



INX

Doing our part for a sustainable future

A Basic Guide - Customer Waste Management Options

REDUCE

REUSE

RECYCLE

Reduce – The first step in a Waste Management Strategy is to promote reduction of resources, pollution prevention and landfill elimination. For INX, improvements in efficiency and reduction of waste have historically been a focus of our company through programs such as Lean Manufacturing and TPM. Reduction is the first step in a waste management strategy that can provide the biggest impact to decreasing one's carbon footprint.

- Reduce through ordering products with more environmentally-friendly contents and minimal packaging.
- Reduce waste generation by improving process efficiency through early adoption of such programs as Lean Manufacturing and TPM.
- Reduce manufacturing waste generation and disposal through increased waste avoidance and waste recycling
- Reduce inventory through consolidation and standardization.
- Order in bulk to reduce inventory and waste generated by ordering several smaller batches of ink

FIRST STEPS TO REDUCE

The easiest solution to reduction starts at the beginning – evaluate the quantity of ink you need. Consider these questions before you place your order:

1. Do you have an ink management software program Like INX Manager to calculate quantity
2. Do you have historic consumption data?
3. Have your specifications changed?
4. Has there been a change in your process?

Consider an INX waste-reducing system that can directly impact your bottom line: Use our "stay-open" inks which can be left in the fountain overnight to reduce waste and wash-ups.



INX®
Visual Communication Technology

Reuse – At INX, reuse is a preferred choice. We like to use items more than once, like using refillable totes instead of many smaller, non-refillable containers.

- Reuse of packaging material and pallets for transportation of materials.
- Reuse solvents with solvent distillation systems, which also reduces the volume of waste.
- Metal filtration systems allow the reuse of filters and the disposal of contaminants, not filters.
- Manage inventories, promoting reuse rather than disposal.

THE INX SOLUTION: INXMANAGER™

INX developed software to assist internally with color management and overall inventory and waste control. It enables reuse and reworking of excess or obsolete ink, reducing print waste thus saving ink costs as well as waste disposal efforts and expenses.

INXManager® Software allows users to recycle existing excess colors into one batch. (Where waste is neither recoverable nor recyclable we aim to ensure that is environmentally safe for all probable end-of-life scenarios).

- Reuse totes with dispenser systems, a consideration for high volume customers. Work with INX to install a dispenser system with re-usable totes. Added advantages of dispenser systems include:
 - JIT delivery of spot colors
 - Cost savings
 - Improved inventory control
 - Improved quality
 - Improved productivity
 - Increase speed and accuracy



WHY DISPENSER SYSTEMS?

A dispenser system works to help minimize waste with reuse totes. Will a dispenser system work for you?

- Do you use paste or liquid inks?
- Do you order spot colors or blends?
- Do you use large volumes of ink – purchase \$50,000/annually?

Yes?

A dispenser system could work for your facility and provides:

ENVIRONMENTAL ADVANTAGES

- Reuse totes
- Generate VOC reporting monthly by dispensed history
- Reduce environmental disposal costs
- 99.9% repeatability – reduce generated waste from re-matching
- Reduce delivery charges –fuel & energy costs

OTHER ADVANTAGES

- Reduce labor costs through automation
- Reduce shelf items by using excess inks to make new inks
- Reduced press time by delivering consistent quality.
- Reduces floor space and warehouse space wasted by “just in case” ink inventories.

Recycling - The last alternative in our waste management strategy is recycling. Recycling is simply the reprocessing of old materials into new products. Recycling closes the waste management loop and is always our preferred option over disposal.

INX customers have the opportunity to recycle as most all INX containers are made from recyclable metal or plastic (P1 or P2) materials. Customers have several methods to consider based on their own in-house recycling and waste management practices including:



- **COMMERCIAL RECYCLING PROGRAMS**

Empty ink containers may be disposed in commercial recycling programs that many facilities have, which are similar to the curbside programs we use at home. The size of our containers, even our five gallon container, is within the range accepted in these types of programs. National recycling and waste hauling firms will accept empty ink containers depending on their cleanliness. These programs typically have more stringent requirements associated with the definition of “empty”, some may just accept scraped, but others will require triple rinsing criteria. In some cases it may be required to remove any metal parts such as handles on buckets. Work with your existing waste hauler or recycler to determine whether they will accept your empty ink containers. Work with your employees to help them understand how to prepare empty containers to improve your recycling options.

- **INDUSTRIAL RECYCLING OR SALVAGE**

Most manufacturing facilities have to dispose of scrap or salvage at some point of operation. Your industrial recycling or salvage contacts may offer another recycling options. There are also industrial recycling services which deal with specific types of material such as plastic. Any type of recycling will require empty or scraped containers, but typically industrial recycling or salvage operations may have less stringent criteria than commercial recyclers. For example, industrial recyclers may take larger containers used in the industry; and salvage operations will take material in many non-standard shapes. Again, you will need to work with your local industrial recyclers or salvage firms to understand their criteria for accepting the recyclable material. A concern of most recyclers is the residual ink left in the containers. Many recyclers will accept crushed containers more readily; as this is a better indication the containers are empty. Many scrap dealers handle both metal and plastic.



- **WASTE TO ENERGY (WtE)**

This process refers to waste treatment that creates energy from a waste source. Incineration, the combustion of organic material such as plastic waste, with energy recovery is the most common WtE implementation and is a consideration as an alternative to recycling. Typically WtE operations may have less stringent criteria than both commercial and industrial recyclers. Availability of WtE facilities is the primary decision factor in this case. Visit <http://www.go2system.com/locations.html>

REDUCE**REUSE****RECYCLE**

Your recycling options are defined, based on your responses to the questions at the below. Determining which recycling option will work for your facility is a decision that needs to be made with your waste hauler or potential recycling facility. In many cases, your potential vendor will review samples of materials to be recycled to determine suitability.

Review your options:

	Ink Residue	Waste Volume	Waste Stream	Container Shape/Size
Commercial	Most Stringent - Scraped and Rinsed	Smallest	Limited	Crushed or flattened recommended
Industrial/Salvage	Less Stringent - Scraped	↓	↓	
Waste-to-Energy	Least Stringent	Largest	Expanded	More non-standard shapes/sizes

WHAT ARE YOUR RECYCLING OPTIONS?

Determine your recycling options :

1. Do you currently have a office (commercial) recycling program? Who provides the service?
2. Do you have an industrial recycling program for scrap or salvage? Who provides the service?
3. How much recyclables are generated (pails/week)? Consider both metal and plastic recyclables separately.
4. Are the empty ink containers scraped clean, wiped clean or rinsed?
5. Can you crush the empty ink containers? Can you shred plastic containers?
6. Where are local recycling facilities? Location is key to evaluating cost effective recycling practices.
7. Recyclables are sold as commodities and are subject to market changes. Your waste hauler or salvage contact will have current information on availability of recycling options.

Additional information on recycling options are available at:

Institute of Scrap Recycling
www.isri.org

Society of Plastics Industry
www.plasticsindustry.org

Integrated Waste Services Association (WtE)
www.wte.org

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