

What I learned

ZEON
SCHC Spring Meeting 2015
Michelle Baker
03/17/2015

- Update of SDS was the easy part.
- Few print technologies/options available in spite of long transition period.
- New color print technology is in the LABEL material not the printer.
- The touch, feel and performance of labels may change.
- People hate change.
- Buy-in is critical. There were many specifications needed by warehouse, sales, and logistics that I never considered.

2

Updating SDS Was the Easy Part:

ZEON

SCHC Spring Meeting 2015
Michelle Baker
03/17/2015

- Robust software with exceptional technical support
- Sophisticated user(s)
- Much less scrutiny of SDS by internal users and customers than the product label.

3

Few Print Technologies

ZEON

SCHC Spring Meeting 2015
Michelle Baker
03/17/2015



Single-Color Thermal Transfer



Multi-Color Thermal Transfer



Pin-Fed Ink Jet



Cut-Sheet Laser



Continuous Feed Laser

4

Thermal Transfer Printers



ZEON

SCHC Spring Meeting 2015
Michelle Baker
03/17/2015

- Before the GHS, single color thermal transfer printers, **COMMONLY** used in the chemical industry.
 1. Workhorses, with long life
 2. Large startup investment
 3. Temperamental
 4. Expensive consumables.
- Upgrade to a two-color thermal transfer printer not preferred because single advantage did not overcome cost and performance issues.

5

Label Technology



ZEON

SCHC Spring Meeting 2015
Michelle Baker
03/17/2015

- New label technology allows for the use of existing color label printer technology **BUT** with the required durability for chemical labeling.
- Inkjet and Laser Color printing.
 - The printer technology is the same as regular office printers with industrial feeders and housing.

6

New Label Stock New Label Problems

ZEON
SCHC Spring Meeting 2015
Michelle Baker
03/17/2015

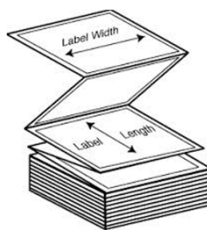
- “Worse than the atomic bomb and sauerkraut”
- The new label stock is thinner
 - For durability
 - For feeding through the printer.
- The new label stock is static-y
 - Cut sheet labels stick together
 - Output side of printer needs a babysitter
 - Static stick to the backing or drum
 - Highly flammable products/environments???
- The adhesive is more aggressive
 - When printing many labels, laser printers get hot. The adhesive can bleed or become aggressive – (hard to peel the backing and/or hard to re-place label on packaging)

7

Printer Limitations

ZEON
SCHC Spring Meeting 2015
Michelle Baker
03/17/2015

- **Cut-Sheet**
 - **Hard to peel**
 - **Curling**
 - **Jamming**
 - **Static**
 - **No large print jobs (>50-100 labels)**
 - **Batching or sequencing of labels/products required**
 - **continuous feed label stock**



- **Inkjet**
 - SLOW
 - Poor print quality – barcodes, product numbers (non-HazCom stuff) must be scanned from 4 pallets high in a warehouse with poor lighting



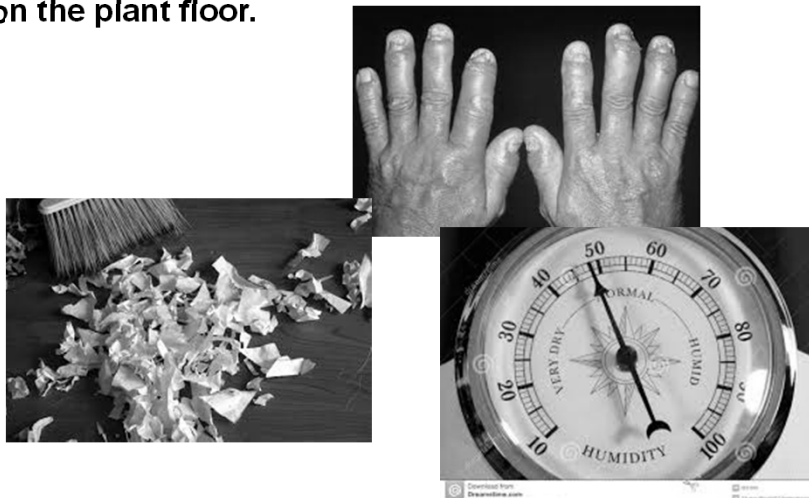
8

"Buy-In" is Critical Change is Hard

ZEON

SCHC Spring Meeting 2015
Michelle Baker
03/17/2015

What works in a clean, manicured office, may not work on the plant floor.



9

Final Considerations

ZEON

SCHC Spring 2015
Michelle Baker
03/17/2015

- **Customers may be more sensitive to label changes than SDS and classification changes. Labels convey hazard information AND product and quality information. When labels change, customers notice (and complain)**
- **To network or not to network? That is the question. Networking printers and spooling (especially with picture files) may seriously slow down print jobs.**
- **Expect IT hiccups**

10

Thank You!

ZEON

SCHC Spring Meeting 2015
Michelle Baker
03/17/2015

Michelle Baker:
P: +1.502.775.7724
mbaker@zeonchemicals.com