Processing Outlook Report: Resins & Plastics Segment

The most significant issues for this sector seem to stem from fewer capital equipment purchases being made over one year ago, and as a result, maintenance costs have increased, thereby impacting operational efficiency. Additionally, the adoption of new feedstocks and wireless technology is lower here than in other areas of the processing field.

When it comes to 2009 vs. 2008 purchasing projections:

- 65 percent indicated that they will spend less on safety programs and related products in 2009. Last year, nearly 30 percent spent more than $40,000 in the category.
- Similarly, 63 percent of respondents said that they will not invest as much this year on automation equipment as they did in 2008. Last year, more than 45 percent spent more than $100,000 in this category.
- Looking at overall capital equipment expenditures, 46 percent of respondents said that they spent more than $750,000 last year, but 75 percent felt that they will spend less in 2009 due to the current state of the economy.

In addressing energy costs:

- 33 percent of respondents said that their costs are down due to lower oil prices.
- 29 percent said that energy conservation initiatives have offset price hikes in keeping costs even.
- 17 percent said that costs are down due to internal energy conservation practices.

In working to reduce energy usage (respondents could check all initiatives that applied to their facility):

- 58 percent have started to do simpler things like shutting off lights, and relying less prominently on heating and air-conditioning services to help control costs.
- 42 percent have implemented new, more efficient lighting products.
- 42 percent also cited machinery overhauls and increasing preventive

maintenance practices in reducing the amount of energy needed to power their older equipment.
- 25 percent said that they have purchased new, more efficient equipment.
- 17 percent added instrumentation that allows for better equipment monitoring and control in maximizing energy usage.

When asked which initiatives could be implemented in order to realize greater energy efficiency gains, while least impacting operational efforts:

- 44 percent cited equipment upgrades.
- 35 percent said improved usage patterns.
- 21 percent identified facility improvements.

Questions were also asked regarding the respondents' familiarity and use of new feedstocks:

- The feedstocks that they are most familiar with, in order of precedence, are agricultural by-products, biomass and algae.
- Those feedstocks that are used in their plant, again in order of precedence, are agricultural by-products, biomass and plant by-products.
- The feedstock that respondents feel has the most promise moving forward is plant by-products.
- The biggest obstacle readers see with the integration of these non-fossil fuel sources are the associated development costs.

On the software front:

- The most important software functionality cited was inventory management (38 percent), followed by operational simulation capabilities (21 percent).
- The greatest realized gains from software investments were operational efficiency (44 percent) and asset accountability (35 percent).
- Looking ahead, respondents' greatest needs are simulation capabilities, followed by logistics and maintenance scheduling.

In terms of wireless technology integration, readers cited data capture and machine-to-machine communication applications as those with the greatest impact on their operations, but only 13 percent said that they have retrofitted current equipment with wireless capabilities. The greatest benefits cited are the absence of cables, fewer location limitations and simplified connections between machines.

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