at the entrance so that you have a much easier time in producing the new folded spine. This becomes more <u>crucial and is apparent</u> when you want to <u>run at faster speeds</u>. It's especially more important when you want to create a <u>cleaner, V shaped, tighter fold.</u>

5) **New Proprietary Folding Wheels handles a wide variety of paginations:** The Standard HQF-20 Smart Folder can fold a 2-page up to a 64-page quarter folded product with standard heat-set 35-pound/51.8gsm newsprint. The HQF-21 Newspaper Folder can fold thicker paginations up to 96 page/45 GSM Newsprint.

6) <u>Simple and easy to Operate:</u> The new control panel is state of the art with <u>simple, easy to use</u> controls. Printers in general want to be able to use minimum experienced labor to get the job done more cost effectively. <u>Set-up time</u> is now faster and easy to do, as there are a lot less adjustments and fewer parts.

7) **Easy Maintenance:** The HQF-20 is very easy to maintain as it has a lot **fewer components** than competitive models. Polyurethane belts are really the main consumables that need to be changed from time to time.

8) <u>Handling Hiccups in the Line:</u> One of the most important features of our new HQF-20 is the simple manner it deals with hiccups in the line running a **standard shingled stream.** It handles most skewed copies easily <u>without jamming</u> the machine. An example of this is shown at our video download page.

9) **Optional Attachment to handle advertising wraps:** Picture below shows a new optional attachment that works great for folding advertising inserts with wraps which would normally fall off without this device.



NEW LOVAGHY BUMP TURN WITH INTEGRATED CRUSHER ROLLER



View above shows a Lovaghy Bump Turn with an Integrated Crusher Roller running in Italy in this particular application flattening an 80 page folded product. Speeds are set at the Smart Control Panel for easy operation. This production was filmed in Italy with products running in collect mode from a Rotogravure Printing Press.

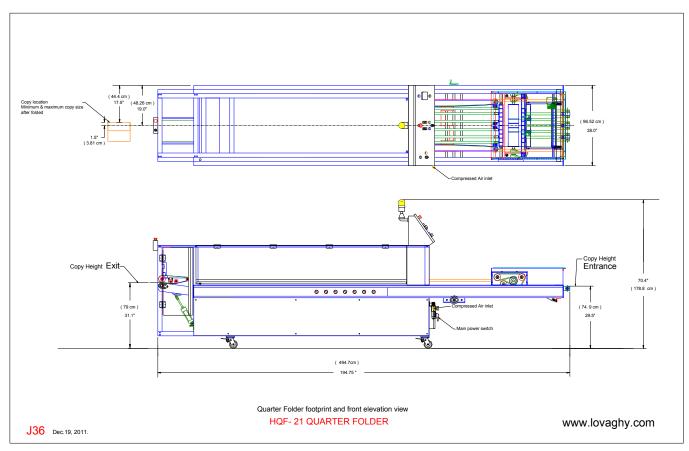
To View Press CTRL & CLICK

https://www.youtube.com/watch?v=P0x7jc3Q4ZI&index=3&list=UU5eA2dooF-8Xe-NT412CNDQ





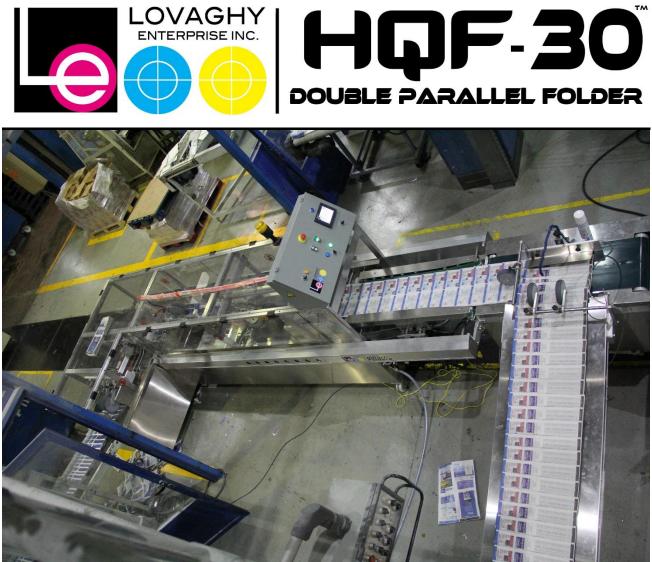
Picture above shows the HQF-21C Upward Smart Folder. Second installation in Poland running at 46K on March 2015. Press Ctrl + Click on video link: https://www.youtube.com/watch?v=qrQhQDi0Pm0&index=2&list=UU5eA 2dooF-8Xe-NT412CNDQ



First footprint of the 2012 HQF-21 Newspaper Folder

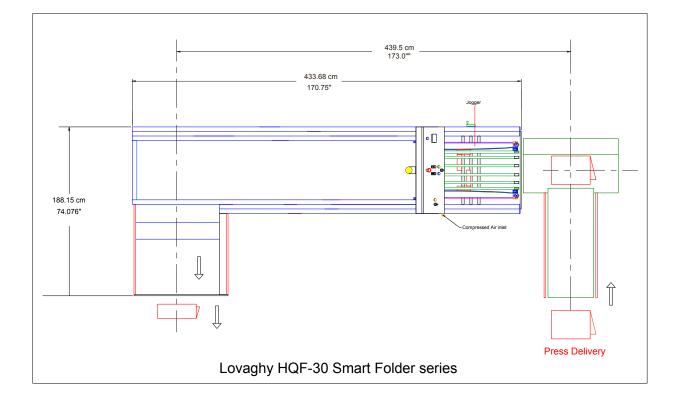
- Comes with all the same great features of the HQF-20 and more.
- The HQF-21 Smart Folder is designed to fold up to a 48-page/48gsm newspaper with delivery of products from a mailroom delivery system.
- Folds newspapers with the header of the product located on the bottom side.

Press Ctrl + Click on video link to view an offline installation: https://www.youtube.com/watch?v=0jAERRIRDMo&list=UU5eA2dooF-8Xe-NT412CNDQ



Picture above shows the HQF-30 taken in Spain running a production of 48 page double parallel folds. Press Ctrl + Click on video link: <u>https://www.youtube.com/watch?v=8r2_arvDw7Y&list=UU5eA2dooF-8Xe-</u> <u>NT412CNDQ</u>

- Folds tabloids into double parallel folds;
- Entrance conveyor and bump-turn are included as part of the machine and are controlled at the control panel;
- Folds 35,000 copies per hour in line with the press;
- Fold 24 page products into 48 pages;
- Folds copies with the spine leading out;
- Folds copies 17.5" in width;
- Provides excellent folds when products are perforated in the center.





Introducing the new Jog N' Crush stream conditioner by Lovaghy Enterprise Inc.

Features and Benefits:

- Excellent for work with Deserters, Separators and Trimmers or anywhere you need to accurately Jog N' Crush your stream of copies into place for optimum speed; Eliminates a lot of potential paper waste;
- Comes with a powerful 3HP motor and 5 to 1 ratio gearbox for continuous duty;
- Easy to read state of the art controls simplify set-up and operation;
- Can be easily set up for press following;
- Jogs and Crushes copies as wide as 18" into place;
- Can be supplied with castors for easy placement;
- Works with choice of 220VAC or 460VAC.

Separator 2



View of Separator 2 with extended conveyor. Can be viewed on European Installation video which shows the Separator in action with 4-page retail inserts. May 2009

Press Ctrl + Click on video link:

https://www.youtube.com/watch?v=TQYLa21Zo0s&list=UU5eA2dooF-8Xe-NT412CNDQ

Main Specifications:

- Two separate one HP continuous duty Baldor AC motors;
- Single phase 230VAC 50/60;
- Schneider Drives Adjustable speed control with on & off switch;
- Drive is equipped with electronic board for automatic press following;
- Two independent 5 to 1 ratio Baldor gear boxes able to run 85,000 copies per hour with two inch/5cm shingles;
- Strong steel welded painted frame;
- 16 Gauge stainless steel metal side panels and top covers;
- Customized to required height;
- Machine is mobile with swivel heavy duty locking castors;
- Top of the line PHD slides with pneumatic controls to lift top pinning sections;
- Built-in outgoing conveyor for smooth copy transfer to stackers.
- Approximate weight: 800 lbs./363 kgs.
- Size: 68"/1.73m in width x 56"/1.42m in length and 108"/2.74m with additional extended long conveyor.

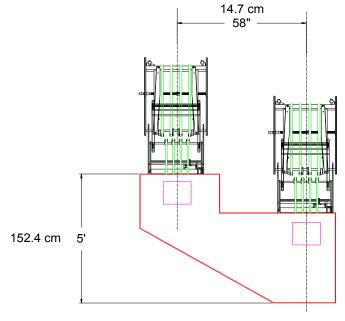
Optional Features: Extended conveyor when interlocking with quarter folders and bump-turns; Dump-gates situated at entrance or exit of machine.



View of new control panel for Separator 2 2013 series in the UK. System comes with easy to understand controls. Emergency Stop, ramp up or down switch, on and off switch and a selector button for manual or automatic tach following. Main power box located on bottom right hand side. Immediately on top you find the camozzi valves that lift section A (90 degree conveyor) and section B (30 degree conveyor). Air inlet is located at the top mid section with a regulator and an automatic bleeder valve that empties itself when full of fluid.

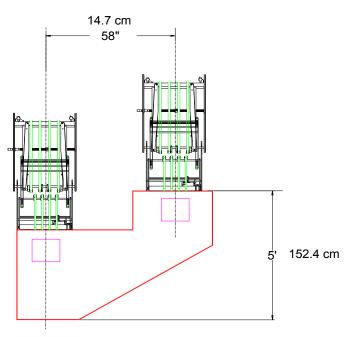


Back side view of new Separator 2 being set up for production.



Entry from press

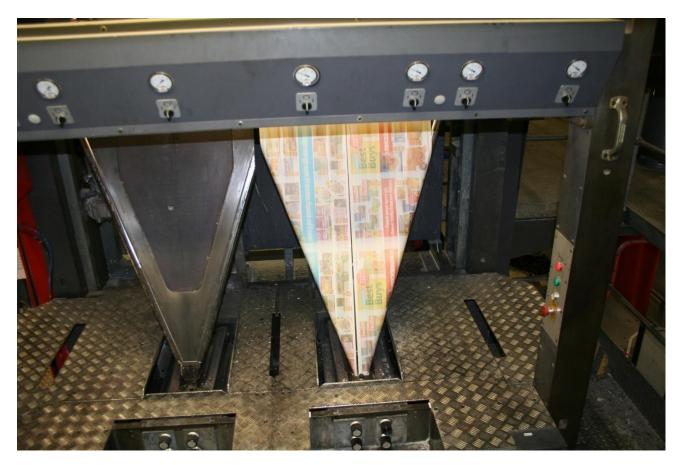
Left sided Separator



Entry from press

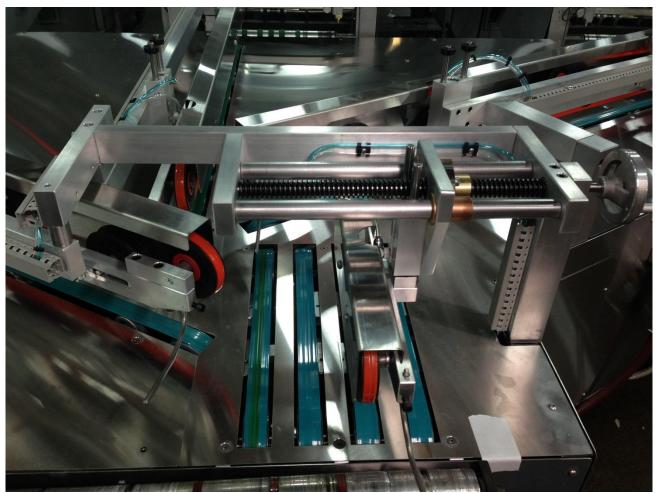
Right sided Separator

Former Board on Goss Press



View of Former Board on the Goss press shows that <u>copies are offset by 30mm</u> in order to create and overlap with the first copy over the next one. This solution is done without the use of additional ribbon aligners and angle bars. This allows you to run nested copies for separation. This breakthrough allows Goss Colorliner 70 and other coldest presses to run two four-page tabs nested together to produce 4-page products which otherwise could not be done on the press. The minimum the cold set press can produce is 8 pages. Can be viewed on European Installation video. <u>https://www.youtube.com/watch?v=TQYLa21Zo0s&list=UU5eA2dooF-8Xe-NT412CNDQ</u>





050 Lovaghy Separator 3 – July 2013. Press Ctrl + Click on video link: <u>https://www.youtube.com/watch?v=NEQ4W1GImmY&list=UU5eA2dooF-</u> 8Xe-NT412CNDQ





Triple your production of Commercial, Advertising Inserts and Direct Mail

Designed to work with the HQF Quarter Folders

Separator 3

The Separator 3 can optimize your printing system by tripling your production of <u>commercial</u>, <u>advertising inserts and direct mail</u> while using *one press folder*.

In today's ever increasing competitive market the demand to print more **efficiently** has become a crucial factor to the future viability of any printing company. With a Separator you can now **significantly lower your cost per copy** by enabling you to using the full capacity of your web press when running multiple jobs that have lower pagination. This allows you to bid on large volume jobs that offered little time availability to print. It also allows you to take on jobs that were previously considered unprofitable.

Here's how it works:

Instead of running half-webs, the printer can now run more efficiently by using a greater web capacity of his printing press to print three copies out. As the web exits the printing rollers & dryer, it is slit into a number of ribbons depending on the jobs your running. These ribbons are then passed through a <u>re-aligner</u> so that the edge of each particular job is offset by about two inches/50mm from each other. This is done so that when it enters the Separator, it has some area to gently pin the edges as they are transported from one conveyor assembly to another. Now that they are overlapping each other, they are sent to a typical single folder which folds and nests three copies into one shingle. The process is continually repeated creating a stream of these nested shingles. This stream of shingles exits the folder and is immediately fed into the Separator where it is separated into three separate streams of shingles. The streams of shingles exits the Separator and then enters into separate stackers or if required they can be sent along the conveyors for other subsequent inline finishing equipment such as trimmers, or our High Speed Inline Mobile Folders HQF-20. The end result is having dramatically reduced your production time. With the Separator 3 you can print three jobs simultaneously and earn an additional conservative gross profit of at least \$ 800.00 USD per hour. This substantially lowers your cost per copy. With this level of profit the Separator 3 can pay for itself within the first 70 hours of operation. From there on in the printer generates new profits, which makes the Separator a truly attractive & intelligent investment. Adding a Separator is like adding an additional press line at a fraction of the cost.

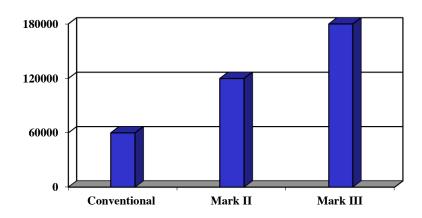
The Separator can easily be rolled in & out of place within minutes. Herein below is a chart showing the number of impressions printed in an hour with a conventional printing system equipped with a single folder and the number that can be separated with the addition of various models of our Separator Line. Please note these figures are maximum numbers used to demonstrate the doubling and tripling of production. If your press and folder can only deliver 35,000 quality printed shingles, then realistically at best you can only expect to triple this figure to 105,000 copies out with a Separator Mark 3. For more information please speak to a technical sales representative.

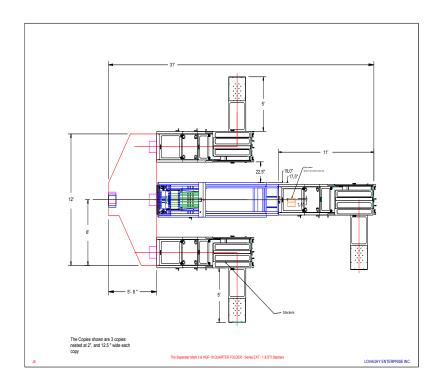
Main Specifications:

- Three separate continuous duty AC motors;
- Single or triple phase 208 to 230VAC 50/60Hz;
- Three Separate Schneider Drives Adjustable speed control with on & off switch;
- Drive is equipped with electronic board for automatic press following;
- 5 to 1 ratio gear box able to run 85,000 copies per hour at 50/60Hz with two inch/50mm shingle;
- Strong steel welded painted frame;
- 16 Gauge stainless steel metal side panels and top covers;
- Customized to height of folder delivery from 26"/0.66m to 40"/1.02m standard;
- Machine can be built to be mobile with swivel heavy duty locking castors;
- Top of the line PHD slides with pneumatic controls to lift top pinning sections;
- Built-in outgoing conveyor for smooth copy transfer to stackers.
- Approximate weight: 1,500 pounds.
- Size: 68" inches/1.73 meters in length x 144" inches/3.66 meters in width.

Chart below shows an example of the number of impressions that can be separated per hour with the help of various models of the Separator Line.







Separator 3 with one HQF-20 & Three Stackers

Main Features, Benefits and Advantages of the Separator 3:

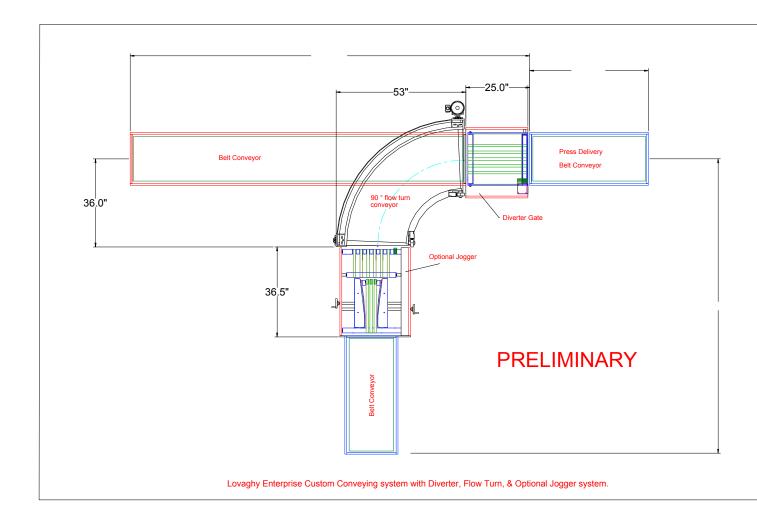
- <u>Triple your Production</u>: Depending on your total press capacity, you may be able to increase the efficiency of your printing system by enabling you to triple your regular production output for example from 60,000 IPH to 180,000 IPH by utilizing the full width of your web press thereby increasing profits. The increased efficiency allows you to:
 - e. Return your investment within the first 70 hours of operation;
 - f. **Lower** your cost per copy printed;
 - g. Reduce delivery time;
 - h. Bid on printing jobs previously considered unprofitable;
 - i. Run different jobs simultaneously to separate stackers;
- <u>Runs on both Cold-Set & Heat-Set Printing</u>: Unlike competitive models, ours can also separate cold set printing, which is something **new** to the industry. Machine is equipped with soft nipping spring-loaded wheels and a special belt that minimizes moist ink from being soaked up onto the belting that could cause unwanted markings.
- 3. <u>High Quality Construction & Custom Design</u>: We manufacture custom designed separators that meet your requirements using top quality internationally known components to ensure high quality performance & long service life.
- 4. <u>Adjustable Conveyor accommodates a wider assortment of copies</u>: The Separator 3 allows you to run copy sizes from 10.0"/254mm up to a 17.5"/444mm copy <u>without</u> having to change any belts. Its new design allows you to quickly slide over to the correct pinning section and maintain adequate tensioning on the belts at all times.
- 5. <u>Advancing Transfer Conveyors:</u> Built in transfer conveyors provide a much smoother copy transfer from the separator to the stackers.
- 6. Simple Setup Procedure: Allows for fast startup and easy operation.
- 7. <u>**Guaranteed Performance:**</u> The Separator 3 is guaranteed to separate the product that it's intended for with a money back guarantee.
- Less Floor Space Needed: The Separator 3 has two streams of copies going out at a 30degree angle which substantially takes up less floor space; The machine is <u>68 inches/1.73m</u> in length x 144"/3.66m in width.
- 9. <u>Flexibility</u> in choice of left or right hand operation for two-out production: The Separator 3's geometry is perfectly centered which means the nested copies enters directly at the center of the separator. The middle copy goes straight out at 90 degrees while the left hand nested copies flow 30 degrees to the left and right hand copy flows 30 degrees to the right.
- **10.** <u>Adjustable Working Height:</u> Separator 3 can be customized to work with various heights from 26"/0.66m without the wheels to whatever height you may require.
- 11. Stainless Steel Covers: Stainless steel covers everywhere for extended life;
- 12. <u>Voltage:</u> The separator is manufactured to run with single or triple phase 208 to 230 VAC 50/60Hz.;
- 13. <u>Pneumatic controls:</u> To lift top pinning sections for easy control.
- 14. <u>Tach Following:</u> All Our drives come with an isolated board to be able to run in tach mode.

It comes with an additional switch which you can flick from auto to manual mode. The advantage is you can automatically slow down or speed up the machine by following a signal from the press.

15. **Reinforced Twin-A Belting:** Lovaghy Separators use the much more expensive reinforced Twin-A belting because it's performance is just that much better. When non-reinforced belting is used on the bottom section of the machine it is stretched and after a production it loses its elasticity. This elasticity loss is commonly referred to as tension decay. The advantage with a Lovaghy Separator is that we use Rosta tensioners which keep our standard reinforced bottom belting properly tensioned that never needs to be cut and re-welded. We guarantee that your Separator will always maintain the right tension even when the ambient temperatures increase and duration of the run is increased.

<u>New Conveyors, flow turns, diverters, dump-gates, joggers:</u>

Lovaghy Enterprise Inc. now manufactures an assortment of high quality, conveyors of all lengths, flow turns, diverters, dump-gates & joggers that can all be automated to your required specifications with our state of the art electronic components.



Manufactured By: Lovaghy Enterprise Inc., 3130 Boulevard des Entreprises, Suite 102, Terrebonne, Quebec, Canada J6X 4J8 Tel: (450) 474-4590 or Sales Office E-mail: info@lovaghy.com Website: www.lovaghy.com or www.quarterfolder.com

Find us You The http://www.youtube.com/user/LovaghyEnterprise/featured Updated May 5, 2015.

Sales Agent: