Teel Plastics among World-Class Processors of 2015

Top of the Class: Meet 2015’s World-Class Processors
EXCLUSIVE BENCHMARKING SURVEY
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From: Plastics Technology
Issue: January 2016

Plastics Technology’s inaugural group of World-Class Processors—selected through an exclusive benchmarking survey—spans geographies, markets, processes, and materials. Diverse in size and capabilities, these companies have one key trait in common: efficiency. How do you stack up in comparison?

What makes up a world-class plastics processing operation? In an exclusive benchmarking survey sent to subscribers of Plastics Technology in the middle of last year, we attempted to find out. Drawing from a pool of 116 companies who responded to this inaugural survey (virtually all of them custom)—Plastics Technology designated 25 World-Class Processors on the basis of 11 different metrics covering operations, business performance, and human resources. Those measures included everything from scrap and on-time delivery rates to employee turnover and sales growth.

Performance of the responding companies in those 11 different metrics winnowed the field down to a select group that includes injection molders, blow molders, compounders, and extruders of film/sheet and pipe/profiles. The world-class group includes facilities in Mexico and Canada and 11 different states, with multiple firms from California, Michigan, and Wisconsin...

Making the Cut
Plastics Technology’s 25 World-Class Processors are drawn from a diverse group of plants. Survey respondents hail from 28 states, plus Canada, Mexico, and Puerto Rico. Michigan leads the way with 11 entrants, followed by California (nine), and six each from Wisconsin and Ontario. The total number of primary processing machines among respondents ranges from one to 104, while total employees are from one to 13,300.

By process, 60% of respondents offer injection molding, with 9% extruding pipe/profiles; 8% providing thermoforming and film/sheet extrusion; 7% doing compounding, and 6% blow molding.

By end markets served, industrial (51% of respondents) and automotive (46%) are in the lead, with more than a third serving customers in electrical/electronics, medical/healthcare, and building/construction. Engineering thermoplastics top the list of resins processed (71% of respondents), followed by polyolefins (62%), styrenics (53%) and TPEs (50%).

The preceding figures are for all respondents. In comparison, our World-Class Processors average 21 primary processing machines with an average age on that equipment of 12 years. In terms of secondary operations, about 82% offer assembly, with more than 59% providing welding and joining and half offering decoration. Industrial products are the top market (76%) for this group, followed by automotive (60%), building and construction (56%) and consumer goods/housewares (48%). Nearly 90% of the World-Class Processors run engineering thermoplastics, with 64% processing TPEs and 60% utilizing polyolefins.

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Of the injection molders, the vast majority operate presses with clamp force up to 500 tons; 90% provide insert molding and 60% offer two-shot molding. On the automation front, 100% use sprue pickers, while 60% use Cartesian-style robots and 40% articulated-arm robotics...

What MAKES THEM World Class?
In compiling data from our benchmarking survey to identify the World Class leaders, most results are not all that surprising (such as lower scrap rates for top-ranked companies), but there were surprises (longer average setup time for product/mold changes among the World Class group).

• World-Class Processors run fewer pounds of materials overall, but used more different kinds, including more reclaimed in-house scrap.
• They also have significantly fewer total active customers, suggesting a focus on quality of client vs. quantity.
• Also, they log more production hours in the shop and slightly greater machine utilization.
• On-time deliveries are higher and accident rates are lower.
• They also have a significantly lower number of total employees, though direct manufacturing employees were roughly the same, indicating lower overhead.
• There is no difference in employee turnover rate, although World-Class Processors finished the year with more employees than they started the year with.
• Somewhat surprisingly, average wages are lower at World-Class Processors and training time is equivalent.

Processing & Business Strategies
Nearly 90% of our World-Class Processors have some kind of certification, ISO or otherwise, and more than 50% apply lean manufacturing techniques. Fully 75% of them offer some value-added services, led by inventory stocking/logistics (78%), shipping/packaging/labeling (78%), and product design (72%). In a clear break from their colleagues, 74% of World Class Processors use process or production monitoring software, vs. only 50% of the broader group. Both, however, utilize ERP to a large extent, with World-Class Processors and everyone else eclipsing 60% usage.

World-Class Processors reinvest more revenue into capital equipment but spend less overall on machinery and more on resins. They see a greater return on those investments, with substantially higher sales growth and sales per machine, although they have lower average sales per employee, though the median is higher...