"A World of Plastics Information"

DECEMBER 2008

Dear Colleague:

<u>Deflation driving downturn...</u>the sudden and unexpected reversal of the price spiral of most of this decade is <u>impacting profits negatively</u> and <u>depressing revenues in our industry.</u> The resulting cut back of production in <u>many manufacturing sectors</u> such as resin and converted shapes is seen as the precursor of an extended and deep recession. The optimistic view is that most plastics resin and shapes manufacturers are not rushing to lower prices. We should note the model of the airline industry - instituting price increases and energy surcharges based on the skyrocketing price of oil and thus jet fuel ...while not rolling back prices as oil has dropped in price precipitously. This seems to be taking hold in our industry with some exceptions...PVC pipe went down 15-20% in October. If sustained it will mitigate deflation's degrading effect on earnings. We are entering a period of deflationary recession...a unique economic phenomenon – one that current management in our industry has not experienced in their business careers up to now.

Challenges abound that will require much wisdom! Deflation taking hold drives down asset prices and consumers start sharply reining in spending, expecting to pay less for goods tomorrow – businesses cut back, unemployment rises, and the downward slide accelerates. Another reason for our industry to hold off reducing prices. Another smart move now is to improve productivity yet cut IT expenses such as using online software; reduce data storage and consolidate servers.

What are the odds of this moderately severe recession becoming a depression? ... unlikely in our judgment since the sustained deflation of the '30s isn't likely to repeat - the central banks then shrank the money supply which was the wrong move. Further global trade policy then led governments to hike duties on imports... today exports of many countries are still growing.

<u>Expect a mid '70's or early '80's type contraction</u> – however unemployment, liquidity, housing prices and business credit problems will persist into 2009-2010. <u>Central bank actions in making funds available to financial institutions will begin to show positive results in early 2009</u>.

<u>Energy price outlook</u>...crude oil staying at about \$50 per barrel into next year and then rising to \$80 – lowering gasoline, diesel and natural gas prices in 2009. This portends well for shippers and truckers and could result in double digit *decreases* in shipping rates for our products.

<u>TRENDS</u>: Sales are slowing partly due to the annual end of the year slowdown but also due to the global economic crisis. The MRO sector (maintenance, repair & operations) is still and should continue to do well for those companies supplying materials and parts to them. The resins costs of PP, PE, PS and PVC have dipped slightly this month due to lower demand. The cost of energy continues to fuel overall costs as it is 30% higher than this time last year. Energy and power generation coupled with food processing will keep

our industry's lights on. Canada seems to have the resources for the future. Saskatchewan, where mining of uranium and production of potash fertilizer and oil and gas is propelling their economic boom is expecting its GDP to rise by 3.9% this year. They are hiring!

The Extrusion Business Index dropped another 12% in October, year after year. PVC global resins growth is estimated at 2% per year- down from 5%. A recent study of the North American plastics industry by Plante & Moran indicates eroding profit margins. China probes nylon "dumping from the West." First Biobased PP developed in Brazil as PLA biopolymers grow in use and applications – a fact of our industry, not a trend anymore. NAW Executive Summit will focus on distributor successes despite a tough economy...set for Washington, D.C. in late January.

Editors Note: Bill Shields contributed to this section.

OUTLOOK ASIA:...by Mal Binnie, our special correspondent, embedded in the Pacific Rim

Throughout the Pacific area the global economic downturn continues to affect the plastics industry with business in China and India now starting to feel the impact. Travel in Asia has been affected this month by the Terrorist attack in India and the political problems and airport shut down in Bangkok. Arnold Mouw COO of Mulford International reports that his teams in Asia are secure but is limiting travel in the Region. It is reported that Karl Aschenbach of Ultrapoly Seattle USA has been spotted "among the gum trees on the road to Bright .. Mate". Steve Vajda, owner of Raven Engineering, has been honoured by the Hungarian Government for his services to the country. Laurie Green owner of Cut to Size Plastics has reported that the new location of their premises at Yennora, Sydney is proving perfect for their distribution activities. Laurie has been a regular attendee at the IAPD conferences but now sends at least one of his sales team Rick Moore, Edy Marcu or Mark Renkin. He also advised that Jason Bridgett has joined his team. Jason has experience with EPlas, Gantiel and Mulford Plastics. Mulford have added a large German made router, bed 4080 x 2040mm, to their laser cutting operation in Melbourne. Arnold Mouw COO reports positive results with their entry into Engineering Plastics in Australia with their main stock material arriving in January from Ensinger and Orbilan, their NZ operations continue to develop. Raw material prices in Australia are being effected both with costs rising as well as an exchange rate that is falling. Significant price increases have already taken place and commodity products such as Acrylic have risen by more than 30%. It will be interesting to see the long term effect of the Mitsubishi Rayon (MRC) purchase of Lucite International. Currently MRC (before Lucite) is number 4 in the world acrylics market. When the purchase of Lucite is completed, expected Jan/ Feb 2009, MRC will rise to No. 1 with a 35% share of the world acrylic market. Sig Floyd, an ex Rohm and Haas executive with wide plastics industry experience in China and Japan, (fluent in both languages) has started his own web site. For information and to engage Sig in any projects visit www.valushar.com Sig is currently located in Shanghai, China.

Peter Vanacker, Bayer, is reported as stating that "China by 2015 will have become the largest polyurethane market in the world." Exports from China are causing concern as it appears that low price is all that counts. Zhejiang province makes products at cheaper prices than Guangdong and this has resulted in lower sales and plant closures in the latter. Merry Christmas and a Happy New Year to all from the Pacific.

OUTLOOK EUROPE:...by Chris Parry, our European correspondent, embedded in the U.K.

For those who can still afford it, Christmas seems to be coming early this year. Just about every retail outlet is cutting prices in order to stimulate spending. The UK factory of Honda in Swindon is closing for two months early in 2009, (February and March), because of lack of demand in the European auto market. Two BMW factories, (located in Oxford and Swindon, UK), are closing for 4 weeks at Christmas instead of their usual 2 weeks. Unemployment is rocketing in every major European country. The only bright light on the horizon is the continuing decline in the price of oil, (at the time of writing below \$50/barrel). Whilst this oil

price reduction is helping the plastics and polymers sector in reducing costs, it cannot get around the enduser market problems of lower consumer spending. Business failures are already increasing significantly and will continue at current or higher rates for the next 2 or more quarters at least. In the light of the general economic downturn, Sabic IP is cutting polycarbonate, (and other), resin production by 20% globally. It is not yet clear how this will feed through to the structured products sheet and film business. Despite the doom and gloom, there are some businesses that are maintaining a growth attitude to the future. Mitsubishi Rayon has bought Lucite. The price of \$1.6bn is considerably higher than the original estimate of the deal and will please the current owners, Charterhouse Capital Partners, who bought the Lucite business in 1999 from ICI. Bayer Material Science has introduced two new polycarbonate films to their Makrofol ID range. Designed to reduce the risk of forgery in security pass and passport applications, the films can be laser printed using commercially available colour laser printers using dry toner. For those of you who are fortunate enough to be able to get there; don't forget "Arabplast", 11 to 14 January in Dubai. I wish all of you a wonderful Holiday Season and great success in 2009.

<u>PRICING</u>: <u>Prices are trending downward for most commodity resins</u> including PP, PE, PS, PVC (pipe down 15-20%) and ABS...single digit drops are common, based on slowing demand and much lower feedstock prices, especially <u>benzene</u> which dropped 62% from October to November.

MANUFACTURER/DISTRIBUTOR BRIEFS: BASF is temporarily shutting down 80 plants worldwide and reducing production at the same amount of plants in response to declining resin demand. SABIC Innovative Plastics is cutting 20% of their production of all of its engineering plastics production sites worldwide. On a bright note, Daikin America will boost its domestic production of ETFE in their Decatur, AL facility through a \$66 million expansion. Their demand is driven by wire and cable, film for solar power cell protection and other market segments.

MERGERS, ACQUISITIONS, ALLIANCES DIVESTITURES AND EXPANSIONS

M&A activity is expected to be about 30% lower in 2009- tight credit and volatile equity markets as well as increased bankruptcies are causative.

<u>Piedmont Plastics</u> acquires <u>Warehoused Plastic Sales</u> (estimated CDN\$20 million annual sales) and its four locations in Canada. Merges its Ontario branch with these - Mike Willoughby stays on...the future of the <u>Prisma Plastics</u> jv is in question at this point.

[Editors Note: Clarification...in November we reported that Baker Plastics had closed, when in fact it was acquired by Piedmont in October and is operated as Regal Piedmont, El Paso, TX branch. Baker Glass remains open with Dave Baker heading up.].

<u>Kendrion</u> sells its plastics semi-finished distribution business, <u>Vink Group</u>, to <u>Edmundson Distribution Ltd.</u> Sold in the U.K. under the <u>Amari Plastics</u> name – locations in 11 European countries. <u>Quadrant EPP</u> closes one UHMW plant in Ft.Wayne, IN and moves it to PA. <u>Mitsubishi Rayon</u> buys <u>Lucite International</u> for \$1.6 BN, becoming largest global producer of MMA monomer and PMMA sheet – new plant in Singapore comes on stream concurrently.

<u>PEOPLE</u>: <u>Mark Schiefer</u>, new V.P. Marketing, King Plastics. <u>Mike Healy</u> becomes branch manager, Modern Plastics, Peabody, MA. <u>Jeff Bostic</u> appointed Mfrs Rep for ZL Engineering Plastics in 7 western U.S. states. <u>C.J. Garvey</u> to rep Plastifab in 4 southwest U.S. states.

<u>INDUSTRY INTERVIEWS</u>: ...continuing our interview with **Sebastian Gehr**, **President**, **Gehr Plastics Inc. USA**

- Q. Should distributors inventory specialized products or should manufacturers subsidize?
- A. It surely is in the best interest of distributors to offer a permanently huge stock. Otherwise processors might be pulled into distribution in the long-term as well. The market already has certain "specialty" distributors and I don't see this changing.
- Q. What do you foresee as the most important markets and applications you see for the near future?
- A. Our existing materials are doing very well in chemically resistant applications like valves and pumps. We've also experienced a higher demand in mechanical applications where Acetal is used. We do expect a new market for eco-friendly materials though. Hence, we just hired a product manager for ECOGEHR with the objective to develop applications for bio-based or biodegradable engineering plastics. We need to point out the fine line between true life cycle assessment and "greenwashing", thus combining economics and ecology in marketing and application.
- Q. Who are some of your most important suppliers?
- A. Excellent resin sources such as PolyOne (PVC), Basell (PP), Arkema (PVDF) and BASF (Acetal). In ECOGEHR we trust in NatureWorks (PLA).
- Q. How will your experience in Europe impact the U.S. company?
- A. American companies tend to better protect their market. So it will be my challenge to find the right profit-driven approach between pushing new products according to our expansion strategy and protecting the market of our customers at the same time.
- Q. What are the biggest challenges facing Gehr in 2009?
- A. It somehow scares me that Americans who I've always considered as optimistic people tend to lose this optimism due to the recent development in stock markets, bail outs and presidential elections. Many fear socialism is just a step ahead, especially when I tell them that German employees pay 20.5 % of every paycheck as a social insurance contribution (covering health care, social pension and unemployment insurance) and employers an additional 19.6 % on top. With the economy going down, we need to keep both feet on the ground, preventing our expansion strategy at GEHR from becoming a hallucination.
- Q. What is your approach to doing business online?
- A. Being born in 1975, I was raised with the internet and surely am addicted to e-mails. We push our website, featuring new helpful tools like our "material selection guide" or a video summary of our ECOGEHRworkshop. But no fancy internet website can keep up with our sales team even if there existed lovely avatars of Alma, Chris, Doris and Karla online.
- ...to be concluded in January 2009 issue

Editors Note: Our best wishes to all our subscribers for a safe and happy holiday season. May next year bring good health and a return to prosperity and peace throughout the globe!

Information contained in this newsletter has been taken from trade and statistical sources that we consider reliable but we cannot assure its accuracy or completeness. Any opinions expressed reflect our judgement as of this date and are subject to change.