



Six categories, one big prize: WTG honors manufacturers for game-changing business process projects

A state-of-the-art manufacturing execution system (MES) in use at the historic St. James's Gate Brewery in Dublin gained international recognition at **World Trade Group's** (WTG) 2008 Strategic Manufacturing Awards. Credited with minimizing on-site waste by 40 percent, driving down utility costs by nearly [euro] 2 million, and bringing raw material costs to [euro] 1.35 million under budget, the entry from London-based **Diageo** won the Manufacturing IT award sponsored by **Rockwell Automation**.

Held in Germany in early October, the awards ceremony saw manufacturing executives from all over Europe—including representatives from Hewlett-Packard, Procter & Gamble, Whirlpool, and Baxter Healthcare—compete in six categories.

"To be shortlisted for the Manufacturing IT award is itself ample recognition that you are on the way to achieving manufacturing excellence," notes Chris Molamphy, continuous improvement process team leader for the Dublin brewery, where Ireland's creamy dark brown Guinness beer has been produced since 1759.

Manufacturing Business Technology was present on the judging panel, along with Pierfrancesco Manenti,

European research director at Framingham, Mass.-based **IDC Manufacturing Insights**; and lean manufacturing coach and international author Mark Graban.

In all, more than 100 entries were received, with Lawrence Allen, marketing director for WTG, describing the standard of submissions as "incredibly high."

Such was the case for **Autoglym**, a Letchworth, U.K.-based maker of automotive polishes and cleaning compounds, and winner of the Demand-Driven Manufacturing award.

According to Paul Phillips, director of production and logistics, the Autoglym project involved geographically separate product lines consolidated within the headquarters' manufacturing operation to deliver significant productivity and lead-

time improvements, as well as an increase in capacity.

Says Phillips, "A small team picked the project up and made it work. The company had invested a lot of money in this part of the business, and the board took a keen interest in how it worked out."

Similar sentiments were echoed by Bendt Jørgensen of Nordborg, Denmark-headquartered **Danfoss**, a privately held, 23,000-employee manufacturer of valves, and fluid power and refrigeration components, with 70 factories in 25 countries.

Winning the Operational Excellence award, says Jørgensen, VP and head of the company's lean initiative, "is clear recognition" of the effort that employees made over the past four to five years to boost the company's competitiveness.

The award recognized development and rollout of the companywide Danfoss Business System, a lean manufacturing and supply chain initiative modeled after Toyota's Toyota Production System. The initiative embraces production, purchasing, sales, and product development.

"We did a benchmarking exercise, and saw we were making only half the

earnings before tax of the best companies in our peer group," he explains. "And when we looked in detail as to why this was, we discovered that the way we were working on our factory floors wasn't as smart as the way they were working. Specifically, we were [involved in] activities that weren't adding any value to the customer."

No laggard, Danfoss had been on a journey of improvement since the early 1980s, when it had first sent employees to Japan to investigate Just-in-Time, Total Productive Maintenance, and similar concepts.

"But these were piecemeal initiatives, not an integrated approach—hence our decision to go for a companywide lean business system that embraces the whole value chain," Jørgensen explains. "To grow the company, we need to acquire other businesses—but that costs money. By improving our earnings before tax, we're generating that money, as well as making our operations more efficient."

It's a message that wasn't lost on lean coach and judge Mark Graban.

"Lean success comes not from implementing lean methods, but rather from using lean to meet business improvement goals," he notes. "Danfoss' results—improving productivity and capacity by more than 30 percent—are impressive."

Other awards were given to companies with special prowess in green manufacturing, skills versatility, and innovation.

Sponsored by Microsoft, the Innovation award went to machine tool automation specialist **Fatronic Tecnalia** of San Sebastián, Spain, for its development of a mobile robot intended to drill holes with a high degree of precision in large aeronautical components—such as aircraft wing spars—during the assembly stage.

Already in use at **Airbus España**, part of Europe's Airbus consortium, the robot is delivering cycle-time improvements of 33 percent, says Hugo Martinez de Lahidalga, projects and markets manager at Fatronic.

The Green Manufacturing award—and the overall Manufacturer of the Year award—went to machine tool maker **IDEKO-IK4**. Part of Spain's **Danobat** group, IDEKO acts as a research center for the group, developing new tools and techniques.

Working closely with a customer—

Paul Phillips, director of production and logistics for Autoglym, says the cleaning-compounds maker once had geographically separate product lines, but consolidated within the headquarters' manufacturing operation to deliver significant productivity and lead-time improvements, as well as an increase in capacity. That consolidation earned Autoglym the Demand-Driven Manufacturing award this year, presented by the World Trade Group.



Kennametal Technologies of Fuerth, Germany—IDEKO created a solution to a perennial problem: the machining of die cast magnesium components, which are conventionally machined under "wet" conditions with cutting oil due to the hazards of fires and explosions when working with the metal. During the machining processes, the tiny particles of magnesium will ignite if not continuously washed away from the cutting face of the tool, explains IDEKO's director of international R&D, Joseba Perez Bilbatua. The problem: disposing of the oil, which is difficult to treat or recycle.

It was for designing hollow cutting tools, new cutting parameters, and a redesigned spindle and tool holder that enabled oil-free "dry" machining that IDEKO won both the awards, explains Tom Boughton, WTG's manufacturing alumni project director.

"The Manufacturer of the Year award represents the pinnacle of manufacturing excellence, and acknowledges the achievements of a single enterprise in taking their business to the next level in competitive manufacturing," says Boughton.

But for IDEKO, more bankable recognition is forthcoming, reports Bilbatua. The European Commission, it seems, has injected funding to help the company adapt the technique for use with the composite materials used in aerospace manufacturing.

"The aerospace industry potential is very exciting indeed," concludes Bilbatua. ■

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Line-up of excellence: Executives from winning companies take the stage for the World Trade Group 2008 Strategic Manufacturing Awards presentation.

World Trade Group 2008 Strategic Manufacturing Awards

- Green Manufacturing Award (sponsored by **Autodesk**) and Manufacturer of the Year Award: **IDEKO-IK4**, Spain
- Manufacturing IT Award (sponsored by **Rockwell Automation**): **Diageo**, U.K.
- Innovation Award (sponsored by **Microsoft**): **Fatronic Tecnalia**, Spain
- Operational Excellence Award (sponsored by **Atos Origin**): **Danfoss**, Denmark
- Skills in Manufacturing Award: **PA Consulting**, Germany
- Demand-Driven Manufacturer of the Year: **Autoglym**, U.K.
- Special commendation: **Bombardier Transportation**, U.K.