



ShepherdReport

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Message From the President

It was 20 years ago that my wife and I started Shepherd Packaging. Our meagre success in the early days was a result of hard work and desperation. In those days, all I had to offer my customers was service and the expertise that I had learned during 20 years of working in various packaging positions. I have spent 40 years in the Packaging & Plastics industries and today, our company has considerably more to offer. I am very proud of what my family and our employees have achieved and hope you will take a few minutes to read our first newsletter.

We are especially proud of our growth in the engineering side of our business. We have four skilled designers working as project managers, taking assignments from part design to production tooling. They use CAD CAM software making the transition from solid design format to CNC tool path program and finally to the machine centre, quickly and accurately. The engineering group will generate most of our new business and we have some exciting plans that will be confirmed in our next newsletter.

Over the years Shepherd has been the recipient of several awards. We consider these awards to be an example of how successful we are at taking on difficult jobs. It is this recognition that proves we are making a significant contribution to the industry and is a source of pride in what we have built over the last 20 years.

My involvement in the U.S. based Thermoforming Division of the Society of Plastic Engineers Board of Directors, has also provided me with an insight into what is happening in our industry throughout the world. I have made several trips to Europe with the SPE to see thermoforming operations in many different countries as well as developing some valuable and close relationships with other U.S. thermoforming entrepreneurs.

It is my hope that we can quote on a future project for you. We are eager to display to you our ingenuity, resourcefulness and ability to be very cost effective. By visiting www.shepherdthermoforming.com you will see a display of some of our products.

Sincerely,

Barry Shepherd
President



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Why Thermoforming?

The Society of Plastic Engineers lists five main plastic processes; Injection Molding, Blow Molding, Extrusion, Rotational Molding and Thermoforming. These processes produce rigid plastic parts in a wide variety of materials. There are other processes that convert plastic resin into other forms, however, for this purpose we look at only these five.

Since Extrusion can only produce continuous profiles or sheets, and Blow Molding and Rotational Molding are used mainly for hollow parts (although there are exceptions), we will compare Thermoforming to Injection Molding since these two processes are most often considered as options. Injection Molding, however, cannot be considered for Clamshells and Blister packaging. This is strictly a Thermoforming process.

Thermoforming or vacuum forming, as it is sometimes called, uses two main types of processing equipment,

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Shepherd Focus on Automation

As the move to automation rapidly accelerates, the demand for transit trays and for automated pick and place equipment is keeping pace. Robots and pick and place equipment move assemblies and subassemblies from one operation to another automatically.

In robotics there is a need also for a maneuvering and handling device in the form of a transit tray or pallet that holds and orients the parts in exactly the right position for the automation equipment. Designing transit trays and pallets with this required precision has become a Shepherd trademark.

The starting point in these challenging assignments at Shepherd are the new CAD systems in our engineering department. The specific part is imported into the CAD file and show it interfacing with the transit tray prior to the tray being formed. The whole file can then be sent to the customer to show how it interrelates with the robot it is intended for. This process shows up potential difficulties and structures eventual solutions before the first sample is formed.

With the knowledge of how our customer is going to utilize the transit tray combined with our longtime Thermoforming expertise, we are able to meet the critical tolerances and repeatability required for each part. The most important benefits to Shepherd customers are that the very trays and pallets used to transport parts in the automation cycle, are also a cost effective end shipping device for the parts to travel long distances. As the automation creates a more efficient part, customers find themselves more competitive in larger markets.



Why Thermoforming?

(continued)

roll-fed, thin gauge machines and sheet-fed heavy gauge lines. These processes are self-explanatory. They start with plastic sheet either in roll or cut sheet form which has been extruded from raw plastic pellets or recycled flake.

Rarely will you find an injection molded part with a wall thickness of less than .015". So in the case of clamshells, blisters and trays for packaging, thermoforming is your only option. Once you get over .015" wall thickness (and especially where the part has many thicknesses within it), Injection Molding becomes a viable option in long production runs. This is the basic reason to use thermoforming over injection molding for thin wall parts.

Injection Molds are on average 5-10 times more expensive than Thermoform Molds, so justification for tooling cost can obviously only be made where the volume of production is high. For example, if a food company needs a lid for a can of coffee, they can produce it with a \$10,000 Thermoform tool or a \$100,000 Injection tool. So why would they spend more on tooling? Price is part of the answer. Once you have the injection mold tooling, the lid could cost up to 30% less because the raw material is the plastic resin. In Thermoforming the resin must be made into sheet before the part can be formed.

Advances in thermoforming have made it very difficult to tell the difference between Thermoformed parts and Injection Molded parts. The most significant advance is the use of air pressure in conjunction with vacuum and mechanical assists tools to provide greater part definition. Where the volumes cannot justify the high cost of Injection Molds, quality parts can be produced without incurring prohibitively high tooling costs by employing the Thermoforming process.



When Mike Wallace is Waiting in Your Lobby

Now (hopefully), you will never get the message that Mike Wallace of 60 Minutes is waiting in your lobby to interview you. When Mike shows up, it's usually because he wants to talk about something that went terribly wrong in a company and wants to put someone on the "hot seat".

The fact is that major or minor disasters do hit companies every day. It's how the company with the problem handles the crisis, both internally or with the media that can determine whether the future will be bleak or livable. There are specific do's and don'ts that are important to follow:

- Appoint one spokesman for the company and do not allow anyone other than that person to talk with the media.
- Make that spokesperson available to the media, operating on the premise, "we don't like what happened, but we are willing to discuss it".

- Governments can get away with deny, deny, deny, but companies in trouble seldom can without it coming back to haunt them. So it's best to tell the truth, but not supply any more information than is necessary on the problem.
- Sometimes by implementing the right damage control, a disastrous situation can be turned into something positive. Jim Burke, President of Johnson and Johnson, quickly rebuilt public confidence in his company after the Tylenol cyanide poisonings shocked the world. He decided:
 - that absolute candor was necessary.
 - to scrap millions of dollars worth of Tylenol in inventory and on store shelves.
 - offered to replace any Tylenol thrown away by the general public.
 - To personally reveal a new tamperproof package on the Phil Donahue show, and was cheered by the audience for his efforts.

From the Funny Bone

A company was looking to employ a new accountant and had called in the last three candidates for their final interviews. The first candidate was invited into the Chairman's office and asked, "What's two plus two?"

Four, he replied.

The second candidate was invited in and she was asked, "What's two plus two?"

She replied, "Four".

Finally, the third candidate was invited in and he was asked, "What's two plus two?"

He said, "What do you want it to be?"

The chairman said "You've got the job".

Meet Cornel Toader

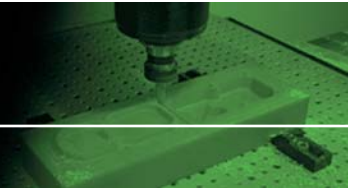


Cornel Toader is a man on a mission. He is a Romanian who lived under the oppression of Communism in the years before 1990, emigrating first to Texas in 1996 and moving to Canada in 1999 to join the Shepherd staff.

With a master's degree in Metallurgy, Cornel was recently appointed overall Plant Manager of both Shepherd Thermoforming and Plastics Divisions. He is a man of varied interests, including soccer, classical music (trained in classical guitar), and his wide scope of reading materials include industry and professional publications as well as popular literature. Cornel's goal of career advancement in a free country combined with his genuine desire to help other people improve their lives and achieve their own success targets, is a driving force in his life and a welcome strength for the Shepherd group.

He and his wife have a 16 year old daughter and live in Milton, Ontario.

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Another Success Story From Shepherd

Ian Bigham and Andrew Sperlich, owners of Bee-O-Sphere Technologies in St. Williams, Ontario, are on the leading edge of beekeeping technology. Convinced that today's chemistry could provide a more effective way to collect comb honey, they embarked some three years ago on the development of a plastic container that bees would fill directly and that could be marketed simply by snapping on a cover and label.

With prototype in hand, Bigham and Sperlich approached Shepherd to see if the production of such a product had merit, if it could be made economically, and if a plastic existed that the bees would accept. Shepherd engineering took up the challenge and went to work. After a number of modifications in the design and development, the successful Bee-O-Pac System was ready for market. The frame is Thermoformed from food grade PET (the bee's choice!) and is designed to slide into the hive in the same way as the standard wooden frame. It has cavities molded into its side with a honeycomb pattern embossed on the bottom surfaces. The cavities open outward and provide a space for the honey bees

to build their comb honey. When filled with honey the cavities can be easily separated from the frame, fitted with a snap-on lid, completed with a wrap around label and are ready for market.

The Bee-O-Pac System has caught the interest of bee enthusiasts and packaging experts from around the world and won awards in 2004

for packaging innovation from Dupont and The Society of Plastics Engineers. Great teamwork between Bee-O-Sphere and Shepherd engineering created a packaged product that is superior in appearance, flavor, taste and aroma. The bonus is that it has outstanding shelf life and no seepage of honey from the container.



Response Corner

Can we be of help? Do you have a question about our technology or policies or require a quotation? If you do, please send your request to Todd Shepherd, Vice President of Sales, e-mail todd@shepherd.ca and you will get a prompt response.

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