Mel Ettenson's GLOBAL PLASTICS LETTER

JUNE 2000

Dear Colleague:

Some significant events took place in May 2000 which will have long-lasting impact on our industry. Inflation has returned to stay (see the "price at the pump" effect); whispers of recession are growing louder – all of these trends have a sound basis for happening . Add to these the entry of China into the World Trade Organization and approval by the U.S. of China's status as a permanent normal trading partner, as well as the formation of the International Plastic Fabricators Association , and finally GE Plastics entry into distribution via their acquisition of Cadillac Plastic .All of these happenings will bode ill or well for most of our readers. We will attempt to interpret succinctly – as is our mission (see TRENDS).

We will discuss inflation in PRICING Forecasts (below) – Recession? That dreaded word is surfacing in many economic circles based on historical data - since 1948 , a rise of more than 0.3% in the unemployment rate's three-month moving average has been followed within one year by a recession. Such a jump now would bring the average to 4.4% (it is now 4.03%). Coupled with inflation ,led by gasoline prices at record levels and plastic resins rising across the board causing price increases at the sheet, rod, tube, film level which slows down the buying process. Prices have been substantially stable for almost 10 years and buyers have not heard the "prices have gone up" scenario for so long they forgot how to program computers for this eventuality and thus have to go into the open market to shop. With internet alliances and auctions (see TRENDS below) for the first time adding uncertainty to the cycle , the likelihood of a recessionary vortex is high. When China begins to both import and export plastic products at sustained levels – also for the first time , turmoil could ensue and profits could suffer . One fix – keep costs down by use of internet buying and selling models. But plan on higher interest rates this summer as Fed acts to dampen inflation by hiking interest rates by half a point in June.

In further developments, April saw the formation of the IPFA (International Plastics Fabricators Assoc.). This new trade association , headquartered in Roselle, IL , represents those companies that are *primarily* Fabricators and their vendors and represents a competitive organization to the IAPD who represent both distributors and fabricators . A stated goal is to … " rely heavily upon electronic communication to provide important forums through which customers can reach plastic fabricators and fabricators can reach manufacturers". Sounds like an e-commerce website about to be born. Executive Director is John Kasper and President is Chris Elfering of Piper Plastics – phone contact is 630 980 4740. Will be worth watching.

PRICING Forecasts : UP , UP , and away … the upward spiral is on again , led by PP, PE , PS and PVC- joined by nylon, acetal , PET - and LCP products are inevitably next . PVC for example is up 24 cents per pound from Jan. 1999 thru March 2000 ,with PP up 16 cents during that same period. PS went up 3 cents per pound in April for a total of 10 cents in 2000 to date. This puts HIPS close to ABS in price while some applications may shift to PP from PS due to the cost-performance ratio shift. On the PE front, prices have moved up 12 cents this year due primarily to ethylene monomer price escalations. UHMW resin is up about 20% for the first increase in several years and inflationary pressure continues on all engineering resins.Meanwhile nylon is up 8-10% and acetal 6-8% , according to DuPont and BASF (shapes of these are up 5%). Both of these bellwether engineering resins relecting rises in useage outstripping any capacity additions.1999 North American use of nylon and acetal was 1.2 billion pounds and 260 million pounds respectively . PC , PBT and other engineering resins will undoubtedly join the price increase trend. For additional detailed statistics on pricing and supply-demand we recommend CMAI's (Chemical Market Associates) Global Plastics & Polymers Market Report – contact them at 281 531 4660 .

TRENDS: Ways of doing business are still changing in these early days of the 21st century –EDI , just hatched in the 70's has been replaced by the internet- b-to-b e-commerce is being broken up into four basic models :

1. Forward Auction (seller controlled) – sellers post goods and serviced they want to unload and buyers submit competing bids.
2. Reverse Auction (buyer controlled) – buyers post goods and services they want to purchase and sellers compete to provide it to them.
3. Internet Exchange (multiple buyers and sellers) – buyers and sellers trade bids and offers until they make a deal. Operated by a third party that sets rules of engagement , entry is often restricted.
4. Linked Exchanges (the true network economy) – several competing Exchanges may be combined into one (the auto industry just did it) or different exchanges may be wired together and the b-to-b universe will be composed of many similar marketplaces with bridges between them. Look for "horizontal" exchanges such as logistics and credit services to build the first bridges among various "vertical" exchanges such as plastics and oil.

Either way , there will be many more connections than there are today and if these internet exchanges take off, they will significantly reshape the underpinnings of the new and old economies .Which direction are you taking? – This is the time for strategic thinking and tactical action!

Since , on the internet , time is measured in "dog's years" , which are known to last one-seventh of our calendar year , any opportunities opening in this area of business must be snatched up very quickly. Our best advice is to think big, start small , scale fast . Rather than selling plastics , begin to sell cost reduction, helping customers save money , then take a percentage. The trend favors the larger competitors with the most resources and the best economies of scale , and it promotes further consolidation of small to mid-sized distributors.

Thus the move last month by GE Plastics to integrate forward into distribution by acquiring Cadillac Plastic , appears to have been driven by Cadillac's early foray into selling direct over its website *cadillacplastic.com.* (and on *commerxplastics.net.com)* When adding this initiative to *gepolymerland.com* , the direction they are taking seems clear. The effect on the rest of the industry – less clear.(see Interview with Ed Statter of Regal Plastics –below).

Meanwhile another recent trend – Integrated Supply – would seem to be moving forward with sales from integrated supply contracts expected to reach $11 billion this year , according to Frank Lynn & Associates. Reasons?

Cost reductions guaranteed by suppliers make this a no-lose effort on the part of major manufacturers -, However 20% of customers who signed integrated contracts a few years ago have changed suppliers or have taken MRO buying back in house – the cost savings offered could not be sustained beyond the first year.Integrated Supply may soon join EDI in the dinosaur gallery!

MERGERS , ACQUISITIONS, ALLIANCES , AND EXPANSIONS: In addition to the aforementioned GE/Cadco move , which did not include jv's in Germany, France , and Spain – will probably be spun off to a European distributor (Thyssen is often mentioned) . Also in Europe , William Cox , a leading distributor of GE as well as ICI , is acquired by Quantum Plastics (also a GE distributor); – Elf Aquitaine and TotalFina complete their merger probably resulting in a change of name for Elf Atochem (keeping track of the owner of Plexiglas® in N. America is challenging) – Viag and Veba merge their chemical divisions which will now be known as Degussa AG. Back in the U.S. –Plaskolite buys Continental Acrylics from Laird who promptly buys Graphic Outfitters of St. Louis (a foam board distributor). DSM buys Amoco's Torlon® shapes assets and BP Amoco looks to divest the Torlon , Radel , Udel resin business.

Mitsubishi Engineering Plastics Corp. doubles their PC resin capacity in Asia , while Shell's Montell unit builds new PP plant in Brazil in a jv with Brazil's Suzano. Norton Co. puts up a b-to-b website that will integrate Norton's industrial distributors and service customers that choose to purchase MRO *abrasive* products via the internet – orders are e-processed and products shipped within 24 hours , directly from a stocking Norton distributor – will plastics be next?

NEW PRODUCT NEWS: Alusuisse introduces Sintra® Top Material with a glossy finish – Alphatec providing sheet for lenticular printing – aftermarket package for VW Beetle is formed from Lustran ABS –

A rapid computer prototyping system which mimics thermoplastic properties is available from 3D Systems-

A one piece shell for a public transit bus has been fabricated from Derakane epoxy vinyl ester from Dow – it weighs 22,000 lbs.OPP Petroquimica of Brazil claims LLDPE for thermally shrinkable applications – a first.

Many special-effect colors being made available from GE – for PC as well as other imbedded color resins.

Andure™ resin being used in Fincastle County's Chairworks line of outdoor furniture – DuPont to introduce a number of new materials in the nylon , acetal , and liquid crystal polymers at NPE 2000 (we will report on these and more in our July 2000 issue).

PERSONNEL NEWS: Mike Callahan (formerly Polymer Corp.) named global medical business manager for Victrex USA . Elf Atochem North America (may be changed to TotalFina) names Thomas Gellrich director of electronic business and will lead the company's efforts to sell its products over the Internet.(another one!).

Curbell appoints Chris McClleland national accounts rep for northeast and midwest. Lex Hoekstra becomes CEO of GE Plastics India.

DISTRIBUTOR/MANUFACTURER BRIEFS: Elf Atochem unveils its new polymer technology center in PA.

This will help customers trouble-shoot and evaluate new products. They also will continue to market Tuffak® (their name of PC sheet)in North America , Korea and Italy – DSM EPP has reorganized its engineered plastic stock-shapes business combining global new product development, application development and new technology – additionally, Terry Folk appointed to evaluate e-business opportunities.CYRO drops some New England distributors for non-performance. As a result of the previously noted GE buy-out of Cadco, Jim Conway of ACI in St. Louis comments : …" was a defensive move – another suitor was in the wings".

INDUSTRY INTERVIEWS: Ed Statter , CEO , Regal Plastics, Litttleton , Colorado . Ed has been active in the Plastics Distribution business for over 40 years and his company, Regal Plastics is the third largest distributor of GE Plastics sheet and film , operating from 12 locations in the western U.S. and Mexico. We interviewed Ed by phone and fax from his offices in Colorado.

GLOBAL PLASTICS LETTER (GPL): As you know GE recently announced their acquisition of Cadillac Plastic – since your company is one of the major authorized GE sheet product distributors , how does this move affect you insofar as it positions your supplier (GE) to also be your competitor?

ED STATTER (ES): We have been assured that Cadillac Plastic will be operated as a totally separate entity.

For many years we have competed against GE Supply with GE Silicone under a similar arrangement , and hae always been able to compete effectively.

GPL: Are you and other GE distributors going to remain with them?

ES: I cannot speak for the other distributors, but our relationship with GE Structured Products is very strong.

We do not see that changing as long as we are not put at a competitive disadvantage.

GPL: Does the Lexan® brand carry the same significance in sheet as it did in the 80's?

ES: Yes , I feel that the Lexan brand continues to carry the same significance in the marketplace, as it always has.

GPL: Where (by industry) do you see the biggest growth for your products? Which will be the fastest growing products?

ES: We see the potential for growth in most of the markets we serve. I would prefer not to get too specific relative to industry types or products.

GPL: How will your business change (if at all) with the advent of e-commerce , b-2-b initiatives and internet alliances by manufacturers?

ES: I am sure that our business will change as a result of the internet , and we are positioning ourselves to be both web enabled and /or participate in e-commerce marketplace sites. However, there will always be a need for someone to serve local markets , especially if they provide value added services.

GPL: Are other sheet manufacurers likely to acquire distributors?

ES: I certainly hope not. However , they choose to do so , we will do whatever is necessary to effectively compete with them.

GPL: If a manufacturer-supplier sold direct on the net and offered you a fee to cut-to-size and deliver locally , but not to stock , what would your reaction be?

ES: We would certainly consider it , and have thought perhaps that is the role that today's distributor will play sometime in the future.

GPL: What percent of your customers currently buy plastic shapes and parts on the net?

ES: I really do not know the answer to that. Some surely do , however I suspect that it is a small percentage at this time.

GPL: What advice would you give a plastics marketing person starting out in today's business?

ES: Change careers! Seriously , I would advise them to learn as much as possible about the products they sell and the markets they plan to serve.

GPL: What is your greatest business problem today – and how are you solving it?

ES: Attracting and retaining good people. This has become increasingly more difficult recently. I am not sure that we have solved the problem, however we do everything possible to offer good compensation packages and benefits.

GPL: How do you recruit the future leaders of your business?

ES: Simply by doing the above and training them as best we can.

GPL: What do you consider your greatest accomplishment ?

ES: Having a successful marriage of 47 years , and raising four wonderful children , that all have productive lives and are contributors to society. Last but not least , the seven grandchildren that we have been blessed with.

GPL: Thank you Ed.