

U.S. \$95.00

Manufacturing 2013

Executive Summary



Based on the MPI Manufacturing Study of U.S. plants
Conducted by The MPI Group



The MPI Group

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Introduction

The *Manufacturing 2013 Executive Summary* examines plant-level performances and practices for facilities in the United States and is based on the 2012 MPI Manufacturing Study. This *Executive Summary* also compares 2012 study findings to 2011 study findings for U.S. plants. The MPI Manufacturing Study is conducted by The MPI Group and is intended to help manufacturing executives in benchmarking their operations performances; to compare best practices; to assess management of workforces, equipment, and technologies; and, ultimately, to improve their operations.

The Executive Summary serves as a barometer of the U.S. manufacturing environment:

- *Manufacturing activity improved in 2012:* Production volume as a percentage of designed plant capacity rose to 75% in 2012 vs. 70% in 2011. Almost one-quarter of plants reported production volume at 80% or higher of designed plant capacity. In addition, 66% of plants reported increased output in the past 12 months.
- *Employment didn't rise as fast as demand in 2012:* Despite increasing sales, employment at plants remained flat: Respondents reported the same median number of employees (85) as in 2011. The combination of increased output and stagnant employment helped to boost sales per employee to \$192,000 (median) in 2012 vs. \$173,000 (median) in 2011.
- *Employee costs increased in 2012:* Production employee average wages and starting wages rose by approximately \$1 per hour in 2012 vs. 2011. Labor costs as a percentage of costs of goods sold also rose in 2012 to 25% (median) from 20% in 2011. In addition, 73% of plants indicated that wages increased in the past 12 months, and 61% reported that employee benefits costs increased.
- *Improvement methodologies lagged in 2012:* The percentage of plants with an improvement methodology fell in 2012 from 2011, and the use of lean manufacturing dropped to 59% in 2012 from 75% in 2011. In addition, only 27% of plants described the implementation of their improvement methodology as extensive or complete. The percentages of plants with operations programs and practices to drive improvements were also lower in 2012 than in 2011. For example, use of continuous-improvement programs dropped to 69% of plants in 2012 vs. 77% in the previous year.
- *Production work moved from suppliers back into plants in 2012:* An average of 7.8% of total production volume was brought back into plants from outside suppliers in the previous 12 months; 30% of plants increased insourcing. Conversely, an average of 5.2% of production volume moved out to external suppliers of plants in the previous 12 months; 35% of plants increased outsourcing. Based on overall figures, an average of 2.6% of volume moved back to plants. Also of note, the percentage of imported material/components from China dropped to 0% (median) in 2012 vs. 1% (median) in 2011, and 47% of plants imported from China in 2012 compared to 56% in 2011.
- Approximately 44% of manufacturers have made significant progress toward world-class manufacturing status or have fully achieved world-class status (up from 40% in 2011), but 12% of plants report no progress toward world-class status (nearly double the percentage from 2011).

For more information on U.S. manufacturing performance, practices, and trends, read on.

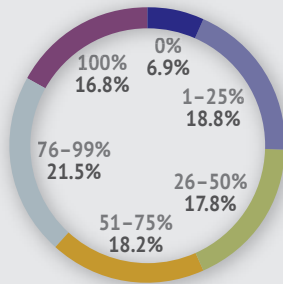


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Human Resources

Sixty-four percent of manufacturers recognize human-resource management as important or highly important to their plant's success over the next five years. But only 44% provide more than 20 hours of training annually to each employee, and only 39% have a majority of employees in self-directed teams. Many plants are, though, cognizant of training for specific needs: 56% of plants have more than half of their positions documented with skill standards and supported by aligned training.

What percentage of positions have documented skill standards supported by training aligned with those standards?



How important is human-resource management to your plant's success over the next five years?

	2012	2011
Not important	2.6%	2.2%
Minor importance	9.6%	9.7%
Somewhat important	23.6%	20.7%
Important	39.6%	39.2%
Highly important	24.6%	28.2%

What are the average annual hours of formal training received by each plant employee?

	2012	2011
Less than 8 hours	18.7%	20.0%
8 - 20 hours	37.7%	37.3%
21 - 40 hours	21.9%	26.7%
More than 40 hours	21.6%	16.0%

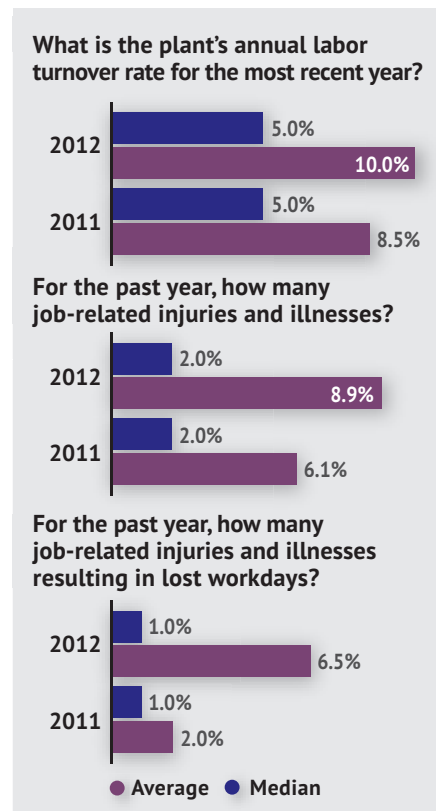
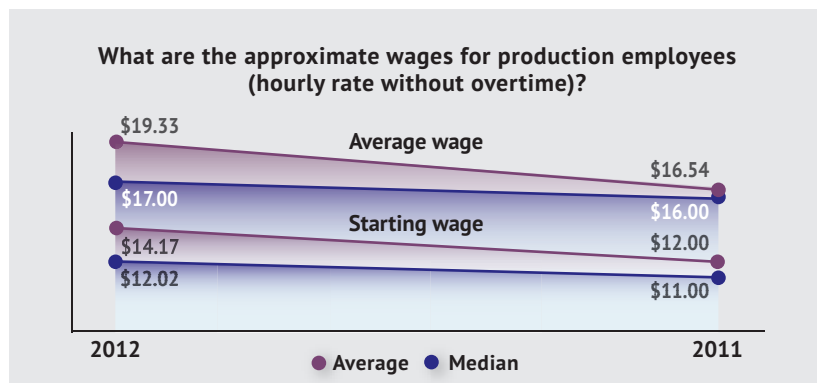
What percentage of production employees participate in empowered or self-directed work teams?

	2012	2011
0%	22.9%	21.2%
1 - 25%	24.5%	26.1%
26 - 50%	13.9%	14.0%
51 - 75%	11.6%	11.7%
76 - 99%	12.6%	10.8%
100%	14.5%	16.2%

Manufacturers increased average and starting wages for production employees by approximately \$1 per hour in 2012 vs. 2011. In addition, a majority of plants offer various HR programs and benefits, ranging from paid vacation (90% of plants) to bonus plans (53%). Only 3% of plants offer no HR programs or benefits.

Key workforce performance metrics, unchanged from 2011, include:

- Labor turnover (median 5%)
- Job-related injuries and illnesses (median 2.0)
- Job-related injuries and illnesses resulting in lost workdays (median 1.0).



Which of the following human-resource practices/programs are used at this plant? (multiple responses allowed)

	2012	2011
Paid vacation days	89.5%	94.7%
Paid medical benefits	80.6%	84.6%
Formal safety/health program	74.2%	78.0%
Annual review and raise program	69.1%	77.1%
Paid sick and/or personal days	66.2%	64.8%
Formal employee training program	60.8%	59.0%
Education reimbursements	55.1%	60.8%
Leader/supervisor development	54.8%	54.2%
Bonus plan	52.6%	57.3%
Teaming/team-building practices	44.9%	45.4%
Recruiting and hiring program	34.4%	33.9%
Profit or revenue-sharing plan	34.1%	41.9%
Apprenticeship program	13.4%	10.6%
Employee-ownership options	10.2%	11.5%
None of these	3.2%	0.9%



Thank you for reviewing the
Manufacturing 2013 Executive Summary.

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