ING 2015

Business model for an ink jet press

TKS
SINCE 1874

Why purchase an Ink Jet Press?

More profit on existing jobs

- Print existing products (sweet spot) more efficiently on the ink jet press.

More revenue

- Better able to compete with other offset printers for “sweet spot” runs.
  - If your bid is at offset competitors price level you will have a much higher profit margin.
  - You will have more latitude to get the job by being more price competitive

More revenue

- Open up printing time on existing offset press for larger runs.

More revenue

- Bring in new work and new products. Leverage existing marketing and data base knowledge with targeted print vehicles. **Requires sales effort**.

New markets and or products

- Personalization of products. Does not have to be newspapers.

TKS
SINCE 1874

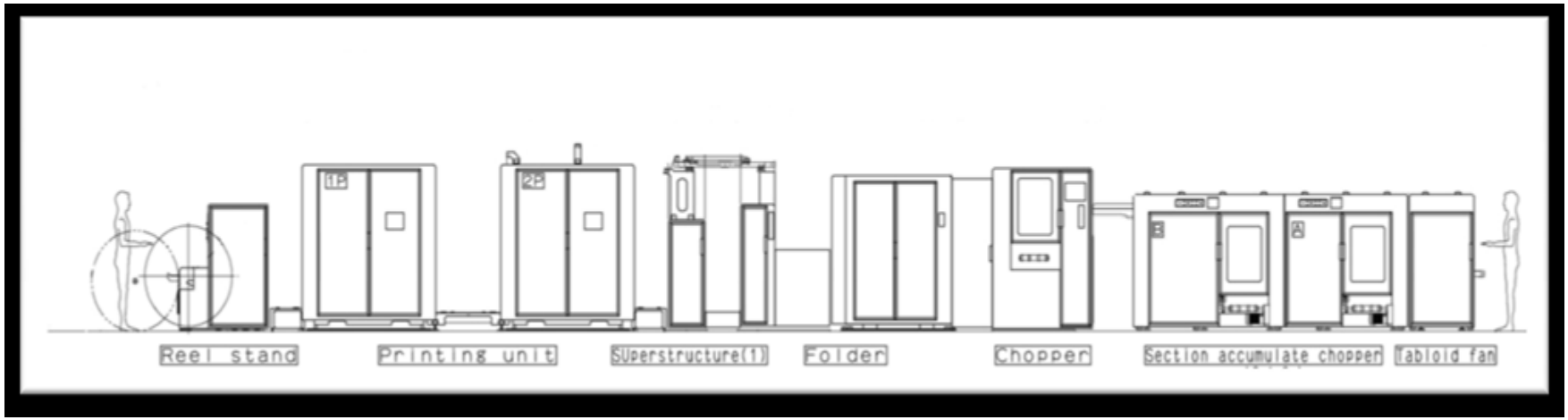
Products produced

JETLEADER

- Broadsheet (standard)
  - From (1) to (5) sections in-line
  - 72 pages maximum product size.
- Tabloid (standard)
  - Can quarter fold for mailing in-line one or two sections
  - Up to 48 page section
  - Multiple sections

- Books (optional finishing)
- Direct Mail (optional finishing)
- Magazine (Optional finishing)
- Single sheet (optional sheeter)
- Roll to roll (optional rewinder)

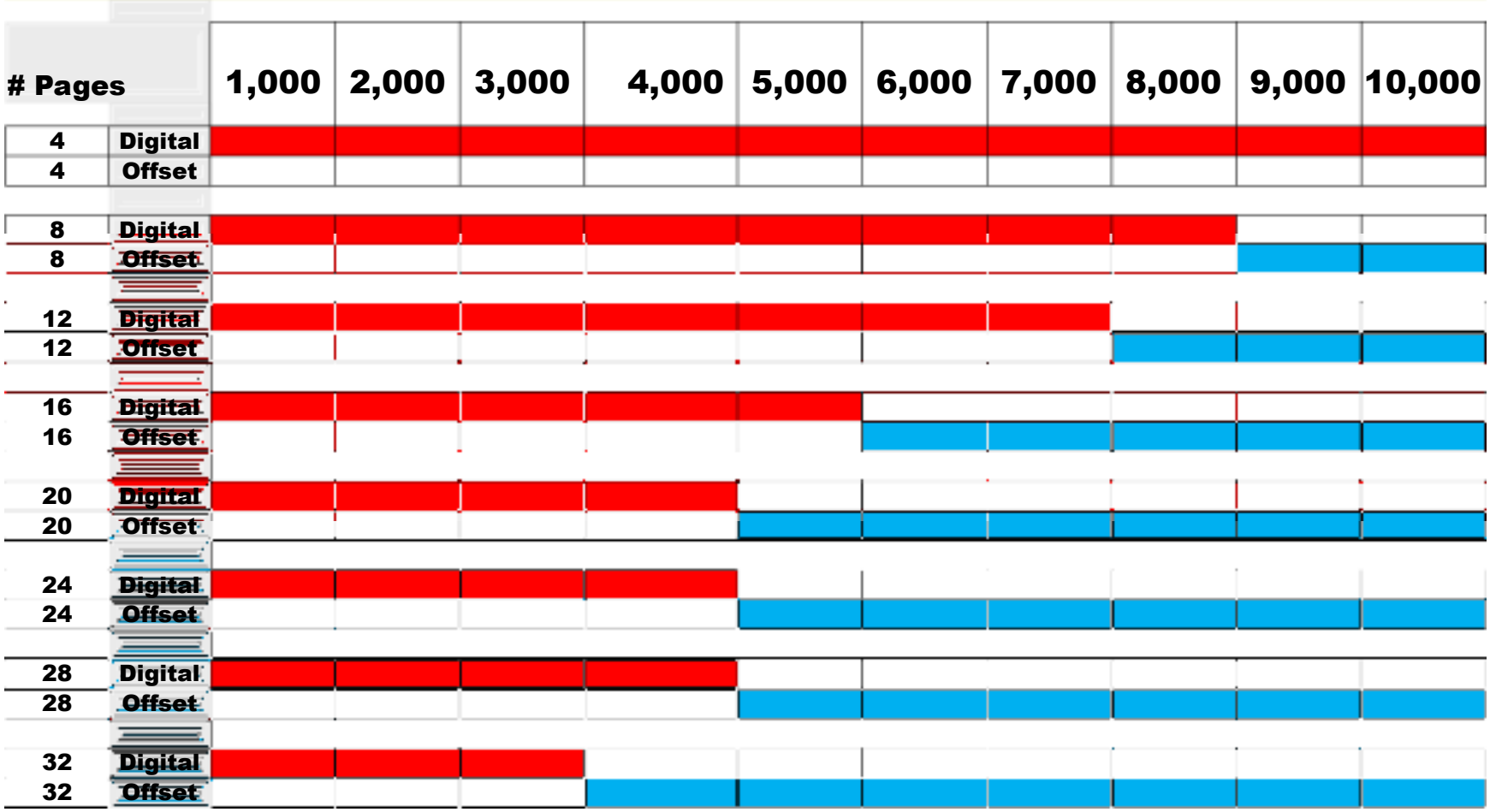
Newspaper configuration



TKS
SINCE 1874

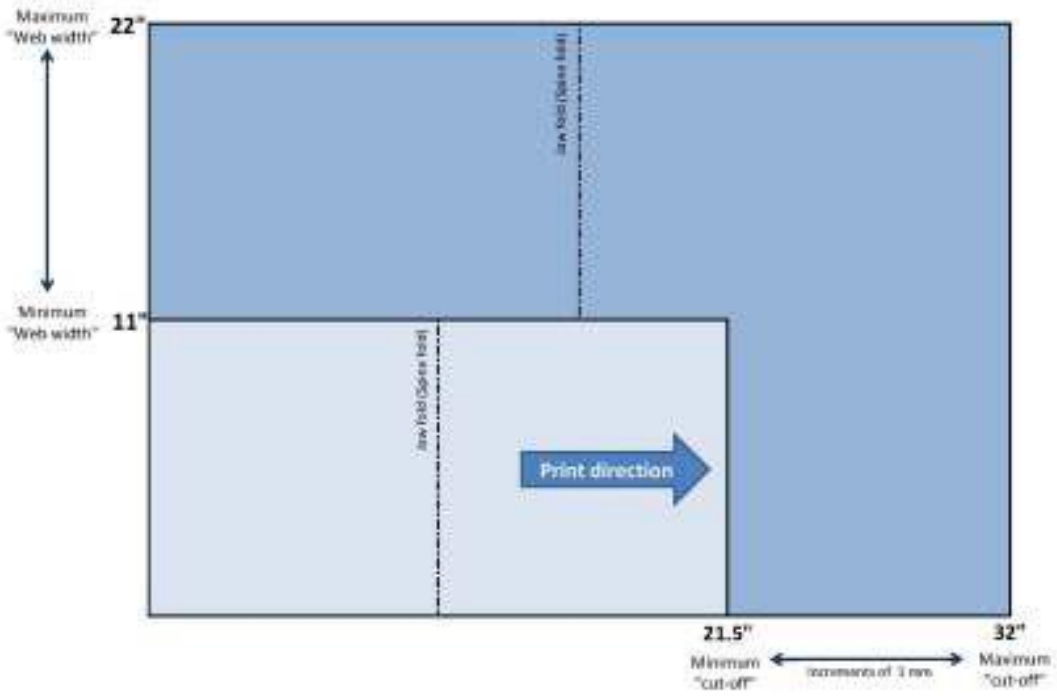
Sweet Spot (example)

24" broadsheet size with 4 color on all pages, 30# news



TKS
SINCE 1874

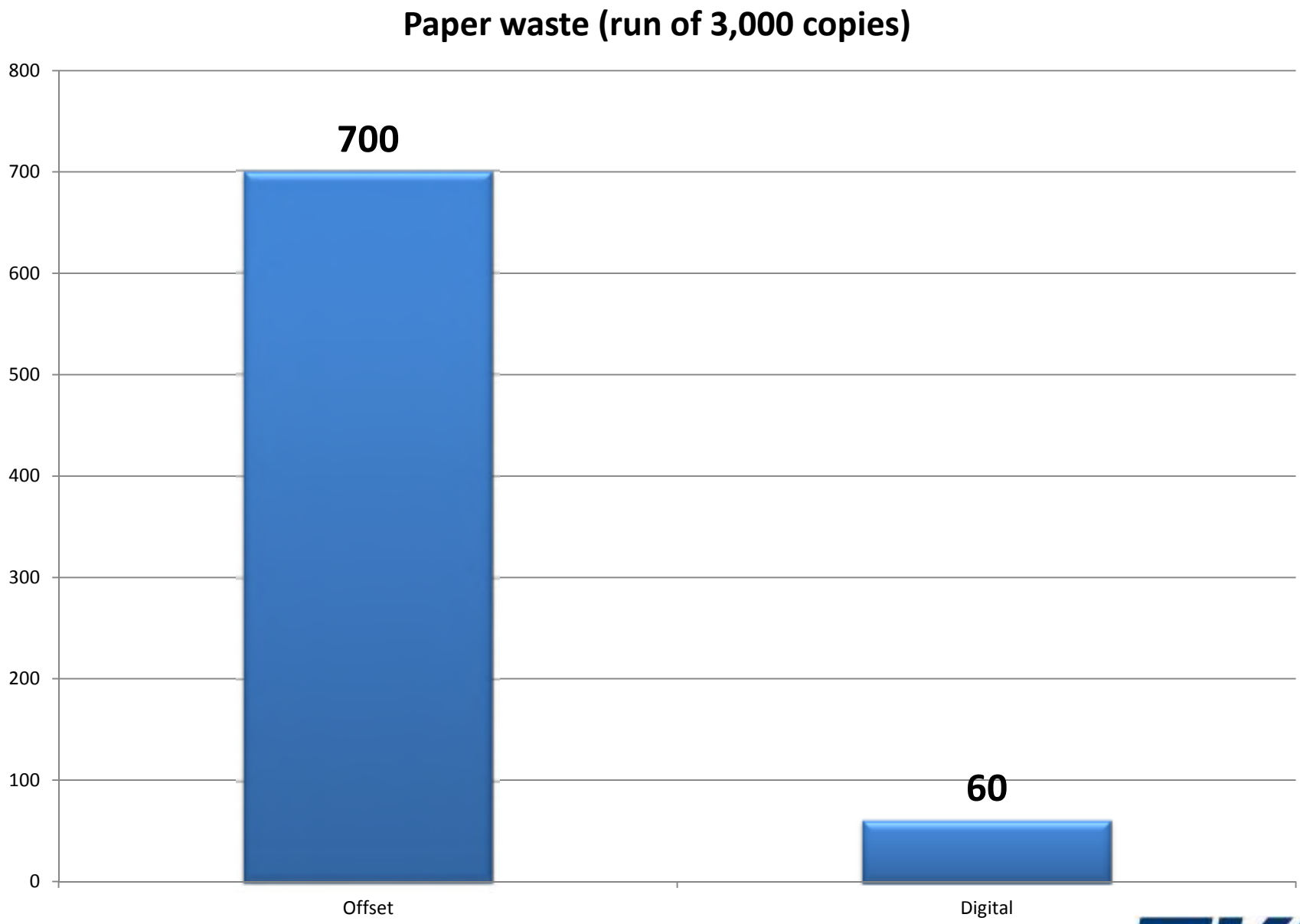
Flexibility



TKS
SINCE 1874

Why More Profit (for jobs in sweet spot)?

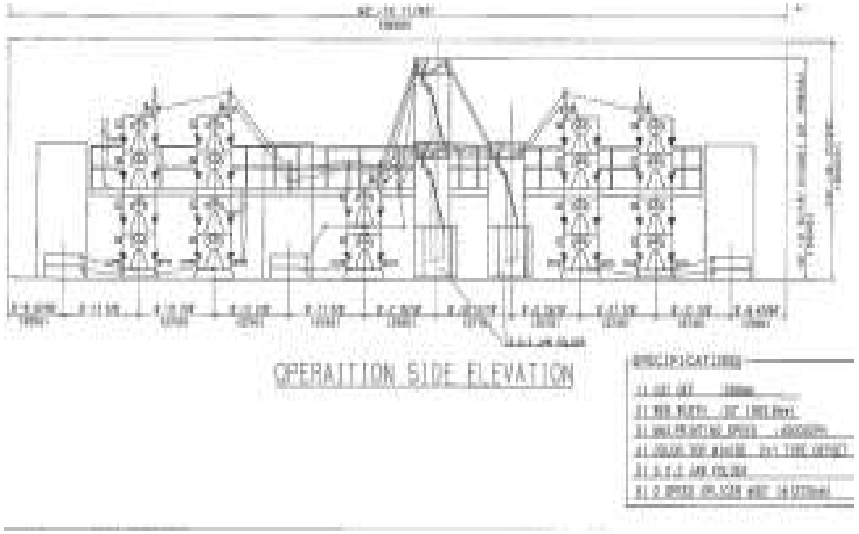
TKS
SINCE 1874



TKS
SINCE 1874

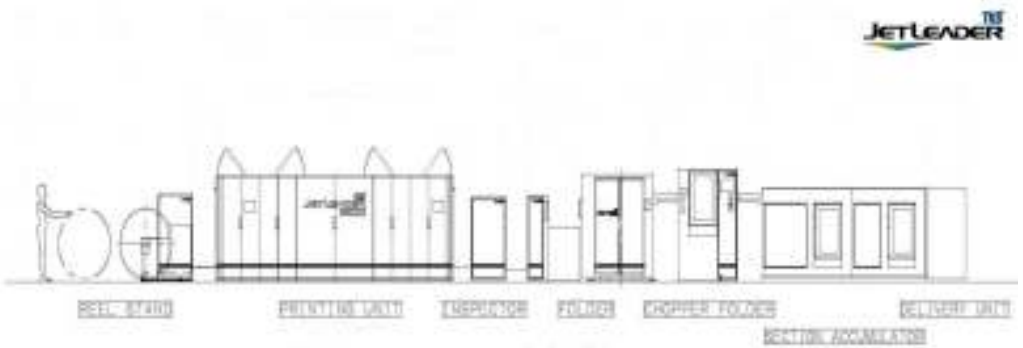
Manning

Offset



4 or 5 people

JETLEADER



2 people. 1 when the press is running

TKS
SINCE 1874

Setup time

JETLEADER

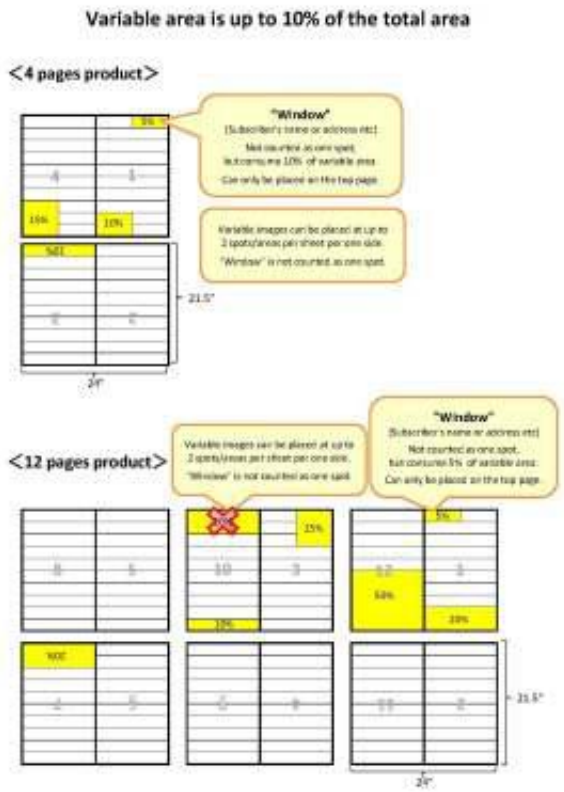
- No plates
- No blankets
- Not have to add or remove web(s) based on paging
- If using the same web width, just a few minutes for ripping new job, then start new run, including paging increase or decrease.

TKS
SINCE 1874

Variable data

TKS
SINCE 1874

Variable data printing (basic)



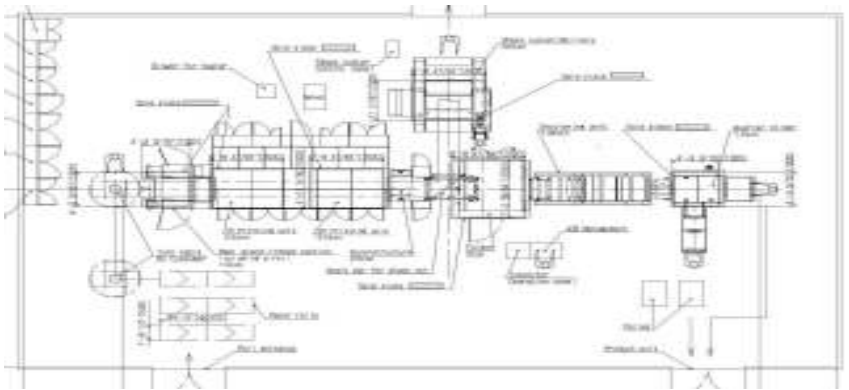
- Addressing in line
- Personalize content
- Micro zoning
- Better utilize web to print models
- Give customers the ability to customize their product through your web site

TKS
SINCE 1874

Building

TKS
SINCE 1874

Building



- Less of an over all press footprint. About 5,000 square feet for everything including equipment, inventory, office, and computers.
- JETLEADER on one level
- No foundation modifications for JETLEADER
- Less power utilized
- JETLEADER is 66 feet long

TKS
SINCE 1874

Building

Previous administrative offices at Topweb

TKS
SINCE 1874

Other Products/Markets

TKS
SINCE 1874

Other products

Books – Variable Page Count – Variable Size

Saddle Stitched

Collated - Inline / Near Line – Single / Multiple Webs
Direct to New or Existing Saddle Stitcher or Staged

Perfect Bound

Stacked Signatures – Inline / Near Line – Single / Multiple Webs – Direct to New or Existing Perfect Binder or Staged

Other products

Magazines – Variable Page Count – Variable Size

Saddle Stitched

Collated - Inline / Near Line – Single / Multiple Webs
Direct to New or Existing Saddle Stitcher or Staged

Perfect Bound

Stacked Signatures – Inline / Near Line – Single / Multiple Webs – Direct to New or Existing Perfect Binder or Staged

Other products

Direct Mail – Inserts

Variable Data Post Cards
Business Reply Cards
Flat Sheets
Door Hangers

COMPONENTS

Web Handling

Unwind
Register Splicer
Constant Tension Infeed
Web Guide
Tension Monitoring
Angle Bars
Sheer Slitters

COMPONENTS

Folding

Former Folding
Plow Folding
Goemetric Former Folding
Belt Folding

INK

Ink Jet versus Offset ink

TKS
SINCE 1874

Inkjet Ink Outlook

Viscosity

1mPa s	5~10mPa s	30~300mPa s	5~20Pa s	50~100Pa s
Water	**Inkjet**	Flexo	Offset newspaper	Offset sheetfed

Particle size

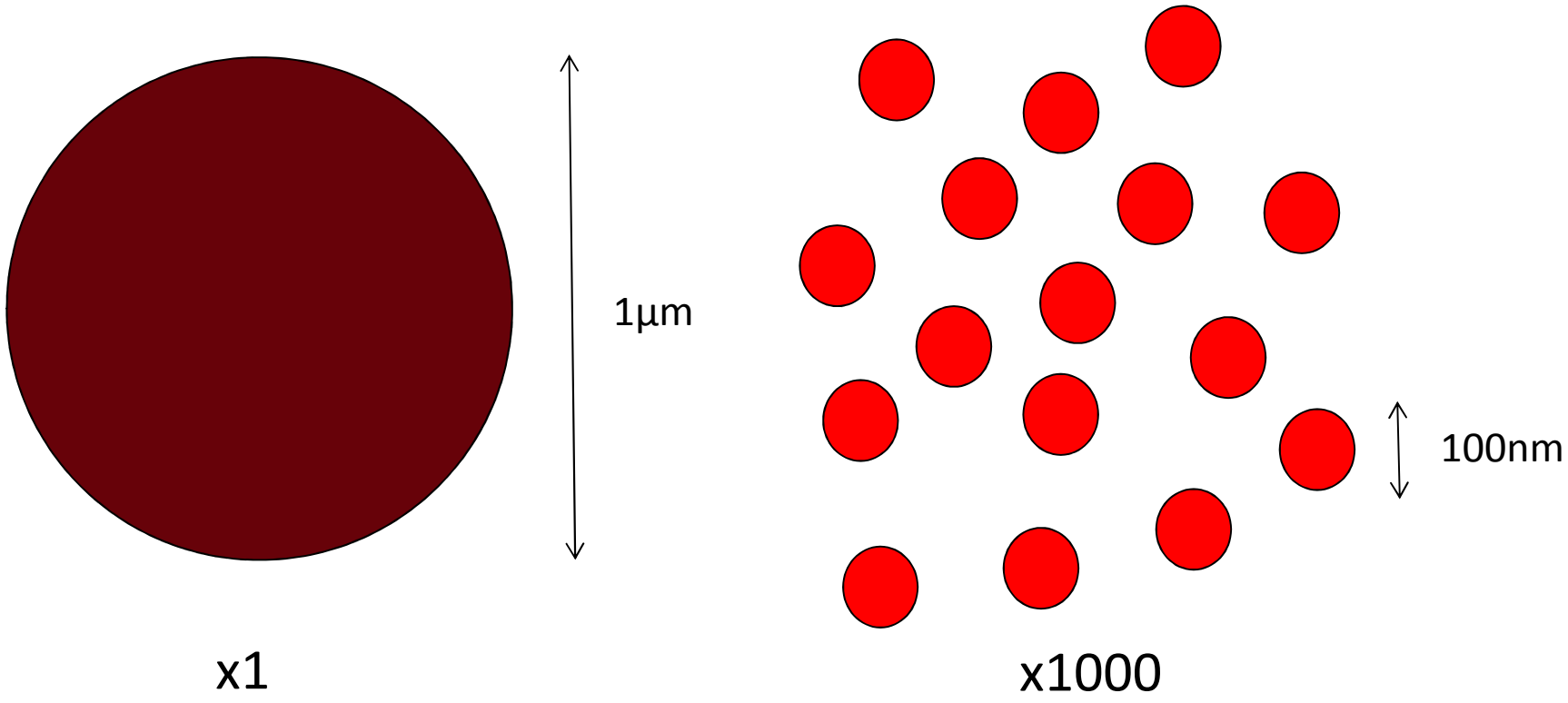
1A	1~20nm	50~200nm	1~2µm	1~5µm
Inkjet (Dye)	Color filter (TV)	**Inkjet (Pigment)**	Offset	Flexo

Because inkjet ink must be jetted from nozzle of inkjet head, it requires

- Very low viscosity (1/10,000 of offset ink)
- Very small particle size (1/1,000 of offset ink)
- Very stable of the dispersion

TKS SINCE 1874

Pigment Dispersion



More difficult to keep it stable

TKS SINCE 1874

Future developments

- Speed
- Coated paper

TKS
SINCE 1874

- Print demonstration at Topweb Tuesday morning at 8:00am.
- mshafer@tkspress.com
- TKS booth is #1467