

4-1-1990

Seed Packaging

R.A. Nelson

Follow this and additional works at: <https://scholarsjunction.msstate.edu/seedsmen-short-course>

Recommended Citation

Nelson, R.A., "Seed Packaging" (1990). *Proceedings of the Short Course for Seedsmen*. 6.
<https://scholarsjunction.msstate.edu/seedsmen-short-course/6>

This Article is brought to you for free and open access by Scholars Junction. It has been accepted for inclusion in Proceedings of the Short Course for Seedsmen by an authorized administrator of Scholars Junction. For more information, please contact scholcomm@msstate.libanswers.com.

SEED PACKAGING

Robert A. Nelson¹

It's a pleasure to be with you today and discuss packaging and shipping containers.

It is important that you see equipment manufacturers, packaging manufacturers, and consumers like yourselves, share information and develop together improved methods and containers for products which enrich our lives.

At Bancroft, we are dedicated to responsible packaging. And, Bancroft is dedicated to agriculture. Being founded in 1924 at West Monroe, LA, we were attracted to that location by the then recent gas discoveries, and the location of carbon black producers. But it soon became evident that additional base sales were needed. The knowledge of agriculture and the core of interest in agricultural community by the owners and employees of Bancroft, made this a natural transition in our early years, and it remains today.

Environmental Issues

I would like to ask the following questions of our audience:

1. How many of you are aware of environmental, ecology and conservation programs?
2. How many have an organized reclaiming program for waster materials?
3. What do you do with used packaging materials? Bags, etc? Burn - incinerate - plant site - municipality bury - give to waste hauler - other???
4. Do your bags include barrier plies: polyethylene, foil, polypropylene.

¹ Regional Manager, Bancroft Bag, Inc., Portage, IN.

Usually bags are constructed for the most cost effective protection of the products contained. Would you voluntarily pay more to obtain the same protection with environmentally friendly barriers?

The reason I ask this is, we are developing alternate barriers to help protect the environment. Many times we find even better product protection with environmentally friendly products but there are higher costs associated with them. Keeping in mind your current disposal costs using whatever method you do, and assuming a base cost of 45 per bag, what cost increase could you assume?

$\frac{15\%}{51-3/4}$	$\frac{25\%}{56-1/4}$	$\frac{40\%}{63}$	$\frac{50\%}{67-1/2}$
-----------------------	-----------------------	-------------------	-----------------------

We expect the environment to become protected legislatively in the very near future. Many areas have already done so and I reference the State of Illinois mandating the dumping of yard wastes (estimated at 20% of metropolitan waste retrieval) must now be placed in special paper sacks for composing.

How many of you participate in programs like this?

Varieties of Bags

At Bancroft we manufacture a variety of bags including PVSE, PBOM, SOS, WEBB, SOM, LBSOS, and Barriers.

Barriers

Polyethelyne, polypropylene, foils, combination of four laminates, sarans, silicone, water shed and oil resistant treatment, flame resistant, bleached, colored, clay coated liner board papers; ingraft, reversed buffed, machine glaze, super calendared, and ribbed finishes; each barrier designed for specific purpose.

PVSE - Pasted Valve Stepped End Bags

Special paste patterns, and adhesives so they are more moisture resistant; sift resistant, with a variety of closures, TIS, PEIS, PAP-IS, double trap, 1/2 sleeves, compounded sleeves for heat seals, air seals, ultra sonic seals, water seals, and several others we're not quite ready to discuss.

PBOM - Pinch Bottom Open Mouth

With special interplay paste patterns. Variety of end closures including standard A-32 hot melt of anything in a variety of temperature sealing lines, polyamide hot melts to resist oils and gasses and a variety of hot melt poly resins for all lineal seams. We can place single and double tail scores to give bottom and closure ends improved memory for appearance and ease of closure. Manufactured with all the papers we discussed, in sizes of .3 to 2.8 cubic foot approximate, with or without heat sealing.

SOS - Self Opening Style Bags

Special sift resistant stepping and pasting patterns developed over nearly 40 years of experience with custom made machinery; can manufacture from 2 to 5 plies. With all the special papers and barriers including the very difficult silicone release papers, in sizes of 3/4 foot to over 3 cubic foot.

Webb Style Bags

This is a proprietary bag made only at Bancroft. It incorporated the square bottom of SOS, and strength, and integrity of stepped end, and can be made in valve or pinch open mouth, or flush cut sewn field closures, with or without heat sealing. Can be run in sizes of 1 1/4 to 3 cubic foot with gussets of 4-3/4 inch or larger. This is becoming an increasingly useful package to improve shipping and warehouse density and lower damage.

SOM - Sewn Open Mouth

In full size and construction ranges of 1/4 to 3 cubic foot. Variety of thread and tape closings to resist acid, chemicals, oil, heat, easy open and heat sealed styles.

LB-SOS

We manufacture square bottom, lap bottom sacks with a full range of barrier and construction plies. Very soon we will have patch, roll, and heat seal bottoms for this style bag. Each of these will have flush cut tops suitable for sewing, heat sealing, roll folding or other closures.

Bancroft has pioneered the high resolution printing processes which has come to dominate the printing field. We can print from our smallest bag to nearly 60" width with six colors and more plus lacquer. Printing is done in line work, or

process dot to coverage to 160 line screen on acceptable substrates and polyethelyene, with PE, lacquer, antiskid and watershed finishes over print.

Bancroft has been on a cost monitoring basis of each order since the early 70's. It was a tremendous aid in converting to our statistical process control program initiated four years ago. We are generally acknowledged as being a leader in these systems and frequently have competitors request our specific programs which are available by purchase or lease.

Bulk Bags

Bulk-Pack, Inc. was formed in May 1980, to meet the growing needs of the flexible intermediate bulk container (FIBC) industry. We are proud of our continued growth and success in meeting the needs of our customers with a top quality bulk bag to meet their needs. quality is embodied in our people, in our products, & in our performance. We are committed to providing our customers products and services that conform to agreed requirements.

FIBC's (Bulk Bags) are designed as a "cost-effective" method of shipping and storing of dry bulk products...whether it be powder, pellets, flakes, or granular. FIBC's eliminate the need for pallets and elaborate packaging equipment.

Bulk bags are made of woven polypropylene fabric for its strength, durability, and low cost. The bags are reinforced with polyester webbings and have polyester webbing lift loops and crane lift features as needed. Some bags are made with the fabric having a polycoating to the inside and others have a clear polyethylene liner inserted for added protection against moisture and contaminates.

Capacities range from 20 CU FT TO 200 CU FT, usually 2000 lbs to 4000 lbs of product. There are some standards to start with... the shape, whether reusable or disposable, and the weight capacity.

The variety of products is endless: chemicals, minerals, dyes, resins, feed, seed, grain, food products, salt, nuts, plastics, sand, clay, cement, pharmaceuticals, fertilizers, etc., not to mention special uses such as for waste from oil rigs.....or spills.

With the great variety of products, comes the need for special requirements that can be made into the design of the bulk bag to meet your needs to make the bag most efficient for the situation. The right combination of fabrics, filling spouts, discharge chutes, lifting devices, prints, color coding, etc., can make the bulk bag "that's right for your needs".

The primary reason for using FIBC's (Bulk Bags) is the benefits that the user receives. The advantages are numerous:

- ◆ Labor costs can be dramatically reduced. Bulk bags can be filled and emptied in a fraction of the time it takes for smaller 50-100 lb bags to fill and empty. Compare the ease and speed of 1 bag w/3000 lbs to fill and empty w/a draw string..... to 60 50 lb. bags or 30 100 lbs. bags.
- ◆ Capital cost of developing FIBC systems is minimal. Filling equipment can be purchased for relatively low price or many companies simply modify their existing equipment.... further reducing initial costs.
- ◆ Convention equipment... standard handling device is fork lift truck.
- ◆ Bulk bags can be stacked up to 3 high in a pyramid configuration. They can be stored outside, adding to their versatility. The polypropylene fabric is ultra-violet treated for protection from the sun.
- ◆ Bulk bags can be shipped by all modes of transportation. There is no need for pallets unless overhead lifting is restricted.
- ◆ Improved waste and dust control is possible with the use of bulk bags. Working conditions are improved due to the lack of physical handling of bulk by the plant operators.
- ◆ Bulk bags are economical: They are priced competitively with others industrial packaging and your savings go to your bottom line. For and Example:

- A. Bulk Bag: 35 CUFT W/DUFFLE TOP DISCHARGE CHUTE
 APPROX. \$15.00
 PRODUCT 58 LBS/CU FT 2000 LB/BAG
 2 ABREAST IN 40' TRAILER (BAG TARE 6 LB.
 PKG COST FOR 40,000 LBS...20 BULK BAGS
 \$300 OR \$15 PER TON

This simple example of savings does not show the savings in other areas, labor intensive operation of manually pelletizing paper bags, other costs for strapping, stretch wrap or shrink wrap. Use of the bulk bags reduces contamination and damage, faster turnaround in shipping, maximizes available space, reduces time, paperwork and cost of frequent bag, drum or pallet orders.

Seed Companies Save!

A company was using 50 lb. paper bags for storing delinted cotton seed. When his customer ordered seed the bags were torn open and dumped into the hopper and the seed treated as required by the customer. It was not only labor intensive and time consuming but costly too, interims of storage bags and product waste as bags were not emptied completely.

Switching to bulk bags made a significant difference... by storing the delinted cottonseeds in bulk bags... each holding 50 bushel + the company was able to eliminate the expense of paper bags. One man operates the forklift to move to and from storage areas and empty the bulk bags into hoppers for treatment. (Which takes only minutes without waste). After treatment the seed is packaged as required by the customer.

A similar experience.... with similar savings was reported by a company that handles seven varieties of soybean seed... so storage could get complicated and expensive. "We modified our treatment equipment slightly to accommodate. Bulk bags and came out with a streamlined operation we are satisfied with" is the report.

Another "fringe benefit" revealed was that there was a reduction in damage from rodents.... seems rats prefer paper over the polypropylene fabrics!

- Bulk bags can be shipped by all modes of transportation. There is no need for pallets unless overhead lifting is restricted.
- Improved waste and dust control is possible with the use of bulk bags. Working conditions are improved due to the lack of physical handling of bulk by the plant operators.
- Bulk bags are economical. They are priced competitively with other industrial packaging and your savings go to your bottom line. For and Example:

A Bulk Bag: 38 CUT W/DUPLE TOP DISCHARGE CHUTE
 APPROX \$15.00
 PRODUCT 58 LBS/OU FT 2000 LBS/BAG
 2 ABBREAST IN 40' TRAILER (BAG TARE 8 LB.)
 PKG COST FOR 40,000 LBS... 20 BULK BAGS
 \$300 OR \$15 PER TON

This simple example of savings does not show the savings in other areas, labor intensive operation of manually palletizing paper bags, other costs for strapping, stretch wrap of airtank wrap. Use of the bulk bags reduces contamination and damage, faster turnaround in shipping, maximizes available space, reduces time, paperwork and cost of redundant bag, drum or pallet orders.

Seed Companies Save!

A company was using 50 lb. paper bags for storing delinted cotton seed. When his customer ordered seed the bags were torn open and dumped into the hopper and the seed treated as required by the customer. It was not only labor intensive and time consuming but costly too. Instances of storage bags and product waste as bags were not emptied completely.