

CONTROL

F O R T H E P R O C E S S I N D U S T R I E S

Unhappy Meal

THIS YEAR'S
TOP 50 VENDORS
GOT BY ON
SMALLER PORTIONS



Unhappy Meal

Cellphones. Your 401(k). Jared from Subway. A lot of things got smaller in 2001.

So did the process control world. In a year in which overall process control revenues dropped 7.5%, most of the companies on our CONTROL Top 50 table did likewise. In fact, five of our top seven companies and 14 of the top 20 reported revenue declines averaging 10%.

So, bucking a trend of recent years, not all the biggies got bigger. But following a trend, the second tier has almost disappeared: There's a \$1 billion difference between No. 4 Honeywell and No. 5 Danaher, the only company in the \$1-2 billion range. There is, however, plenty of room at the bottom for new, especially niche, players.

"The year 2001 was an extremely challenging year for lots of reasons, not the least of which was September 11. But that alone was not the cause of any recession," recalls Larry O'Brien, research director for process industries at ARC Advisory Group (www.arcweb.com). "A lot of trends were slowing down before that, especially capital spending."

Capacity utilization, inextricably connected to capital spending, has been descending since it neared 86% in 1989, but it remained above 80% for all but the end of 2000. Then the fall began. The measure hit its lowest point in at least 15 years in December of 2001: 72.9%. And while the figure crept up better than a point by the middle of this year, it dropped back as fourth quarter statistics began to roll in.

All of which casts a pall on the beginning of the new year, at least for suppliers of automation and control equipment. However, just because processors are not adding capacity doesn't mean they have stopped scrutinizing their processes and plants. There also has been some deflation going on, causing manufacturers of all types to see if they can make things more efficiently (read: cheaply). In good years, processors are looking for ways to

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meet increasing orders, to manage growth. In down times, they're still looking for help, but in ways to control costs, to do things more efficiently with fewer orders—probably with fewer employees, as well.

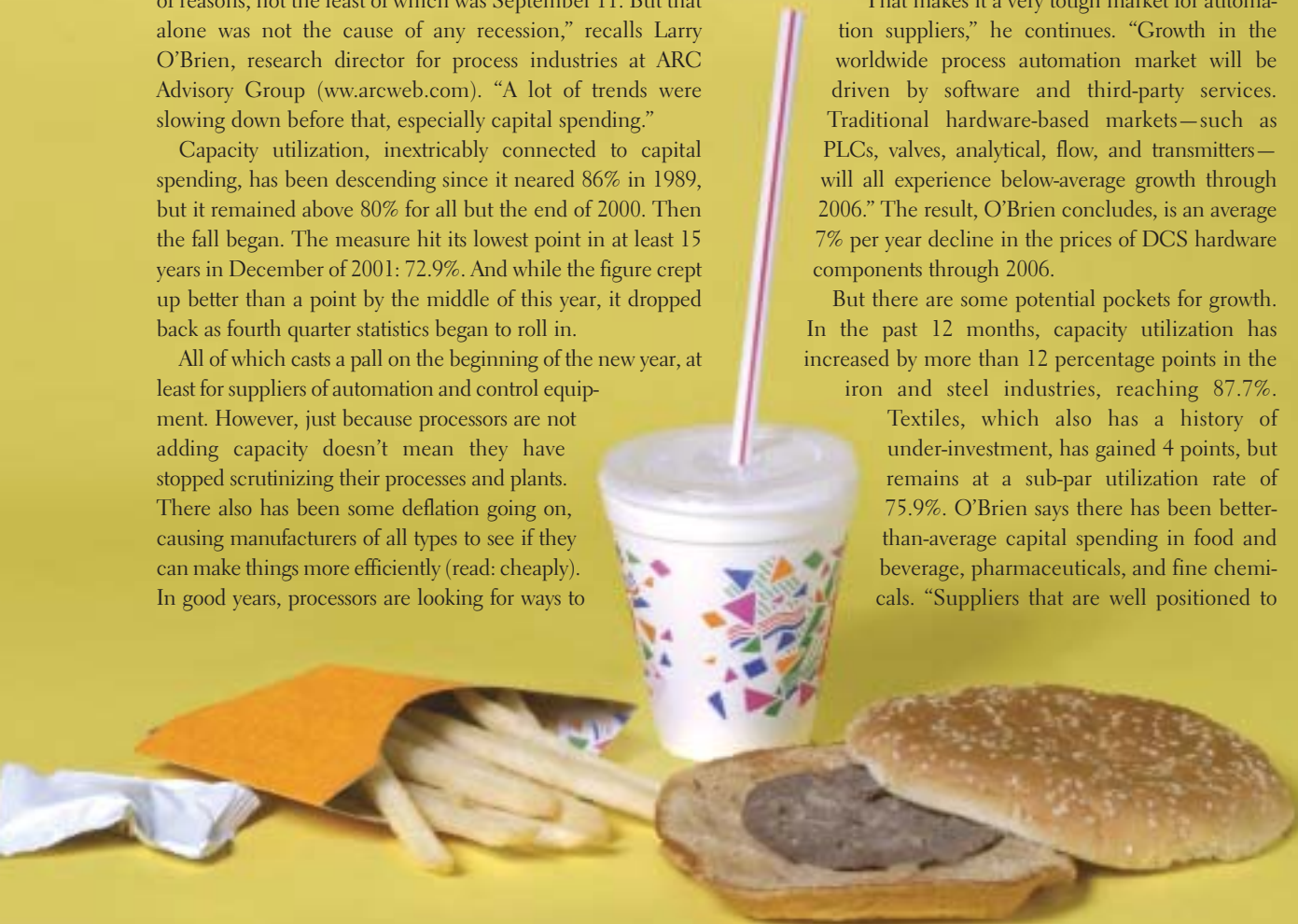
If there is a current area of growth, it's in software and services that can help manufacturers lower their costs now and, when at least a small upturn hits, do more with what they've already got.

"Over the past year we've seen a shift in manufacturing philosophy from capital projects to operational excellence," continues O'Brien. "Getting more out of what you've got. Asset utilization. Return on assets has become the primary criterion for justifying process automation.

"That makes it a very tough market for automation suppliers," he continues. "Growth in the worldwide process automation market will be driven by software and third-party services. Traditional hardware-based markets—such as PLCs, valves, analytical, flow, and transmitters—will all experience below-average growth through 2006." The result, O'Brien concludes, is an average 7% per year decline in the prices of DCS hardware components through 2006.

But there are some potential pockets for growth. In the past 12 months, capacity utilization has increased by more than 12 percentage points in the iron and steel industries, reaching 87.7%.

Textiles, which also has a history of under-investment, has gained 4 points, but remains at a sub-par utilization rate of 75.9%. O'Brien says there has been better-than-average capital spending in food and beverage, pharmaceuticals, and fine chemicals. "Suppliers that are well positioned to



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serve these industries should enjoy above-average growth.”

But there’s no pot of gold...at least not for a while. “It looked like a recovery was under way at mid-year, but things have worsened,” O’Brien concludes. “We don’t see any prospects for recovery till the middle of next year, and that certainly includes the process industries.”

ACQUISITIONS NONETHELESS

The overall drop in the economy and the intensified scrutiny of corporate finances made for a pause in the recent frenetic pace of mergers and acquisitions. Such transactions were largely absent in 2001, but some activity has returned this year. Even for our table, in most cases it was acquisitions rather than organic growth that caused sales increases, especially among the larger companies.

Some key transactions were:

- Invensys Plc (No. 3) shed assets in several areas. Its flow control business (about \$520 million in sales) helped move Flowserve (No. 9) into the Top 10 of the table. Honeywell (No. 4), which has been realigning its own assets, nonetheless bought a sensor systems unit from Invensys. An Invensys drive systems business with sales of \$115 million found (sort of) a new home when it was bought by its own management with the help of an investment group. While only peripherally involved in the process industries, the former Rexnord businesses are being sold to an investment firm.
- General Electric (No. 17), which caused havoc on our list in 2000 with its thwarted attempt to acquire Honeywell, was back in the game in 2001 with the purchase of VMIC, and this year got even busier buying the likes of Panametrics, NovaSensor, Osmonics, and now Intellution, the last from Emerson.
- Danaher moved up one spot to No. 5 with such acquisitions as GLI Instruments, Microtest, Viridor Instrumentation, and—too recent to show up on the chart—Raytek.
- Aspen Technology (No. 20) this year acquired Canada’s Hyprotech.
- Pro-face America (No. 31) last year bought Viewtronix and merged it into Xycom.
- SPX Valves and Controls (No. 47) purchased Daniel Valve from Emerson Electric.
- Even tiny Matrikon (No. 50—process control revenues \$26 million worldwide, \$18 million North America) was dealing, recently acquiring Australia’s Hunter Control.

THE CONTROL TOP 50 SUPPLIERS

2001 Process Control Revenue (\$ Millions)

Company	North America ¹	Worldwide ²
1. Emerson Process Management <i>(Saab Marine)</i>	2,969	5,112
2. ABB	2,147	8,623
3. Invensys	2,141	5,097
4. Honeywell Automation Solutions	2,061	3,786
5. Danaher Corp. <i>(GLI, Thomson, Raytek)</i>	1,066	1,523
6. Siemens Energy & Automation	949	6,624
7. Schneider Electric	805	3,250
8. Rockwell Automation	705	940
9. Flowserve <i>(Invensys Flow Control)</i>	430	829
10. Spectris	320	642
11. Dresser Industrial	278	555
12. MKS Instruments	244	370
13. ThermoElectron	244	334
14. Metso Automation	230	621
15. National Instruments	196	385
16. Ametek	174	220
17. General Electric	160	286
18. Tyco	125	259
19. Yokogawa Electric	117	2,100
20. Aspen Technology	114	208
21. Watlow Electric	77	91
22. Roper Industries	73	170
23. Bristol Babcock	72	108
24. Transmation	61	67
25. Dwyer Instruments	58	72
26. Endress+Hauser	54	632
27. Teledyne Instruments	50	100
28. MTS	49	98
29. GSE Systems	48	54
30. Microwave Data Systems	48	62
31. Pro-face America	45	63
32. Crane Controls	42	49
33. Magnetrol	36	61
34. Control Components	33	40
35. Barton Instrument Systems	32	65
36. Ohmart/Vega	29	140
37. Omron Electronics	28	160
38. Opto 22	27	36
39. Krohne America	27	310
40. FMC	25	33
41. Thermo Electric	24	33
42. Badger Meter	23	27
43. Burkert	22	270
44. Mettler Toledo	22	54
45. Controlotron	21	27
46. OSI Software	20	30
47. SPX	20	46
48. Pepperl+Fuchs	19	136
49. Ionics	19	27
50. Matrikon	18	26

1. Estimated sales of process control and instrumentation.

2. Worldwide sales figure is for the parent company.

Names in parentheses are recent acquisitions.

LOOKING AHEAD: M&A ACTIVITY COULD RESUME:

While mergers and acquisitions activity in the test and measurement sector has declined over the past two years, a new investment banking study predicts continued consolidation in the \$100 billion global category, driven in part by lower valuations and an ongoing effort among companies to achieve global reach and to diversify their end markets.

Strategic buyers, including large multinational test and measurement companies, are considered the most likely acquirers, according to a report released in mid-October by Robert W. Baird & Co., a Milwaukee-based global investment bank.

Despite the current weak economic environment, the report concludes the test and measurement sector exhibits a number of characteristics that make it particularly attractive for consolidation. These include a high level of fragmentation, high barriers to entry based on intellectual capital and customer relationships, and the opportunity for acquirers to create significant synergies by adding new product lines and penetrating new end markets.

"We have identified 800 acquisitions representing \$28 billion in aggregate value in the sector since 1997," says Steven Bernard, one of the authors. "Given the significant pressures on the industry to consolidate and the prevailing competitive climate, we expect this merger and acquisition activity to continue."

"While some industry participants have struggled with the slowdown in the economy, others have emerged with their balance sheets intact or even strengthened," adds Joel Cohen, the other author. "It is these companies that we view as the most likely industry consolidators, although they are likely to be more focused and disciplined than they have been in the past."

A number of private equity firms are also beginning to participate in the consolidation, according to the report, although the ability to structure highly leveraged transactions is currently constrained.

"Today's relatively weak mergers and acquisitions environment does not reflect any changes to the fundamentals that are driving consolidation in the industry," said Cohen. "Increased globalization, heightened competition, and rapid technological innovation are all issues test and measurement companies must confront every day. Over the longer run, these considerations dictate that the trend toward consolidation will continue."

The Baird study estimates there are more than 3,600 test and measurement companies in the U.S. and another 2,000 internationally, with heavy concentration in countries such as the U.K., Germany, and Japan. These companies fall within three broad sub-sectors: general industrial, including food processing, consumer products, petrochemicals, automotive, and aerospace; electrical, including semiconductor, communications, and electronics; and laboratory, including life sciences and healthcare.

The study predicts the sector will rebound with the overall economy, buoyed by such factors as the increasing complexity of products and processes, the heightened importance of quality, and advances in technology and software.

Merger and acquisition activity has picked up in recent months. "There's still room for consolidation, even at the top," says O'Brien. "We wouldn't rule out a blockbuster deal—there are always rumors."

A more likely event, he says, is increasing interest in the process control business by players outside of the sector or from those with a smaller percentage of total company revenues in process control. "Companies like Siemens and Rockwell have indicated they want to get more involved in the process industries. And who knows what GE's acquisition of Intellution will mean for its interest in process control?"

HOW THE RANKINGS WERE DETERMINED

The CONTROL Top 50 for 2001 reflects extensive efforts to gather sales figures of instrumentation and control equipment and services to the process industries.

CONTROL columnist and industry market analyst Terrence McMahon was responsible for collecting and analyzing the data. Assisting in the study were Indrek Grabbi, international trade specialist, U.S. Dept. of Commerce, Washington, D.C.; Wil Chin, senior analyst, ARC Advisory Group, Dedham, Mass.; Stephen Walton, founder of Walton Associates strategic consulting, Menlo Park, Calif.; Cynthia Esher, president, Measurement, Control and Automation Assn., Williamsburg, Va.; and Kenneth Lacy, partner, Acquest International L.P., Philadelphia. These individuals analyzed the revenues of many private and public companies to arrive at the final figures.

Because rankings are based on revenues, one variable that must be taken into account is that some firms sell almost exclusively to the process industries, while others do not. Some companies went to great effort to provide only the sales figures of process instrumentation and controls to the process industries, as requested by CONTROL. Other companies were not able to break out these figures, and their sales were estimated by the committee.

The CONTROL Top 50 distinguishes between the process control end user and the original equipment manufacturer (OEM) markets. For purposes of this survey, process control products include sensors, transmitters, analyzers, displays, controllers, control systems, packaged software, actuators-positioners, throttling valves, and related items. Also note that as in the past several years, the revenues from drives (but not motors) and software and services are included in the totals.

CONTROL defines the process industries using the North American Industrial Classification System (NAICS) codes from the U.S. Census Bureau, primarily codes 221 (utilities—power generation, water and wastewater treatment), 311 (food), 312 (beverages and tobacco), 313 (textile mills), 322 (pulp and paper), 324 (petroleum), 325 (chemicals), 326 (plastics and rubber), 327 (nonmetallic mineral products) and 331 (primary metals).

