



CUSTOMIZED PRODUCTIVITY

Marrying High Speed Finishing Equipment
with White Paper Digital Workflow

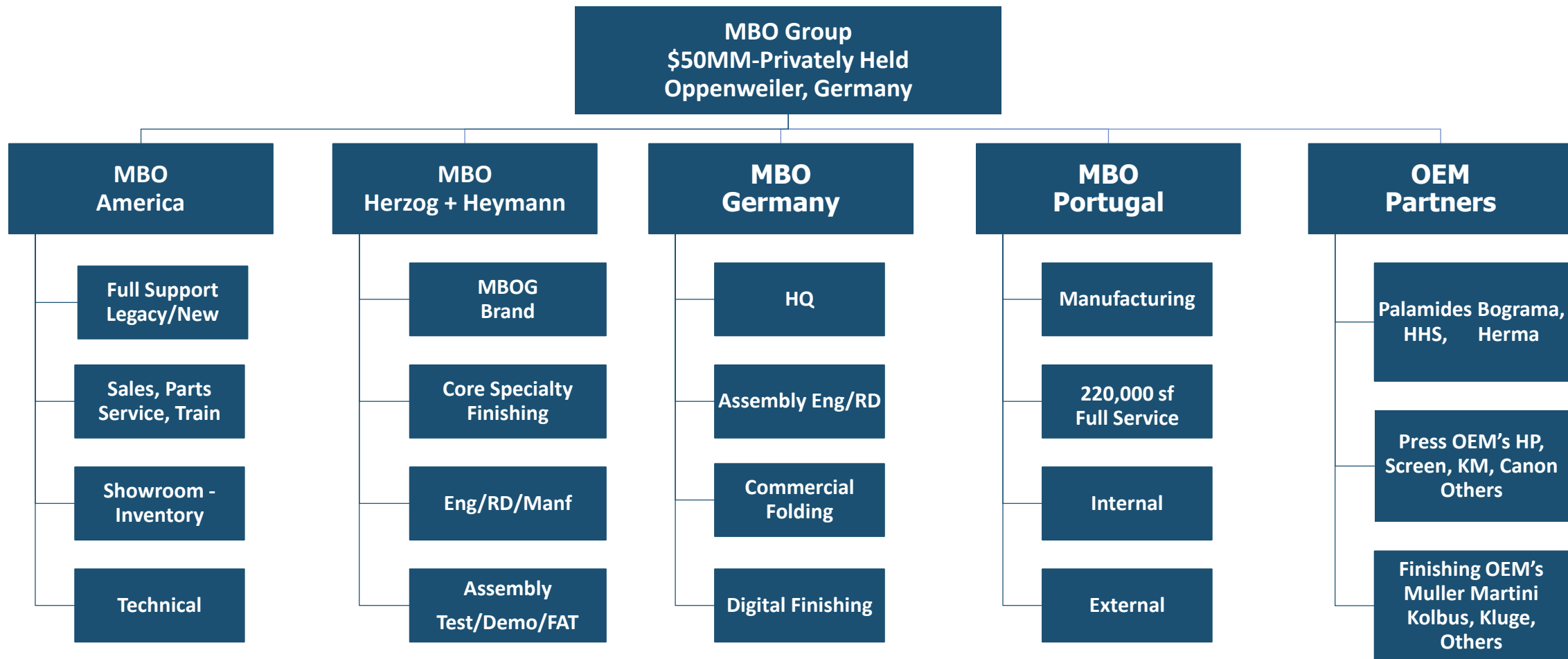
MBOAMERICA.COM

1-609-267-2900



CUSTOMIZED PRODUCTIVITY

WHO IS THE MBO GROUP?



1965

MBO is founded by Heinz Binder in Oppenweiler, Germany



1993

Fueled by increasing demand, *MBO Portugal* manufacturing moves to a 210,000 sft super size production facility



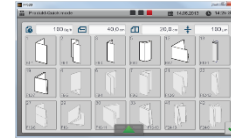
2007

MBOA strengthens its line-up by adding diecutting to the portfolio



2013

MBO launches new finishing controls platform, new folders, new modules



2016

MBO invests further into integrated solutions and partnerships



1985

MBO expands overseas with the establishment of *MBO America* on the East Coast of the USA.



2000

Specialty folding experts, Herzog+Heymann, join the MBO group



2008

With demand for digital printing solutions on the rise, MBO establishes MBO Digital



2015

Digital Finishing Solutions grow to 50% of the business in USA



2018

And the success continues



Why?

Finishing Is Where It Begins

- It's hard to sell a full flat sheet
- It's hard to sell a 50" dia. Roll
- Finished products grab the customer's attention

We Believe Print Is

- Enduring
- Creative
- The great communicator
- Is sustainable
- Is ever-changing

How?

- **Modularity**
- **Flexibility**
- **Durability**
- **Performance**
- **Partnerships**

What?

Modules



MERGING

Digital Finishing



- Direct Mail
- Brochures
- Signatures
- Post Cards

- Books
- Booklets
- Mag/CAT
- Gen. Commercial



Commercial

MARKETS



Diecutting

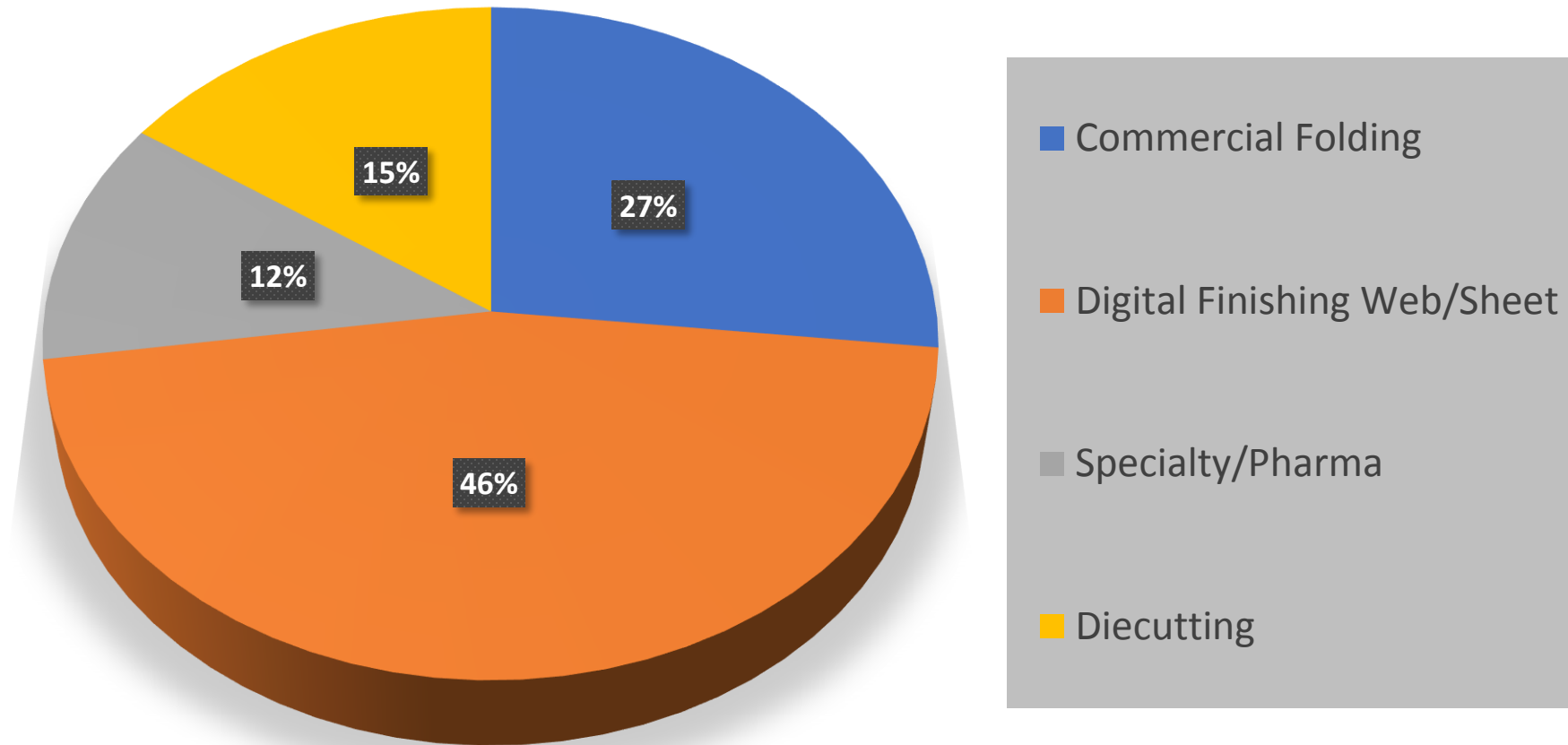
- Tag & Label
- Folding Carton
- Package Inserts
- Cards
- Pocket Folders

- Inserts / Outserts / PI
- Miniature Booklets
- Miniature Folding
- Cosmetics
- Expanded Content Labels

Pharma/ Specialty



2018 Results





CUSTOMIZED PRODUCTIVITY

DESIGN DISTRIBUTORS INC. CASE-STUDY

MARRYING HIGH SPEED FINISHING
EQUIPMENT WITH WHITE PAPER
DIGITAL WORKFLOW



DESIGNDISTRIBUTORS^{INC.}

YOUR COMPLETE DIRECT MARKETING SOLUTIONS COMPANY



- Full-service direct marketing company
- Located on Long Island, New York
- Direct marketing and mailing specialists
- State-of-the-art facility
- Most diverse printing and mailing operation in the northeast



About Us

- Design Distributors was founded in 1966 in Deer Park, N.Y. as an envelope printing company by two brothers, David and Stuart Avrck. In the 52 years since, Design Distributors has grown into the premier, one-stop print service in the Northeast.
- Led by company president, Adam Avrck, we specialize in assisting our customers as they navigate development and execution of each campaign, providing support and education—from artwork to delivery—no matter where they may be in the process.
- Our constant commitment to innovation and investment in new technologies has put us on the cutting edge of printing capabilities—pushing the envelope of what’s possible.
- We pride ourselves on our ability to execute on almost any mail piece idea imaginable, all while offering unique specialty services, such as variable imaging, packaging, and scented ink for your mail pieces, alongside a full suite of traditional services.
- Today, our offerings include: ***Printing, Database Management, Data Processing, Personalization, Mailing, Fulfillment, Tracking, and Reporting.***



Adam Avrnick

President

Graduate Rochester Institute of Technology

USPS PCC Industry Member of Year 2013 – Gold

Board Member APC-NYC

Printing Industries Alliance – Officer

Long Island PCC Industry Co-Chair

Board Member Printing Industries of America

“If you aren’t at the table, you’re on the menu.”



Your Full Service Direct Mail Partner

Services:

Printing: Web Offset, Sheet Fed & Digital
Personalization
Database Management/Data Processing
Mailing & Fulfillment
Logistics

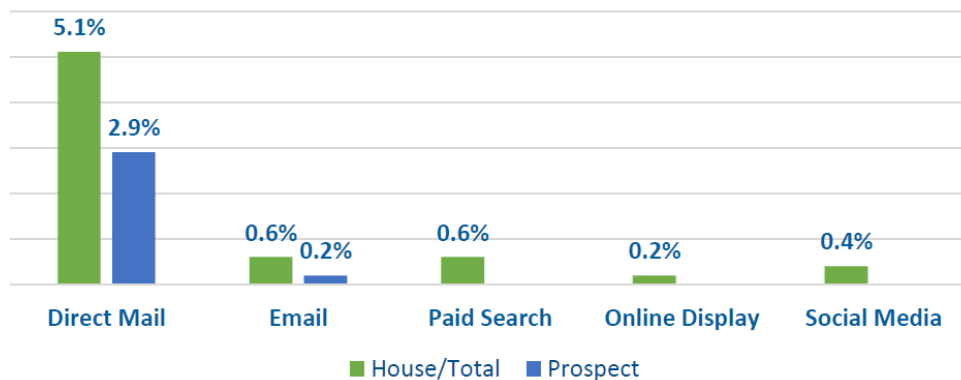
Certifications

- SOC II, Type II with Hi-trust mapping
- HIPPA Compliant
- FSC certified

Why the shift to Digital?

- Direct Mail is still thriving, in fact it is a strong performer when compared with other channels.
- The combination of Direct Mail & Digital increases ROI significantly
- The availability of information and the speed of getting that info to the right person at the right time is driving success.

Response By Selected Media



Source: 2017 DMA Response Rate Report

Direct Mail + Digital = More ROI

More attention



Combining direct mail with digital attracts 39% more attention than a single medium alone

Source:CanadaPost.com

More spending



Customers spend 25% more when companies use a combination of digital and direct mail

Source:postalytics.com

Higher conversions



Direct mail with digital ads yields 28% higher conversion rate

Source:Compu-mail.com

Our Investment in Digital Technology

- After extensive research into Continuous Digital Color Presses, DDI installed the **HP T240HD PageWide Press** in July of 2018.
- Later that year, DDI also invested in **Ricoh's 9100** and **9200**.

The addition of these digital color printers allowed:

- Decreased start-up time
- Increased quality levels
- Increased personalization
- Faster turnover

Clients have embraced the new gamut of digital information available to improve their ROI and quicken response rates.



Why MBO?

SPEED

With the increased production from the T240-HD, we needed a sheeter/folder unit that could keep up. The 500 FPS available on the MBO was a perfect match.

EASE OF USE

The MBO requires less manpower to operate, and the output speed is finishing projects with reduced need for overtime by the staff. With minimum wages building, this helps our bottom line.

LESS DOWNTIME

The MBO is a juggernaut of efficiency. It's ease of use and maintenance makes it integral to our production requirements.



Why MBO?

SPACE REQUIREMENTS

The MBO Sheeter/Feeder's size was also a critical deciding factor. With the amount of equipment already in the production warehouse, we needed a unit that would fit in tight confines with less required remodeling necessary for operation.

Utilizing existing power and HVAC access, the MBO was installed and running quickly with either the single or double folding units in what was a less used machine waiting area.



Why MBO?

INCREASED FLEXIBILITY

In the previous workflow, the finishing line could handle sizes no larger than 18" wide. The new line can handle up to 30". In the old workflow, for every 11" inches, we could cut and fold two forms across. Now, we can do three across. That's a 50% increase in throughput.

OLD FINISHING SET-UP VS. MBO SET-UP

- 100 FPM to 400-500 FPM
- 3:1 Equipment Replacement
- 3:2 Finishing Operator Replacement
- 50% Increase in Binding Throughput



Path of Continual Improvement



- High-speed monochrome presses
- Sheetfed and continuous form laser printers
- Following technology trends closely
- Not investing too early

Original Workflow

Shell Production Model

- 3-step process
 1. Print base web on offset
 2. Print data using toner/laser
 3. Finish using pin-fed/pin-less chop, cut, and fold
- Lengthy turn around time
- Labor/equipment
- Limited cutoff sizes (repeats)
 - 22, 28, 34



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Mobile ← → Fixed

Letterfolds 2-UP



Slit



Letterfold



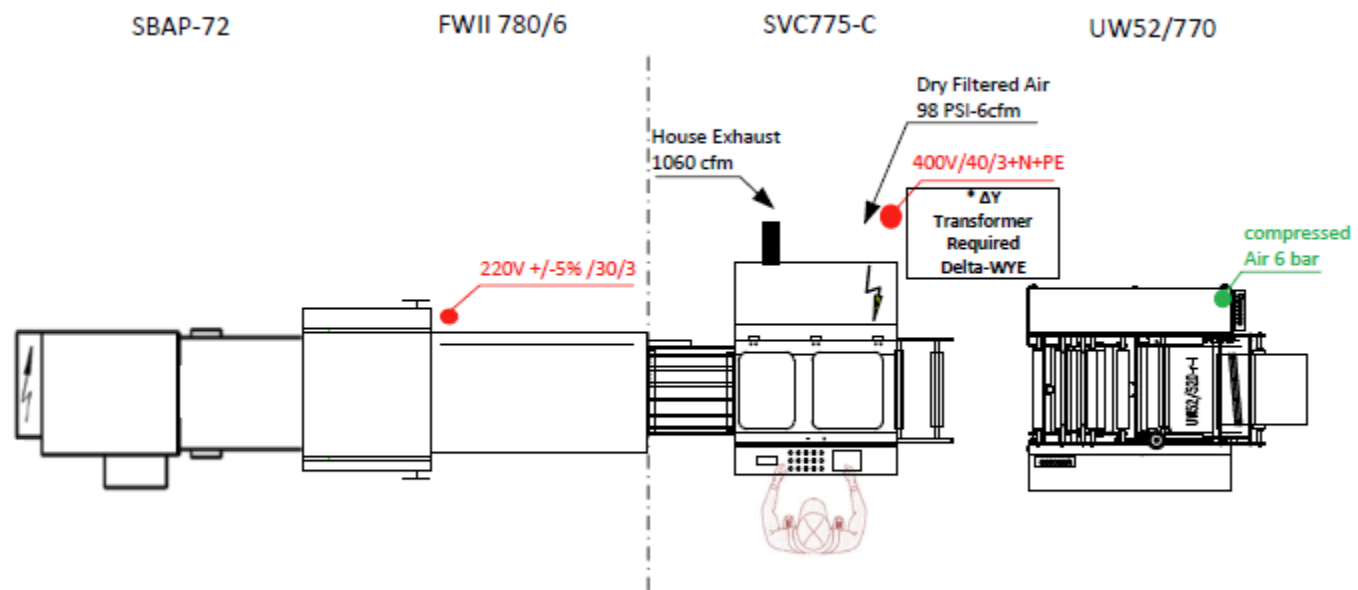
8 Page or Newsletter

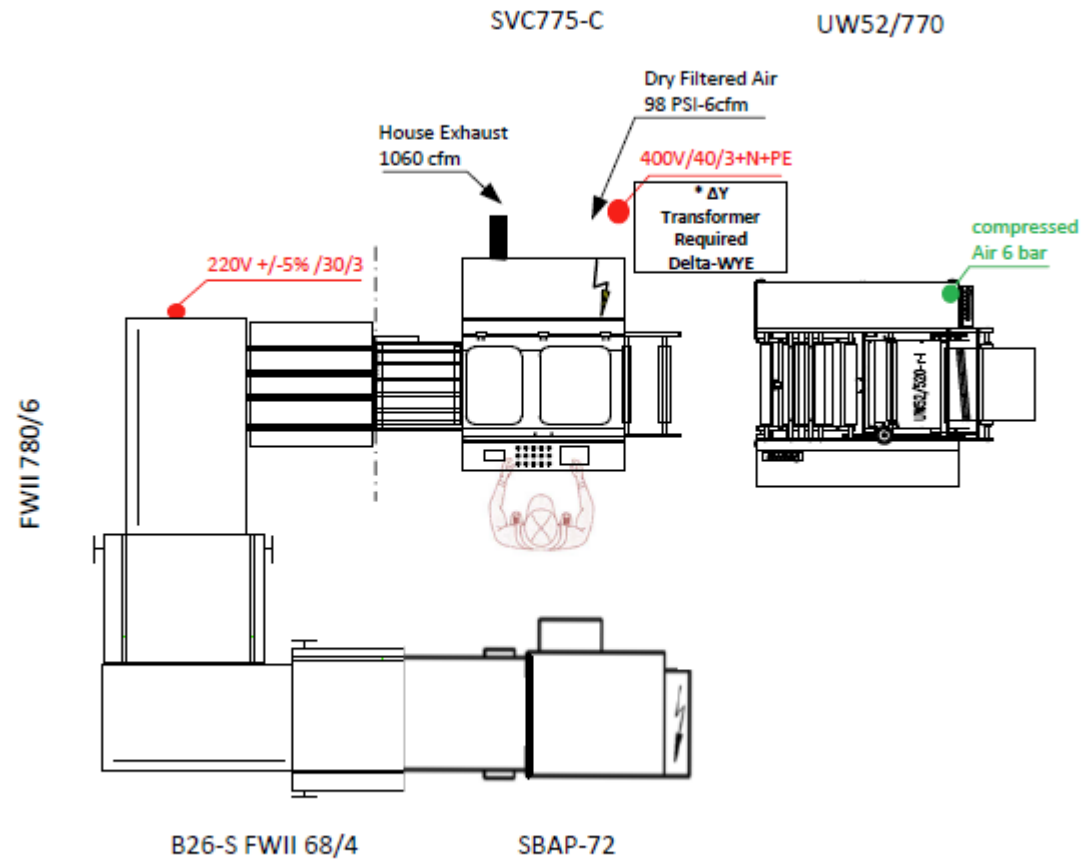


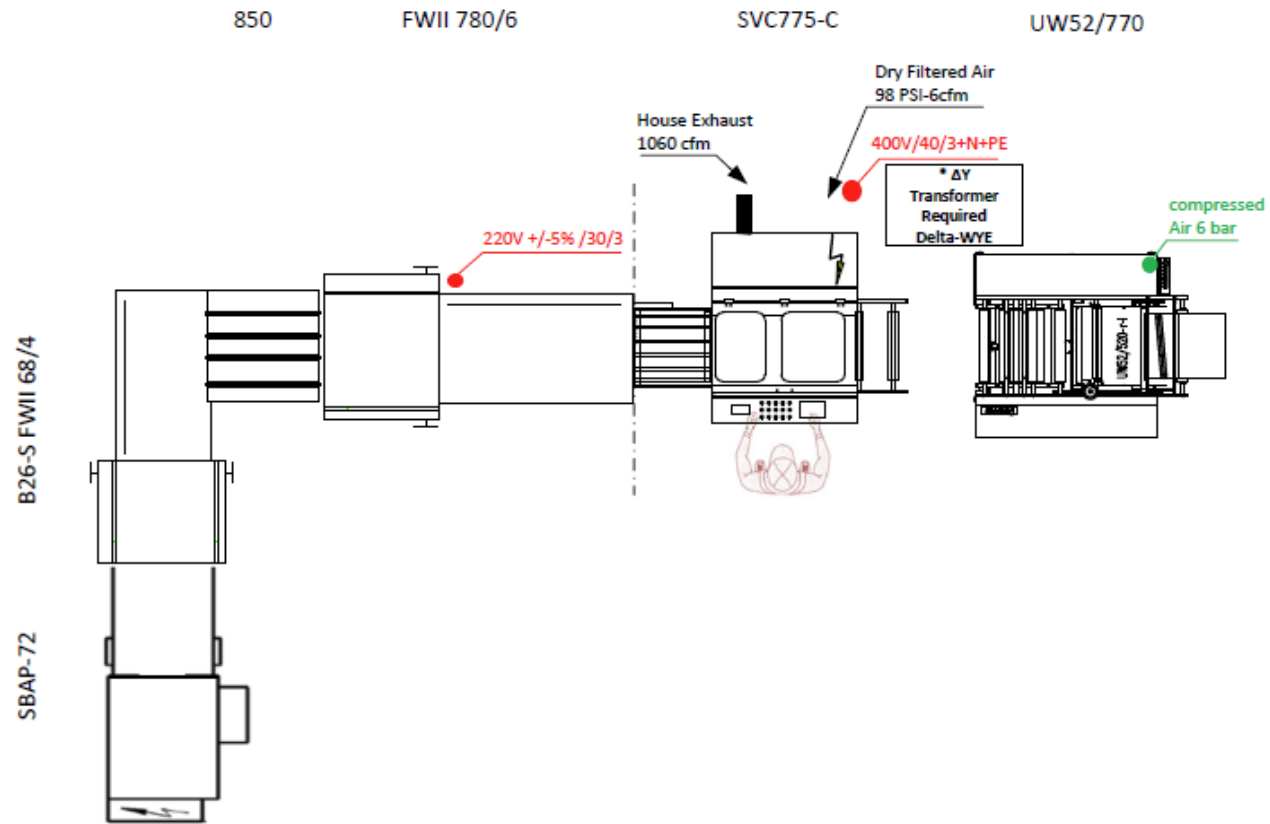
1 Fold



Half Fold
or
Letterfold







Big Items

- Folding change: 140 FPM per line to 400-700 FPM per line
- 3:1 Folding Equipment Replacement on Average
- 3:2 Finishing Operator Replacement when comparing budget production rates
- 50% Increase in Binding Throughput Overall

Process comparison for 100000 feet of paper using averages				
Original Process	Avg. Speed	Minutes	Labor	Comment
Roll to Roll Offset	avg. 500fpm	200	2	High Cost
Makeready Offset	avg. 180 min.	180	0	U/Cas/Roll
Roll to Roll Print Toner	avg. 125 fpm	800	1	x1
Makeready Toner	avg. 10 min.	10	0	x1
Roll to Fold Production	avg. 140fpm	714	1	x1
Roll to Fold MR	20 min	20	0	x1
Offset Spoilage**	x	x	x	10% paper
TOTAL		1924	4	
New Process	Avg. Speed	Minutes	Labor	Comment
Roll to Roll Digital	avg. 250-500fpm	286	1	single press
Print Makeready	avg. 10 min.	10	0	Rolls
Roll to Fold	avg. 400fpm	250	2	x1
Roll to Fold MR	20 min	20	0	x1
TOTAL		566	3	0

Adjusted Analysis

- Run multiple lines of toner press
- Run multiple lines of folding

Process comparison for 100000 feet of paper using averages				
Original Process	Avg. Speed	Minutes	Labor**	Comment
Roll to Roll Offset	avg. 500fpm	200	2	High Cost
Makeready Offset	avg. 180 min.	180	0	U/Cas/Roll
Roll to Roll Print Toner	avg. 125 fpm x 3	267	3	x3
Makeready Toner	avg. 10 min. x 3	30	0	x3
Roll to Fold Production	avg. 140fpm x3	238	3	x3
Roll to Fold MR	20 min x 3	60	0	x3
Offset Spoilage**	x	x	x	10% paper
TOTAL		975	8	
New Process	Avg. Speed	Minutes	Labor	Comment
Roll to Roll Digital	avg. 250-500fpm	286	1	1
Print Makeready	avg. 10 min.	10	0	Rolls
Roll to Fold	avg. 400fpm	250	2	x1
Roll to Fold MR	20 min	20	0	x1
TOTAL		566	3	1



MEETING (NOT SO) MODEST GOALS

Thank You
for you joining us.