Manufacturing Prospers But What About Pay?

Salaries are up, satisfaction is high, but continued prosperity requires a third payoff – the next generation of manufacturing leaders.

By Jill Jusko

The results of IndustryWeek's annual salary survey are enough to make you scream. It's a cry of aggravation, but not one prompted by evidence of dismal pay or dissatisfied employees.

Indeed, the exact opposite is true. According to results of the 2015 IndustryWeek Salary Survey, the average salary for U.S. manufacturing management is up over last year. Moreover, last year's average was up over the previous year's. In 2015, the majority of respondents also saw pay raises, again a mirror of the previous year's results.

In addition to good news on the pay front, the vast majority of survey respondents say they are satisfied with their choice of manufacturing as a career path, which—you guessed it—is not breaking news.

And stepping outside the bounds of compensation for a moment, the news for U.S. manufacturing also is good. Economic activity in the manufacturing sector expanded for the 25th consecutive month in January, according to the latest Manufacturing ISM Report on Business, issued by the Institute for Supply Management. The overall economy was up for the 68th consecutive month.

So why the scream? Because, despite all evidence to the contrary, manufacturing as a career choice continues to elicit negative reviews by the American public. For example, the latest in a Public Perception of Manufacturing series conducted by the Manufacturing Institute and Deloitte showed that only 37% of respondents would encourage their kids to pursue a manufacturing career – this despite the fact that the overwhelming majority of Americans rank manufacturing as important to America's economic prosperity.

Who wouldn't scream given this wide gulf between perception and reality?

Head Honchos Earn More

Average Salary by Job Responsibility

Position (% of response)	**Salary**
Corporate/Executive Management (CEO, COO, CFO, President, GM, etc.)(14%)	**$193,644**
VP, Operations (4%)	**$159,971**
VP, Manufacturing/Production (2%)	**$135,098**
R&D/Product Development Management (3%)	**$137,040**
Director, Manufacturing/Production (3%)	**$136,332**
VP, Director, Purchasing/Procurement/Sourcing (1%)	**$124,135**
Consulting/Education (3%)	**$105,874**
Plant/Facilities Management (6%)	**$104,393**
Operations Management (5%)	**$101,669**
Quality Management (7%)	**$101,083**
IT/IS Management (1%)	**$100,655**
Lean/Continuous Improvement Management (5%)	**$99,962**
Financial Management/Controller (2%)	**$98,418**
Engineering Management (14%)	**$97,176**
Supply Chain/Logistics Management (6%)	**$93,619**
Sales/Marketing Management (6%)	**$92,490**
Manufacturing/Production Management (7%)	**$89,528**
Environmental, Health or Safety Management (4%)	**$88,530**
Purchasing/Procurement/Sourcing Management (5%)	**$86,352**
Human Resources Management (2%)	**$83,657**
Administration <1%)	**$48,020**

Bridging the Perception Gap

Here is the reality: U.S. manufacturing management earned an average salary is $114,615, according to the 2015 IndustryWeek Salary Survey. This compares with the previous year's average of $111,480 and represents the third consecutive year in which the average salary has climbed above the $100,000 threshold. The me-

2015 IW Salary Survey's Digital Footprint

Go online to **www.industryweek.com/resources/salary-survey** for additional 2015 Salary Survey tables detailing average salaries by a range of factors, including gender and seniority. And check out the IW salary calculator, which allows you to dive deeper into the data. Further, read more of the good and the bad from the manufacturing professionals who participated in this survey.

The Highs and Lows of Manufacturing Pay

Survey respondents are a vocal bunch. Read a small sampling of their comments here and go online for a full accounting.

The manufacturing [industry] is stronger than it has been for years, I am very optimistic for the next 3 years at least. *– corporate/executive manager in the industrial machinery industry with 21 to 25 years of experience, living in the South Atlantic region and earning $150,000*

I've moved 3 times in 3 years since graduating college while working for large global manufacturers. It seems that this trend will continue, and any person entering manufacturing today must be prepared to work on a global scale and that means staying highly mobile. Each move has generated more income and more responsibility, so the incentive to move is definitely there. *— manufacturing/production manager in the electronics/high-tech/telecom equipment industry with 3 to 5 years of experience, living in the South Atlantic region and earning $75,000*

The education department in this country did a terrible disservice to manufacturing when they mandated that students should strive for a college education and didn't highlight the importance and job satisfaction that comes with careers in manufacturing and the so-called blue collar workforce. It is obvious today that our country is in dire need of men and women to complete this portion of our labor force. *—corporate/executive manager in the metals industry with 6 to 10 years of experience, living in the Middle Atlantic region and earning $135,000*

Chemical Industry Retains Top Spot

Average Salary by Industry

Industry sector (% of response)	Salary
Chemicals (5%)	$137,344
Industrial Machinery (14%)	$134,220
Pharmaceuticals/Health Care (2%)	$129,759
Medical Devices/Lab Equipment (3%)	$124,722
Apparel/Textiles (2%)	$120,535
Electronics/High-Tech/Telecom Equipment (6%)	$119,254
Metals (12%)	$118,211
Petroleum & Coal (2%)	$116,223
Food & Beverage (4%)	$111,352
Aerospace & Defense (9%)	$109,943
Automotive/Transportation Vehicles & Equipment (13%)	$109,859
Paper/Printing/Publishing (4%)	$105,877
Consumer Goods/Durables (5%)	$102,184
Consulting/Education (4%)	$100,299
Plastics & Rubber Products (5%)	$99,546
Construction/Building Equipment (5%)	$96,487
Computer Equipment/Peripherals/Software (1%)	$94,349
Stone, Clay & Glass (2%)	$89,171
Wood Products/Furniture (2%)	$82,585

Manufacturing Careers Give Satisfaction

How satisfied are you with manufacturing as a career path? (% of response)

	2015	2014	2013
Very satisfied	43	42	40
Satisfied	42	45	45
Neither satisfied nor unsatisfied	12	10	11
Unsatisfied	3	2	3
Very unsatisfied	1	<1	1

dian salary is $96,000.

More than two-thirds (69%) of respondents reported a boost to their salary over last year, while fewer than 4% saw their base pay drop.

In addition, 59% of respondents said they received a bonus on top of their base salary. The bonus amounts varied widely and in some instances exceeded base pay. The average bonus among those who reported a dollar figure (versus a percentage) was $25,000, although several ventured well over $100,000.

Managers Enjoy Job Satisfaction

How satisfied are you with your current job? (% of response)

	2015	2014	2013
Very satisfied	31	27	27
Satisfied	43	49	47
Neither satisfied nor unsatisfied	16	14	16
Unsatisfied	8	8	8
Very unsatisfied	2	2	2

"I'm quite satisfied with my role and my level of compensation. Enjoy my co-workers and the many challenges/demands of my position," commented one survey respondent, an R&D/product development manager in the plastics and rubber products industry, living in the Middle Atlantic region and earning $120,000.

"Our company offers a very attractive compensation and benefits package," writes a sales and marketing manager in the automotive/transportation vehicles & equipment industry, earning a base pay of $133,000 and living in the North Central region.

Of course, not every manufacturer is sharing equally in that prosperity. For example, Deere & Co. recently reported a drop in quarterly sales, as well as job layoffs, and the oil price crash is taking a toll on manufacturers feeding that sector.

"We are experiencing a slow economy in the agriculture field," commented one salary survey respondent, a quality manager in the industrial machinery industry, living in the North Central region and earning $75,000.

Adds a manufacturing/production director in the metals industry, living in the South Central region and earning $195,000: "Working for a global company means that slow economic growth in Europe hurts the U.S. operations."

On a more personal level, "I have not had a pay raise since October 2002," says a manufacturing/production manager in the metals industry and earning $40,560.

Where the Money Is

Manufacturers are a diverse group of industries, from makers of washing machines, toasters, and chemicals to builders of automobiles, medical devices and packaging equipment. Their average

I am over qualified for the position I'm in and woefully underpaid. Just recently has the job market for STEM jobs started to open up. – *plant/facilities manager in the metals industry with 26-plus years of experience, living in the Middle Atlantic region and earning $70,000*

I could earn more, but company keeps investing in modern equipment, making the future bright. – *vice president of operations in the metals industry with 26 years of experience, living in the North Central region and earning $102,000*

My salary is a little low for my experience level, but I am working for a small site that had budget restrictions. My biggest professional challenge is getting all the work done that is needed—safety programs, training, recordkeeping, etc. – *environmental, health or safety manager working in the chemicals industry with 16 to 20 years of experience, living in the North Central region and earning $70,000*

If I was working just for my salary I would have left a long time ago. Location to family and friends are the key things that keep me here. As long as what I make pays my bills, I don't need for a lot. – *environmental, health or safety manager in the metals industry with 26 years of experience, living in the North Central region and earning $48,000*

Salary is above average for industry, which has me a bit worried if a decision is made to downsize or cut costs. Need to explore other industries/companies where my skills/interests are highly valued and there is opportunity for career advancement. – *lean/continuous improvement manager in the plastics and rubber products industry with 21*

Challenging Work Matters

What matters most to you about your job? (% of response)

Job Stability	19%
Challenging/Interesting Work	19%
Base Salary	17%
Recognition of Your Importance to Company	11%
Career Advancement Opportunities	10%
Company's Recognition of the Importance of Manufacturing Operations	5%
Benefits	5%
Flexible Schedule	5%
Relationships with Co-Workers	4%
Continuing Education/Training	2%
Vacation	1%
Other	3%

It's Not Just Schooling

Average Salary by Education Level

Highest level attained (% of response)	Salary
High School (4%)	$74,443
Some College (13%)	$116,600
Two-Year Degree (8%)	$85,104
Four-Year Bachelor's Degree (33%)	$105,852
Some Graduate Study (12%)	$126,643
Master's Degree (27%)	$130,652
Doctorate (3%)	$150,674

salaries are equally diverse. Manufacturing management in the chemicals industry earned $137,344, well above the industry average of $114,615. At the other end of the spectrum, managers in the wood products and furniture industry earned $82,585, which is just 72% of the industry average.

Age is a significant factor in pay. For example, manufacturing managers between ages 21 and 29 earn an average salary of $70,480. It jumps to $90,530 in the 30 to 39 age group and reaches $136,084 for managers who are age 60 or above.

That said, survey respondents between age 21 and 29 comprised only 2% of the total, and respondents age 39 and under were 10% of the survey pool. Are these low percentages indicative of an industry that is failing to make its case to younger workers?

Manufacturing Provides a Challenge—and Satisfaction

Ask Craig the previous question, and his personal response will be "no." Craig is in the 30-to-39 age range, with a degree in industrial engineering and eight years in manufacturing. For this continuous improvement manager "growing up in the Midwest, seeing family members creating things—making products—seemed more exciting than working in the digital world."

The challenge of manufacturing is attractive, he says. "I would recommend manufacturing as a career," he says. "It's always exciting. Every day, every week, every year there are new things to work on to make our teams and our company more efficient."

The challenge manufacturing presents, in fact, is a huge part of its appeal, according to the 2015 IW survey. Indeed, "challenging/interesting work" tied with "job stability" as the factor that mattered most to respondents about their job. Both garnered a 19% share. Base salary was a close second, with 17% of respondents identifying it as the top priority.

Many of the 2015 IW Salary Survey respondents appear to share Craig's career reflections. "Manufacturing offers the best challenges because it always changes directions. That's where the excitement comes from," writes a manufacturing/production manager in the plastics and rubber products industry living in the Middle Atlantic region and earning $104,000.

Perhaps manufacturing's biggest selling point is this: Those who are engaged in it, enjoy it.

"Overall it's been a very wonderful experience," says Brian Barnes of Alliance Machine Systems International, which builds machines for the paperboard industry.

Today Barnes is vice president of manufacturing but when he entered manufacturing 34 years ago, it was as a second shift mechanic in an entirely different industry sector. His introduction to the management side of manufacturing occurred in 1986, when a manager said to him, "You complain enough about how things should be done; I'm going to make you a supervisor."

"It's challenging, but it's rewarding," adds Antoinette Brahm, executive vice president of Clean Air America Inc., a Rome, Ga.-based manufacturer of industrial air filtration systems. Business is good, she says, due in part to the strength of the automotive industry, which

to 25 years of experience, living in the South Atlantic region and earning $128,400

Underpaid and overworked.—*supply chain/logistics manager in the industrial machinery industry with 16 to 20 years of experience, living in the New England region and earning $50,000*

I really enjoy working in manufacturing leadership. The challenge to develop a strong team and deliver solid results keeps me working hard every day. —*director of manufacturing/production in the chemicals industry with 26-plus years of experience, living in the South Atlantic region and earning $167,000*

Required to work 70 to 80 hours per week in a high stress environment. To work in aerospace you need to be willing to give up your personnel life. Company in growth is struggling to find qualified skilled work force. —*manufacturing/production manager in the aerospace and defense industry with 26-plus years of experience, living in the Pacific region and earning $85,000*

Feel stuck in my position. Salary + bonus is currently acceptable, but with little to no room for advancement, this will be an issue. —*manufacturing/production manager in the plastics and rubber products industry with 16 to 20 years of experience, living in the South Central region and earning $134,000*

I am an owner, so company health is more important than my personal income.—*corporate/executive manager in the metals industry with 26-plus years of experience, living in the South Atlantic region and earning $45,000*

Base Salary Grows for Most

Change in Base Salary from One Year Ago (% of response)

	2015 Survey	2014 Survey	2013 Survey
Increased more than 5%	**12**	**10**	**11**
Increased 3%-5%	**22**	**22**	**21**
Increased 1%-3%	**35**	**39**	**35**
No change	**28**	**27**	**28**
Decreased 1%-3%	**1**	**1**	**1**
Decreased 3%-5%	**<1**	**<1**	**1**
Decreased more than 5%	**2**	**1**	**3**

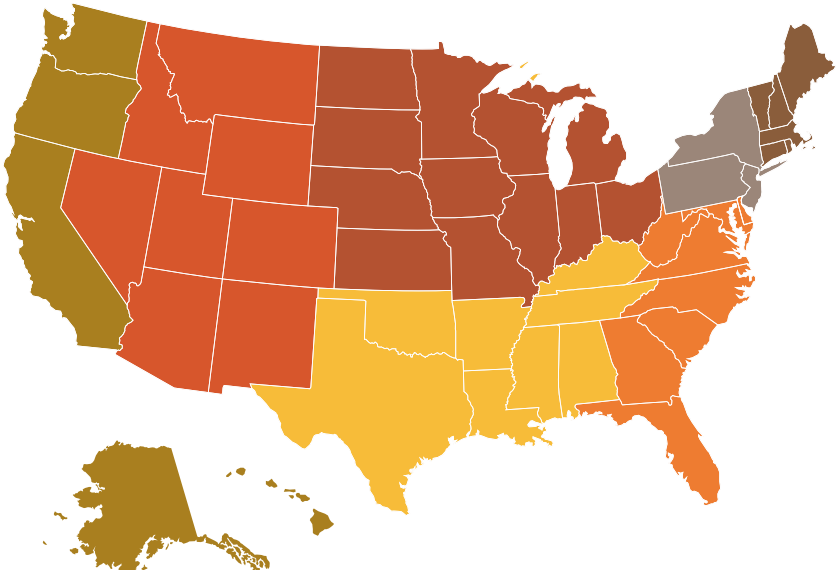
Starting Pay is Strong

Average Salary by Experience

Years in manufacturing (% of response)	Salary
1-2 (3%)	**$84,354**
3-5 (4%)	**$83,806**
6-10 (5%)	**$87,313**
11-15 (6%)	**$115,718**
16-20 (12%)	**$100,721**
21-25 (14%)	**$106,920**
26+ (56%)	**$125,177**

Middle Atlantic Region Shows Strength

Average Salary by Geographic Region



Region	% of Response	Salary
Middle Atlantic (NJ, NY, PA)	11%	**$167,565**
Mountain (AZ, CO, ID, MT, NM, NV, UT, WY)	4%	**$108,334**
New England (CT, MA, ME, NH, RI, VT)	5%	**$117,305**
North Central (IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI)	43%	**$106,464**
Pacific (AK, CA, HI, OR, WA)	9%	**$113,453**
South Atlantic (DC, DE, FL, GA, MD, NC, SC, VA, WV)	15%	**$109,034**
South Central (AL, AR, KY, LA, MS, OK, TN, TX)	13%	**$107,851**

serves as a major customer base. While all manufacturing occurs in Georgia, approximately 35% of the company's business is to export markets.

"I've been very happy with my career," says Andy Britt, a 33-year manufacturing veteran and senior process engineer. "There are always problems to solve, and I've got to work with really smart people over the years." Of course, he adds, "it can be aggravating."

The expressions of career satisfaction aren't isolated comments. Fully 85% of salary survey respondents told IndustryWeek they were satisfied with manufacturing as a career choice, with 43% of those identifying themselves as "very satisfied."

Such high percentages align with a second finding of the Manufacturing Institute/Deloitte Public Perception of Manufacturing series. That finding: Americans with high familiarity with manufacturing held more favorable perceptions of manufacturing as a career choice than those without. Moreover, they were twice as likely to encourage their children to pursue manufacturing as a career.

That's good news because finding manufacturing talent is an ongoing concern. Clean Air America's Brahm says finding engineering talent in the U.S. has been a challenge for her company, and she's not the only one. A corporate/executive manager in the automotive/transportation vehicles and equipment segment issued this warning: "Manufacturing's largest challenge in the years to come will be its ability to develop a large enough talent pool to support domestic manufacturing growth."

What's the takeaway? While manufacturing has a big challenge ahead of it—filling the manufacturing workforce pipeline—it should be populated with the right people to manufacture a solution. And they have a good story to tell. ■

Methodology

The 2015 IndustryWeek Salary Survey was conducted online via emailed invitations to subscribers. The survey took place from November 2014 to January 2015. A total of 1,771 surveys were returned. After the data were cleaned (removing largely incomplete surveys, duplicates and a handful of non-U.S. subscribers, primarily) 1,441 people turned in responses from the 2015 survey. Respondents were not compensated but were offered the chance to provide candid comments regarding their salaries, occupations and employers. The candid comments may have been lightly edited, primarily for spelling. All responses were anonymous.