



Inkjet Explainer Series

Understanding Ink Estimating

January 26, 2021

Evaluate. Optimize. Grow.

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#inkjetexplainer



Our Explainers

Elizabeth Gooding, Inkjet Insight

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Dennis Kavanagh, Data
Reproductions Corp



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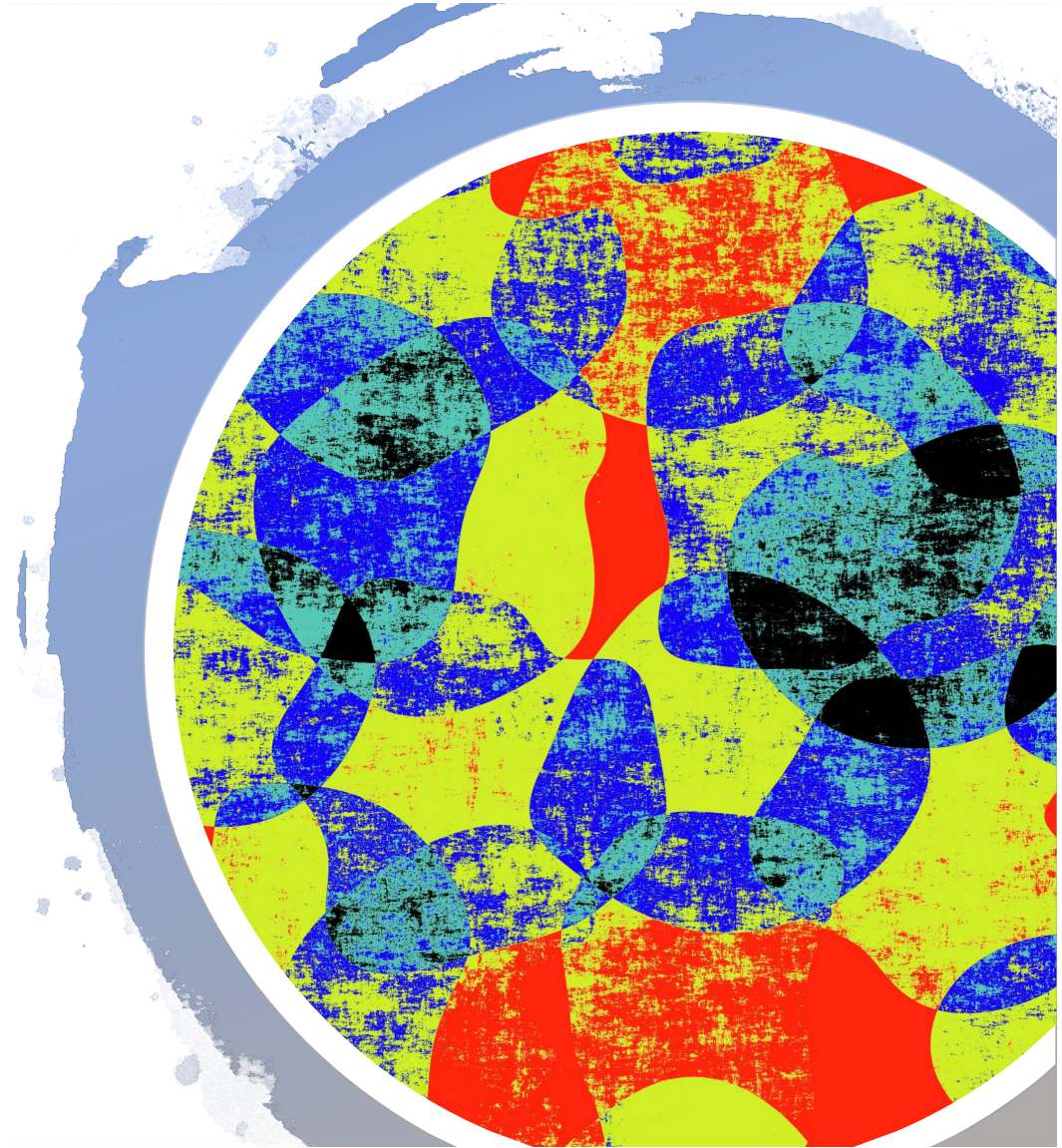
Get the most from your time with us!

- **SEND US YOUR QUESTIONS DURING THE WEBINAR**
- Question control is in the lower left corner
- We may answer during the presentation
- There is a Q&A at the end
- **Video and audio archive will be uploaded later today along with PDF of slides**

Ink Estimating...

Can you just eyeball
ink coverage?

If you could, should
you?

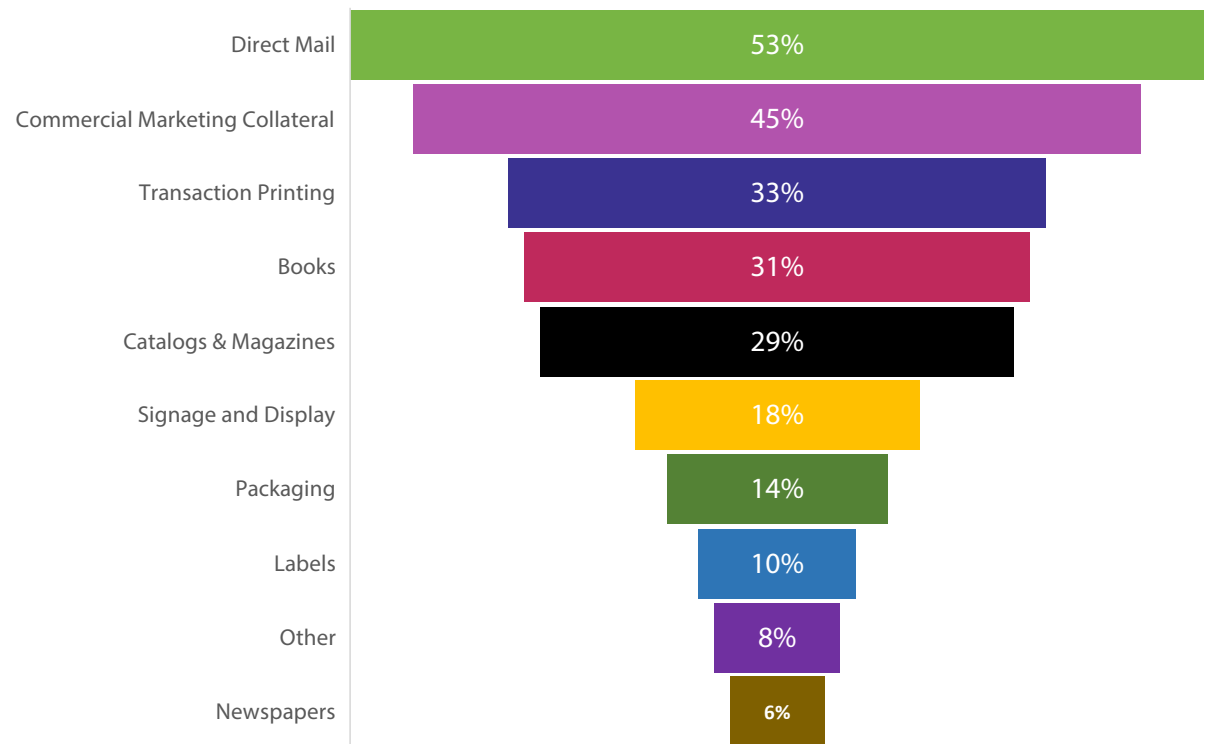


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Production Inkjet Market Survey on Ink Estimating Solutions

- Canon
- Durst
- EFI
- Fujifilm
- HP
- Kodak
- Konica Minolta
- Kyocera
- MCS
- Monotech
- Ricoh
- RISO
- Screen
- Xerox

Participant Application Segments (can select multiple)

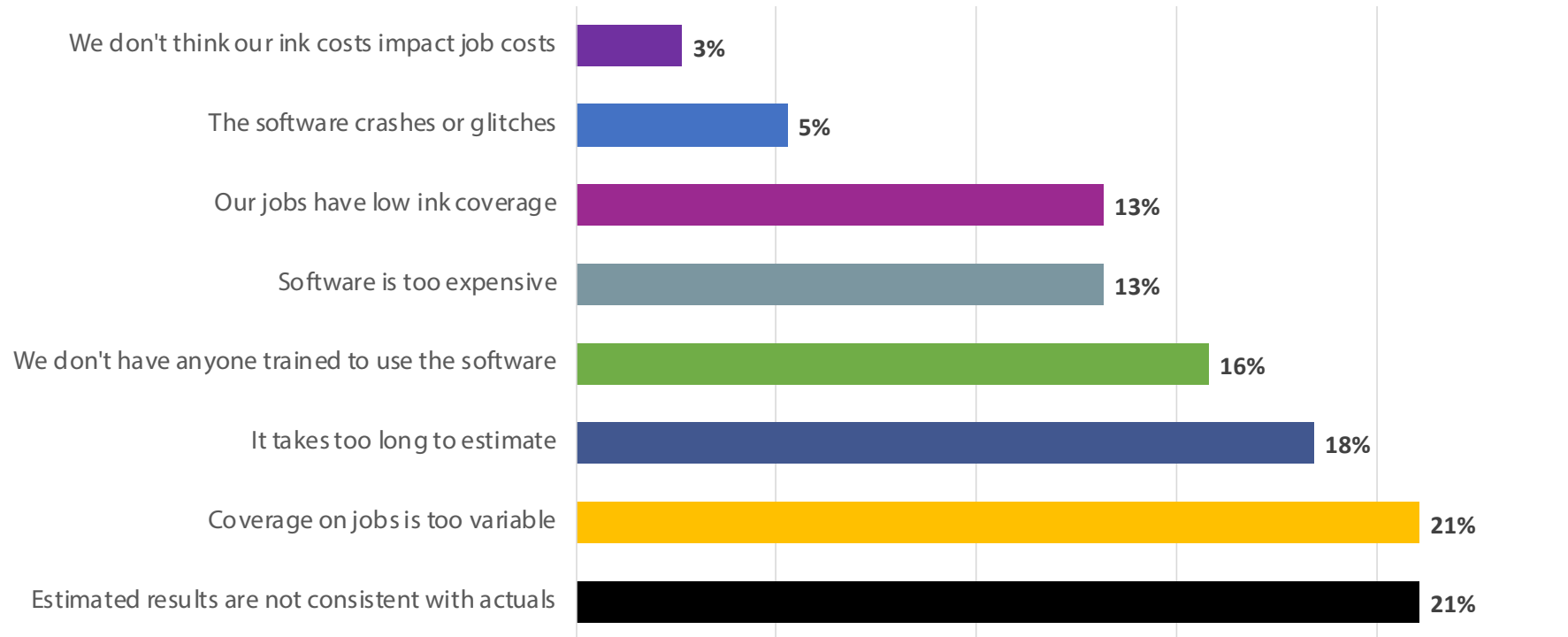


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If Not, Why Not?

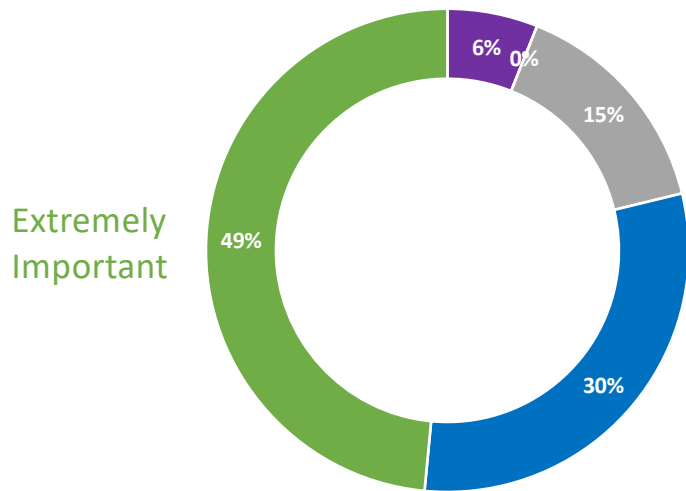
What are Your Top 2 Reasons for Not Using Ink Estimating Software ?



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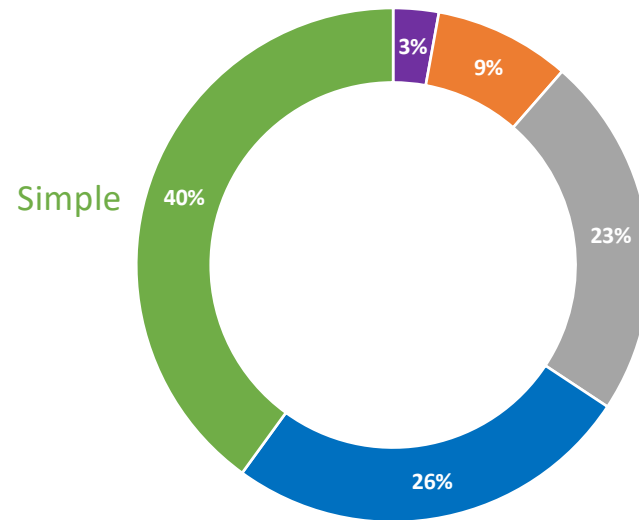
How important is the ink estimating process in your overall estimating process?



Extremely Important

- 1 (Not Important)
- 2 (Not Very Important)
- 3 (Somewhat Important)
- 4 (Very Important)
- 5 (Extremely Important)

How would you describe the level of difficulty with using your ink estimating software ?



Simple

- 1. Very difficult to use
- 2. Somewhat difficult to use
- 3. Neutral
- 4. Simple to Use
- 5. Very simple to use

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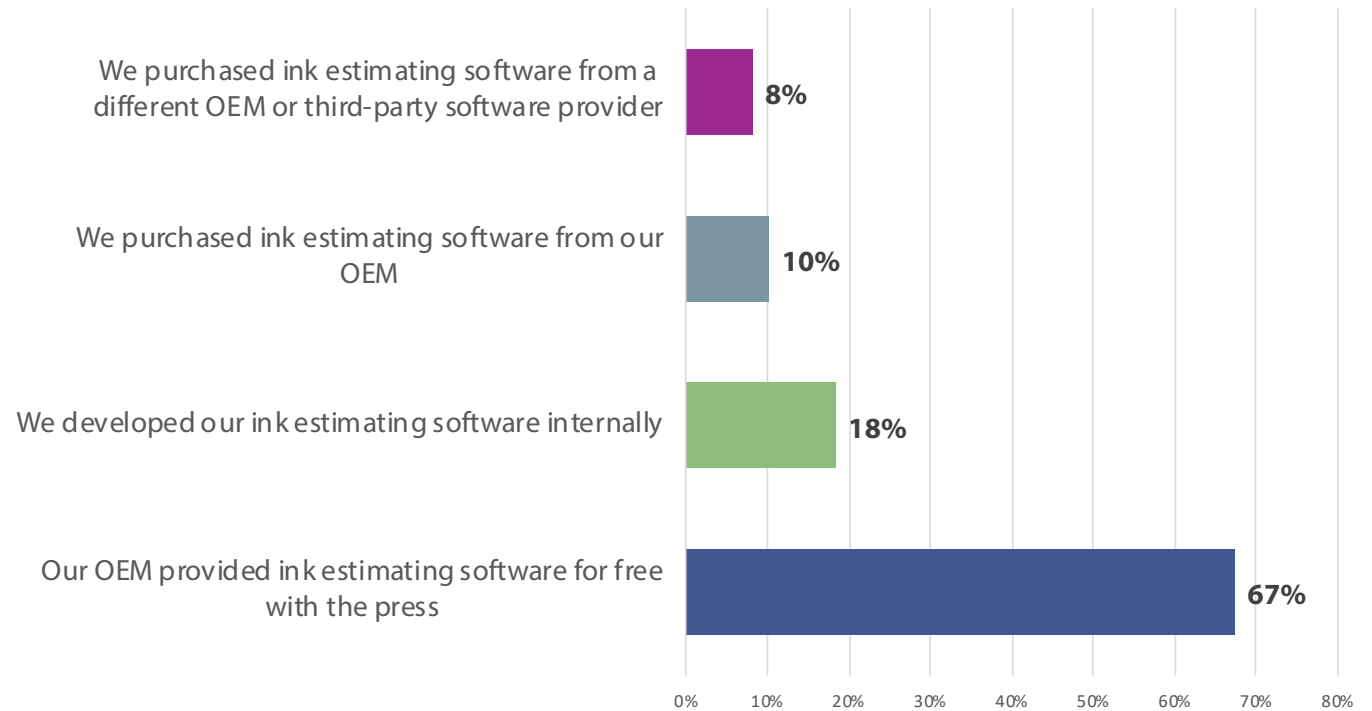
Some had more than one solution

77% had software from their OEM (free or purchased)

Some had uninstalled OEM software (no longer available)

Some had OEM software and chose to develop in house

What Ink Estimating Software is Available for Your Use?



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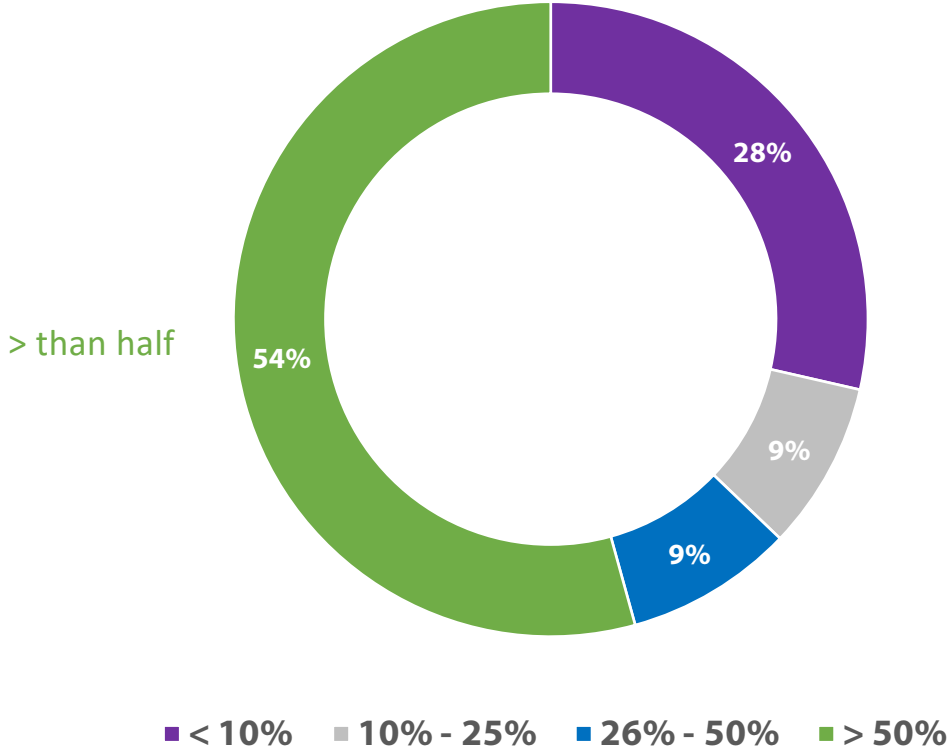
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What percentage of new jobs do you run through your ink estimating software?

Different approaches for different types of work (high/low coverage)

Don't have files to run in advance

Variable data files with high variability in coverage



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Data Reproductions - Who we are

- **Book & Catalog Manufacturer Since 1967**
- **Clients:** Large segment range of small to mid-sized publishers across the US/Canada/Caribbean
- **First Inkjet Press Installed in Q1 of 2019**
- **Canon ColorStream 6900**
 - **Motivation:** Cutback in run lengths
 - **Result:** Customers pleased with inkjet work



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Initial Inkjet Ink Analysis during vendor evaluations

Ink is a very costly component of inkjet book production

Predictability is extremely important

Ink	% of Production Cost
Black-Only	15%
Light / "Low-Color"	33%
Heavy / "High-Color"	50%

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Our Production Ink Analysis

- **Daily ink consumption by job/by page is harvested and analyzed**
- **Job data from June 2019 to June 2020 showed:**
- **Book/catalog producer allows us predictability**
- **Paper Used: Uncoated offset paper, not inkjet treated paper**
- **Canon's new tool for Q3 2020 – "VIEW"**
 - Input: Actual File
 - Output: Forecast of Ink consumption
- **Without a file, quote requests must be conservative**


No significant variation noted in our very simple methodology

Less than 10 jobs out of 700 were costed incorrectly

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How we look at ink consumption – @job level

 **CS6900 Ink Use**

Job Number: 88572

Ink Cost

	Total Grams	\$/KG	\$/Color	
Total Grams:	4525.27			
Grams Cyan:	0.00		\$0.00	
Grams Magenta:	0.00		\$0.00	
Grams Yellow:	0.00		\$0.00	
Grams Black:	4525.27		\$1.74	\$7.74
				\$ Total

Paper Used

Sheets:		Roll Width:	
Feet:		Basis Wt:	
Cutoff:	1	Cwt:	
Pages/Cutoff:		Lbs:	
Books:		Paper Cost:	

Job Info

Customer:	Hayc	Books Shipped:	528
Title:	Hutc	Status:	x
Size:	8x10	Job Number:	88572
Pages:	4		
Quantity:	5		

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How we look at ink consumption – @job level

The screenshot displays the 'CS6900 Ink Use' software interface. On the left, there are five buttons: 'Import', 'Export', 'Print', 'Clear Form', and 'Finished'. The top right section is titled 'Job Number' and contains a text box with '88572' and an 'Update' button. The main area is titled 'Ink Cost' and features a table with the following data:

		\$/KG	\$/Color	
Total Grams:	4525.27			
Grams Cyan:	0.00		\$0.00	
Grams Magenta:	0.00		\$0.00	
Grams Yellow:	0.00		\$0.00	
Grams Black:	4525.27		\$1.74	\$7.74
				\$ Total

A blue ink splatter graphic is overlaid on the table, specifically covering the columns for '\$/KG' and '\$/Color'.

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How we look at ink consumption – @job level

Paper Used		Job Info	
Sheets:	<input type="text"/>	Customer:	<input type="text" value="Hayc"/>
Feet:	<input type="text"/>	Title:	<input type="text" value="Hutc"/>
Cutoff:	<input type="text" value="1"/>	Size:	<input type="text" value="8x10"/>
Pages/Cutoff:	<input type="text"/>	Books Shipped:	<input type="text" value="528"/>
Books:	<input type="text"/>	Status:	<input type="text" value="x"/>
Roll Width:	<input type="text"/>	Job Number:	<input type="text" value="88572"/>
Basis Wt:	<input type="text"/>		
Cwt:	<input type="text"/>		
Lbs:	<input type="text"/>		
Paper Cost:	<input type="text"/>		

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How we look at ink consumption – @prod system



CS6900 Ink Use

Import

Export

Print

Clear Form

Finished

Job Number

Job Number Update

Ink Cost

Total Grams:	2838467.66	\$/KG	\$/Color
Grams Cyan:	81594.39	\$	\$
Grams Magenta:	69511.50	\$	\$
Grams Yellow:	35787.14	\$	\$
Grams Black:	2651574.63	\$	\$
			\$ Total

Paper Used

Sheets:	27550.511	Roll Width:	
Feet:	2	Basis Wt:	
Cutoff:	1	Cwt:	
Pages/Cutoff:	1	Lbs:	
Books:		Paper Cost:	

Job Info

Customer			
Title			
Size	Books Shipped		
Pages	Status		
Quantity	Job Number		

Job Number	Ink Col	Grams	Copie	Books	Paper	Size	Feet	Lbs	Start	End	Total
88OCE Text_100	Cyan	13.26	5	10	60#_Williamsburg_OffsetPlt	18 x 11.5	192	5	3/19/2019 13:22	3/19/2019 13:28	0:05:22
90542_200.pdf	Black	16.06	1	2	40#_Pixelle_Select	18 x 10.5	235	4	Apr 10, 2020 12:02 PM	Apr 10, 2020 12:07 PM	00:04:39
90542_200.pdf	Black	16.06	1	2	40#_Pixelle_Select	18 x 10.5	235	4	Apr 10, 2020 12:18 PM	Apr 10, 2020 12:21 PM	00:02:09
90542_200.pdf	Black	1429.21	89	178	40#_Pixelle_Select	18 x 10.5	20948	381	Apr 10, 2020 12:25 PM	Apr 10, 2020 1:30 PM	01:05:06
90692_100.pdf	Black	13.56	2	4	60#_Williamsburg_OffsetPlt	18 x 11.5	207	6	Apr 10, 2020 8:37 AM	Apr 10, 2020 8:39 AM	00:02:26

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Home-grown Excel estimator

Input on 3 ink types

- K
- Low-C
- High-C

Data Reproductions Corporation		4545 Glenmeade Lane	
Quote		Auburn Hills, MI 48326 (248) 371-3700	
Customer Name	John Smith	Quote Date	1/8/21 2:24:47 PM
Company	<Fill in Company Name>	Title	Bestseller Title
Address		Phone	313-123-4567
City,State,Zip	Detroit, MI 48201	Email	< Fill in Customer's Email Address in Hubspot>
Text, Cover and Binding Specifications			
Multiple Titles (Y/N)	N	<input type="text" value="0"/>	Multiples must be same trim size, paper, binding, finishing -and- be simultaneously produced
Trim Size	8.5x11		
Quantity	QTY 1	QTY 2	QTY 3
Page Count	500	750	1,000
Cover Stock	160		1,250
Cover Inks	10Pt.C1S		
Cover Lamination	C/0/0/C-Color outside		
Text Ink	Gloss		
Text Stock	Color - Low Coverage		
Binding	50# Offset / 512 PPI / 94 Bright / 91 Opacity		
3-Hole Drill	Perfect Bind		
Workbook Perforation	None		

50% of quotes are not touched by in-house Estimating staff
Generate PDF for customer + 1-pager for Production Planning

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Our keys to success with ink estimation

Keep it Simple

Keep it Conservative

K-only: 15% of job cost

Low-color: 33%

High-color: 50%

We have the “luxury” of having relatively simple requirements based on our niche as a book manufacturer

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AM Solutions

- **Started as A.M. Mailing Services in 1993**
- **Shifted to digital with the growth of direct mail**
- **2014: shifted from a traditional lettershop work to a marketing services provider**
- **2019: rebranded to become AM Solutions**

Konica Minolta Accuriojet inkjet press



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AM Solutions - The Good The Bad and the Ugly

HP offline unit lets you enter the stock

- The profile which keeps improving
- Contracted cost structure
- Consumable Cost Modeling: max variant is up to 5%
- Calculate consumables like wipes, heads, and what used to be called Bonding Agent

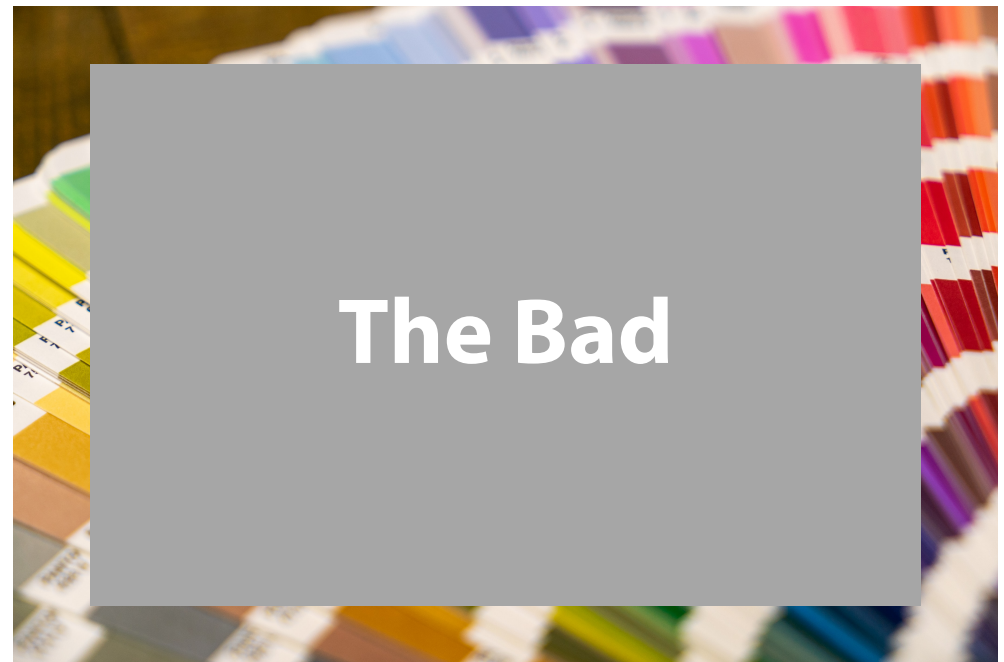
The Good

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AM Solutions - The Good The Bad and the Ugly

- Very few customers send their art in for a quote
- Three-tier estimate is not precise and just approximates coverage.



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AM Solutions - The Good The Bad and the Ugly

- Our OEM's onboard estimator requires stopping the machine from printing or RIPing to do the estimate
 - Drops into a homemade Excel sheet to calculate rough cost
 - Variant is in excess of 5-10%
 - Quite a bit of nozzle cleaning

A lot of shops are not taking advantage of fingerprinting their stock library to maximize ink savings to best quality.

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AM Solutions - The Dream

Ideal software:

- Total Ink Usage ML
- Total Ink Cost per job \$\$
- Maintenance Summary
 - Nozzle flushes/purges
 - Wipes
 - Head depreciation
 - Anything else related
- Ink Management: Print Profiles

**“Everyone can do #1,
how about the rest?”**



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Making Estimating Worth Your time

- Use what's available
- Verify against actuals
- Get tools in the right hands
- Check to see if you made money
- Create SOPs
 - Ink limits for \$ quality levels
 - Coverage threshold for estimating
 - Standard job types
- Educate Customers & Sales Team



**Don't guess if you
can measure.**



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Upcoming Explainers

- February - **Inkjet Head Technology Explained** by Mary Schilling and Mark Bale
- March - Understanding Inkjet Paper Qualification with Mary Schilling
- April - Inkjet Ganging and Imposition Explained by Pat McGrew and Elizabeth Gooding

Questions?

Inkjet Insight provides valuable tools and resources to help companies objectively **evaluate** the potential of inkjet for their business, **optimize** their operations and **grow** their businesses using production inkjet.

Our Message to Printers, OEMs and the Industry at Large
**Evaluate. Optimize. Grow.
Repeat**



Need something explained?
Let us know.

For more information please contact:

Elizabeth Gooding
elizabeth@inkjetinsight.com

Mary Schilling
Mary@inkjetinsight.com

Thank you for your time and attention.

We look forward to the opportunity to help you reach new customers through valuable technical and educational content and to grow your business through market analysis and expert media qualification support.