

# A Study of Critical Skills In Manufacturing The Rhode Island Experience



Sponsored By  
The Rhode Island Manufacturing Extension Services  
And  
The Rhode Island Manufacturers Association

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## Executive Summary

This study speaks from the voice of the manufacturer. The respondents are all decision makers from companies operating in Rhode Island.

While manufacturing faces challenges in Rhode Island, the study provides reasons to believe that there will be a continuing and important economic role for manufacturing in this State for years to come. At present, a significant number of companies are hiring both entry level and skilled employees.

Perceptions regarding the skills of today's younger workers are not as negative as one might believe from the general level of discourse. While there are competency issues of significant importance, there were also many favorable responses used to describe recent new-hires. Further, the vast majority of respondents believe that their workforce is equal to or better than that of their competition.

More specifically, the study was designed to generate insights into several critical areas. The first touched on the top five industry workforce challenges faced by local manufacturers. On the negative or challenge side, the workforce is aging, skilled workers are difficult to find, and potential entry level workers are believed to be less interested in manufacturing jobs than in the past. The personal issues employees face that result in excessive absenteeism is a major problem as, to a lesser extent, are the distances employees must travel to get to work. Many firms commented on general competence issues (e.g. 28% of respondents believe that recent entry level employees are either 'not very' or 'not at all prepared' for a full time job). While some bright spots were found, problem solving ability is a problem.

The study was also asked to address the relationship between the existing 'hard' and 'soft' skills of the entry level and incumbent workforce in the manufacturing sector and the required skills as perceived by manufacturers. The data is clear that manufacturers are most concerned about such 'soft skills' as work ethic, punctuality, and teamwork. Importance ratings on these issues are higher than all of the 'hard skill' categories, including that of speaking English.

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Some positions are more difficult to fill than others. The study identified the most difficult entry-level and skilled positions as of 2007.

ENTRY LEVEL	% OF MFG REPORTING A DIFFICULT POSITION	SKILLED	% OF MFG REPORTING A DIFFICULT POSITION %
Machine operators	14.2%	Machinist	9.9%
Packers/Shippers	9.4%	Sales	5.0%
Assemblers	5.7%	Engineers	4.1%
Customer service	3.8%	CNC setup	4.1%
General labor	3.8%	Multiple tie at (7 positions)	2.5%

In some cases, the respondents were able to identify perceived gaps in available training and how curriculum and programs could be better aligned with industry requirements. However, what was perhaps even more significant is what they didn't know. For example, the most significant issue may be the lack of awareness of the organizations providing these services; lack of awareness was very high. Further, only about 36% of companies responding to the survey have utilized any workforce training programs.

The most significant issue boils down to what many manufacturers perceive as the bureaucratic nature of dealing with the programs. 'Reverse engineering' these programs for ease of use by manufacturers may be the key to increasing participation. Other suggestions related to:

- Communication and follow-through
- Application process (really a 'bureaucratic issue')
- Frequency of programs
- Funding

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## Methodology

An assessment of the manufacturing employment situation in Rhode Island was commissioned by The Rhode Island Manufacturing Extension Service (RIMES) in a cooperative effort with the Rhode Island Manufacturers Association (RIMA). The Rhode Island Governor's Workforce Investment Board provided funding for the study. The overall intent was to look at the Rhode Island manufacturing workforce, entry-level skills employees must possess in order to be hired, skills requiring improvement and skills that are lacking. The data was gathered primarily during the period August – October 2007.

More specifically, the study was designed to generate insights into:

- The top five workforce challenges RI manufacturing faces.
- The relationship between the existing 'hard' and 'soft' skills of the entry level and incumbent workforce in the manufacturing sector and the required skills as perceived by manufacturers.
- The occupations with the greatest skill shortages and an identification (or at least employer perceptions) of the root causes of those shortages.
- The top five barriers manufacturers face when seeking to hire entry-level workers.
- Perceived gaps in available training and how curriculum and programs could be better aligned with industry requirements.

In order to address this set of objectives, two focus groups were conducted. Based on the insights developed from the groups, and with significant input from RIMES and RIMA, a questionnaire was developed to measure attitudes and perceptions as held by Rhode Island manufacturers.

Over a period of three months, three copies of the questionnaire were mailed to the community of manufacturers in Rhode Island based on lists compiled by RIMES, RIMA, and the RI Economic Development Corporation. The companies on the list were also called two to three times requesting a response.

The population of 1,692 manufacturers received mail surveys. A total of 202 usable questionnaires were returned, for a response rate of 12%, which provides for a theoretical 6.8% error margin (+/-) at the 95% confidence level.

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## Demographics

A diverse group of manufacturers responded to the survey. While the study did not capture input from the State's largest manufacturers, in all likelihood they have the resources to best take care of themselves and /or be contacted directly to ensure that their input is received.

The 202 companies responding to this study represent 10,182 full time employees and 539 part time employees. As can be seen, the respondents represent companies of all sizes.

EMPLOYEES	FULL TIME	PART TIME	FULL TIME DIRECT	PART TIME DIRECT
Smallest number	0	0	0	0
Largest number	1,200	40	375	40
Mean/average	51.2	2.7	29.3	1.7
Median	21	1	13	0
Mode	6	0	2	0
Total (number of employees represented)	10,182	539	5,826	332

- Note: The largest full time employer did not provide an estimate of full time direct labor. Actual full time direct labor is higher.

Both the mean and median are measures of central tendency – or the middle range of companies – in this case, middle range by size. As can be seen, the mean or arithmetic average and the median (the half-way point between the lowest and highest) are quite different. This indicates that companies in the respondent pool are very different from one another in size. The mean or arithmetic average is more sensitive to major influences from a few observations than is the median. Therefore, the median is a better number to use when looking for a good estimator of company size in Rhode Island.

The mode is the observation that occurred most frequently in the data set. In this case the mode was 6 – meaning that the single most common employee size is 6.

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The respondents represent a wide variety of manufacturing categories, with fabricated metal products the largest.

NAICS CODES	PERCENT OF RESPONDENTS
311 Food mfg.	4.5%
312 Beverage & Tobacco Mf. (Ice)	0.5%
313 Textile mills	3.0%
314 Textile product mills	2.0%
315 Apparel mfg.	0.5%
316 Leather product mfg.	0.5%
321 Wood product mfg.	2.5%
322 Paper mfg.	2.0%
323 Printing	5.0%
325 Chemical mfg.	3.5%
326 Plastics & rubber products mfg.	1.5%
327 Nonmetallic mineral product mfg.	2.0%
331 Primary metal mfg.	4.0%
332 Fabricated metal product mfg.	14.9%
333 Machinery mfg.	9.9%
334 Computer & electronic product mfg.	4.5%
335 Electrical equipment, appliance and component mfg.	1.5%
336 Transportation equipment mfg.	4.5%
337 Furniture & related product mfg.	3.0%
339 Miscellaneous mfg. (incl. Jewelry)	9.4%
888 Mfg. Type unknown	16.3%
999 Company type unknown	5.0%

A number of respondents didn't clearly indicate what type of firm they represented; several were unclear but definitely manufacturing. A few could not be identified as manufacturers with certainty (and are coded above as 999 'company type unknown').

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Presidents were most likely to complete the questionnaire, followed by owners.

RESPONDENT JOB DESCRIPTIONS	PERCENT OF RESPONDENTS
President	46.5%
Owner	11.6%
Manager	10.6%
HR employee	8.6%
VP/other officer	8.6%
CFO	1.5%
Office manager	4.5%
Controller	3.5%
Secretary	2.0%
Director	1.5%
Head of manufacturing	1.0%

Most of the respondents represent companies that are based in RI.

CORPORATE HEADQUARTERS	PERCENT OF RESPONDENTS
Rhode Island	96.5%
New Jersey	1.0%
Connecticut	0.5%
California	1.0%
Indiana	0.5%
Washington State	0.5%

The respondents have been manufacturing in Rhode Island from less than one year to as long 180 years; the median number of years in business is 36.

YEARS IN BUSINESS	PERCENT OF RESPONDENTS
10 years or less	3.6%
11 – 25	32.0%
26 – 50	35.5%
50+ years	28.9%

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The most reporting firms were based in Providence, followed by Warwick and Cranston and Pawtucket. Responses were received from manufacturing firms from around the State.

PRIMARY MANUFACTURING – CITY	PERCENT OF RESPONDENTS
Bristol	3.1%
Burrillville	0.5%
Central Falls	3.1%
Coventry	1.0%
<b><i>Cranston</i></b>	<b><i>9.3%</i></b>
Cumberland	1.0%
East Greenwich	1.0%
East Providence	3.6%
Exeter	0.5%
Hopkinton	0.5%
Johnston	2.1%
Lincoln	5.7%
Middletown	1.0%
Narragansett	0.5%
Newport	2.6%
North Kingstown	6.2%
North Providence	0.5%
North Smithfield	1.6%
<b><i>Pawtucket</i></b>	<b><i>9.3%</i></b>
Portsmouth	2.6%
<b><i>Providence</i></b>	<b><i>14.0%</i></b>
Richmond	0.5%
Scituate	1.0%
Smithfield	2.6%
South Kingstown	1.6%
Tiverton	1.6%
Warren	2.1%
<b><i>Warwick</i></b>	<b><i>11.9%</i></b>
West Greenwich	0.5%
West Warwick	4.1%
Westerly	1.6%
Woonsocket	2.6%

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## Findings

In order to get a better overall view of manufacturers' attitudes towards the workforce, the respondents were asked if they believed that finding qualified candidates to interview for skilled positions within their companies was getting harder. Most said that it was.

FINDING QUALIFIED WORKERS	RESPONSE IN PERCENT
Getting easier	1.5%
Staying about the same	29.3%
Getting harder	67.2%
Unsure	2.0%

Finding qualified entry-level workers to interview, while still difficult, is less of a problem than finding skilled workers.

FINDING ENTRY LEVEL WORKERS	RESPONSE IN PERCENT
Getting easier	5.0%
Staying about the same	46.3%
Getting harder	45.3%
Unsure	3.5%

Retention is not a critical problem as reported by the manufacturers responding to the survey; about  $\frac{3}{4}$  report that retention is staying at around historical levels.

RETENTION – EXISTING EMPLOYEES	RESPONSE IN PERCENT
Getting easier	10.9%
Staying about the same	76.6%
Getting harder	13.0%
Unsure	2.0%

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Similarly, (and as expected given the response to retention) employee turnover is reported to be about the same as in the past as well.

TURNOVER – EXISTING EMPLOYEES	RESPONSE IN PERCENT
Increasing	15.0%
Staying about the same	70.0%
Decreasing	13.0%
Unsure	2.0%

Over the past five years, about 30% of responding firms added to their Rhode Island employment.

EMPLOYMENT IN RHODE ISLAND PAST 5 YEARS	RESPONSE IN PERCENT
Increased	29.8%
Stayed about the same	39.9%
Decreased	24.7%
Unsure	6.1%

- The median number of employees hired was 5
- The median employee downsizing was 6
- More reporting firms increased employment than decreased. However, those employers downsizing cut more jobs than growing firms hired.

A number of the written comments from the respondents captured the sentiment that *'manufacturing is dead in Rhode Island.'* This comment was heard by the research team during the exploratory phase of the study and, the findings suggest, is not necessarily true; more firms anticipate adding to employment than expect to reduce it.

FORECASTED EMPLOYMENT IN RHODE ISLAND NEXT 5 YEARS	RESPONSE IN PERCENT
Increase	35.7%
Stay about the same	44.4%
Decrease	9.7%
Unsure	10.7%

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It should be noted that there is a relationship between companies that have hired in the past five years and those anticipating additional hiring over the next five years; 61% of firms reporting employment increases in the previous 5 years anticipate growth in the next 5 while only 24.8% of those who did not grow in the past 5 years expect to grow in the next 5.

While employment is important, so is the general likelihood that firms will continue to manufacture in Rhode Island. Again it can be noted that those who think *manufacturing is dead in Rhode Island* are overly pessimistic (suggesting that understanding and nurturing manufacturing is important).

LIKELIHOOD OF CONTINUED MANUFACTURING IN RI	RESPONSE IN PERCENT
Very likely	50.8%
Somewhat likely	25.6%
Somewhat unlikely	13.1%
Very unlikely	8.5%
Unsure	2.0%

It should be noted, however, that if conditions remain the same this ‘relatively optimistic’ evaluation for manufacturing’s future does not suggest a growth opportunity for the Rhode Island economy.

Another problem that is reinforced by the study is the perception that the workforce is getting older.

AGE OF THE WORKFORCE	RESPONSE IN PERCENT
Getting older	59.5%
About the same	29.0%
Getting younger	10.1%
Unsure	1.5%

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The Rhode Island manufacturing economy employs a significant number of workers born outside of the United States. Interestingly, fewer companies report hiring recent entry-level workers born outside of the United States.

WORKERS NOT BORN IN USA	OVERALL	NEW ENTRY LEVEL HIRES
None	32.2%	52.1%
1 – 10%	21.8%	15.3%
11 – 25%	18.3%	5.5%
26 – 50%	16.1%	7.9%
51 – 75%	6.3%	2.4%
76% +	5.2%	16.6%

While the percentage of firms that are NOT currently hiring individuals born outside of the United States appears to have risen, those firms that do employ this group are increasing the numbers that they hire.

WORKERS NOT BORN IN USA	OVERALL	NEW ENTRY LEVEL HIRES
Median number of foreign born employees	10	0
Median number of foreign born workers <i>excluding</i> firms with <b><u>no</u></b> foreign born employees	20	37.5

The respondents were asked how prepared their recently hired entry-level employees are to work a full time job. As the perception ‘*manufacturing is dead in Rhode Island*’ is wrong, so to is the perception that ‘*today’s generation is unprepared for work;*’ 62.4% of respondents indicate that their entry-level employees are somewhat or very prepared to work. Clearly the percent of individuals not prepared is too high – but overall, the data describes a problem that needs to be addressed, not a disaster likely to destroy manufacturing tomorrow.

OVERALL, HOW PREPARED ARE ENTRY LEVEL EMPLOYEES TO WORK A FULL TIME JOB	RESPONSE IN PERCENT
Very	15.2%
Somewhat	47.2%
Not very	23.9%
Not at all	4.1%
Unsure	9.6%

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Interestingly, it is encouraging to note that while problems exist, a majority of the firms responding to the study believe that their workforce is superior to that of their competition – with the vast majority believing it to be equal or better.

RESPONDENT'S WORKFORCE COMPARED TO COMPETITORS	RESPONSE IN PERCENT
Significantly better	17.3%
Somewhat better	37.1%
About the same	28.4%
Somewhat inferior	6.1%
Significantly inferior	1.0%
Unsure	10.2%

### Current Hiring Plans

While a majority of manufacturers are not currently hiring entry-level employees, a substantial 30.9% are. Most firms are looking for one or two people.

ENTRY LEVEL VACANCIES	RESPONSE IN PERCENT
None	69.1%
One	14.9%
Two	7.2%
Three	4.1%
Four	1.5%
Five	1.0%
Six – ten	1.5%
Ten + (note: maximum number is 13)	0.5%

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More manufacturers are interested in hiring skilled employees than are looking for entry-level employees.

SKILLED POSITION VACANCIES	RESPONSE IN PERCENT
None	56.5%
One	17.6%
Two	14.7%
Three	6.5%
Four	0.6%
Five	1.2%
Six – ten	1.8%
Ten + (note: maximum number is 13)	1.2%

Some positions, at both entry and skilled levels, are more difficult to fill than others. The top five positions most difficult to fill include:

ENTRY LEVEL	% OF MFG REPORTING A DIFFICULT POSITION	SKILLED	% OF MFG REPORTING A DIFFICULT POSITION %
Machine operators/machinist	14.2%	Machine operators/machinist	9.9%
Packers/Shippers	9.4%	Sales	5.0%
Assemblers	5.7%	Engineers	4.1%
Customer service	3.8%	CNC setup	4.1%
General labor	3.8%	Multiple tie at (7 positions)	2.5%

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## Skills Required

The charts on the next pages describe the skills that employers are looking for in both entry-level and skilled employees and an overall evaluation of the competence of their most recent hires in each category for a number of skills.

As can be seen, manufacturers were able to identify different importance levels for different skills.

It was very interesting to note that overall, manufacturing executives value the soft skills more highly than hard or educational skills.

As rated by the median, the most important skills for new hires include:

- Work ethic
- Teamwork
- Punctuality
- Speaking and reading English
- Basic Math

Each table shows both a mean and median score. The mean is more sensitive to differences and allows for a more precise sense of priorities.

Each table is shown twice; the first includes all responses. The second table recalculates the scores eliminating the ‘not important/does not apply’ response. In some cases, basic biology for example, the ‘does not apply’ is so high that when basic biology is considered an issue, its importance is somewhat difficult to rank.

When asked to rate their most recent entry-level employees on critical skills, the candidates did reasonably well – especially in terms of such issues as punctuality and speaking English.

Similar patterns and ratings held true for skilled employees as well.

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## Critical Skills for Entry-Level Employees Overall (all positions)

IMPORTANCE OF SKILL FOR ENTRY LEVEL EMPLOYEES	CRITICAL (4)	ASSUMED VERY (+) IMPT(3.5)*	VERY IMPT (3)	SOME-WHAT IMPT (2)	NOT VERY IMPT (1)	NOT AT ALL IMPT DNA (0)	MEDIAN/ MEAN
English – speaking	43.7%	10.8%	24.7%	17.1%	3.2%	0.6%	3.5/3.2
English – reading	48.4%	9.7%	25.2%	11.0%	4.5%	1.3%	3.5/3.0
English – writing	38.6%	9.2%	20.9%	20.3%	8.5%	2.6%	3.0/3.0
Basic math	48.1%	9.7%	18.8%	18.2%	2.6%	2.6%	3.5/3.2
Statistics	11.0%	0.0%	5.9%	19.1%	19.9%	44.1%	1.0/1.2
Algebra	8.7%	0.7%	8.0%	12.3%	16.7%	53.6%	0.0/1.0
Advanced math	5.7%	2.1%	5.7%	13.6%	20.0%	52.9%	0.0/0.9
Computers/word processing	15.4%	3.5%	11.2%	18.9%	8.4%	42.7%	1.0/1.5
Computers/spread sheets	15.7%	1.4%	8.6%	14.3%	14.3%	45.7%	1.0/1.4
Computers/overall literacy	17.9%	4.1%	19.3%	19.3%	9.7%	29.7%	2.0/1.9
Chemistry – basic	1.5%	0.0%	3.6%	6.6%	10.2%	78.1%	0.0/0.4
Biology – basic	0.7%	0.0%	1.5%	3.6%	8.8%	85.4%	0.0/0.2
Problem solving ability	28.2%	6.0%	36.2%	21.5%	4.0%	4.0%	3.0/2.9
Work ethic	66.9%	9.3%	21.9%	2.0%	0.0%	0.0%	4.0/3.7
Teamwork	57.1%	10.3%	27.6%	5.1%	0.0%	0.0%	4.0/3.6
Tolerant/others' beliefs	39.6%	3.5%	3.0%	2.0%	0.0%	6.9%	3.0/3.1
Punctuality	64.7%	10.3%	21.8%	2.6%	0.6%	0.0%	4.0/3.7

Note: Some respondents checked one response to this question rather than writing a number characterizing the importance of the issue as requested in the survey instructions. Those checking are recorded under the 'assumed very important' category.

COMPETENCE – ENTRY LEVEL EMPLOYEE MOST RECENTLY HIRED	VERY COMPETENT (4)	SOMEWHAT COMPETENT (3)	NOT VERY COMPETENT (2)	NOT AT ALL COMPETENT (1)	NOT RELEVANT/ DNA (0)	MEDIAN/ MEAN
English – speaking	56.0%	23.4%	16.3%	2.8%	1.4%	4.0/3.3
English – reading	46.7%	28.5%	14.6%	6.6%	3.6%	3.0/3.1
English – writing	44.9%	22.1%	21.3%	5.9%	5.9%	3.0/2.9
Basic math	33.6%	33.6%	15.7%	6.0%	11.2%	3.0/2.7
Statistics	5.0%	9.2%	7.5%	12.5%	65.8%	0.0/0.8
Algebra	4.2%	5.8%	14.2%	7.5%	68.3%	0.0/0.7
Advanced math	3.3%	7.4%	12.4%	9.1%	67.8%	0.0/0.7
Computers/word processing	8.3%	20.7%	11.6%	5.0%	54.5%	0.0/1.2
Computers/spread sheets	6.8%	14.5%	10.3%	7.7%	60.7%	0.0/1.0
Computers/overall literacy	10.4%	25.6%	12.0%	7.2%	44.8%	1.0/1.5
Chemistry – basic	1.7%	1.7%	7.7%	4.3%	84.6%	0.0/0.3
Biology – basic	0.9%	0.9%	5.1%	4.3%	88.9%	0.0/0.2
Problem solving ability	14.0%	33.1%	26.4%	9.9%	16.5%	2.0/2.2
Work ethic	43.6%	37.6%	15.8%	2.3%	0.8%	3.0/3.2
Teamwork	42.4%	40.9%	13.6%	3.0%	0.0%	3.0/3.2
Tolerant/others' beliefs	30.8%	42.5%	15.8%	3.3%	7.5%	3.0/2.9
Punctuality	51.5%	30.3%	14.4%	2.3%	1.5%	4.0/3.3

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## Critical Skills for Entry-Level Employees

Overall (all positions) – Edited – ‘Not at all Important/DNA’ eliminated

IMPORTANCE OF SKILL FOR ENTRY LEVEL EMPLOYEES	CRITICAL (4)	ASSUMED VERY (+) IMPT(3.5)*	VERY IMPT (3)	SOME-WHAT IMPT (2)	NOT VERY IMPT (1)	MEDIAN/ MEAN
English – speaking	43.9%	10.8%	24.8%	17.2%	3.2%	3.5/3.3
English – reading	49.0%	9.8%	25.5%	11.1%	4.6%	3.5/3.3
English – writing	39.6%	9.4%	21.5%	20.8%	8.7%	3.0/3.1
Basic math	49.3%	10.0%	19.3%	18.7%	2.7%	3.5/3.5
Statistics	19.7%	0.0%	10.5%	34.2%	35.5%	2.0/2.1
Algebra	18.8%	1.6%	17.2%	26.6%	35.9%	2.0/2.2
Advanced math	12.1%	4.5%	12.1%	28.8%	42.4%	2.0/2.0
Computers/word processing	26.8%	6.1%	19.5%	32.9%	14.6%	3.0/2.7
Computers/spread sheets	28.9%	2.6%	15.8%	26.3%	26.3%	2.0/2.5
Computers/overall literacy	25.5%	5.9%	27.5%	27.5%	13.7%	3.0/2.7
Chemistry – basic	6.7%	0.0%	16.7%	30.0%	46.7%	2.0/1.8
Biology – basic	5.0%	0.0%	10.0%	25.0%	60.0%	1.0/1.6
Problem solving ability	29.4%	6.3%	37.8%	22.4%	4.2%	3.0/3.0
Work ethic	66.9%	9.3%	21.9%	2.0%	0.0%	4.0/3.7
Teamwork	57.1%	10.0%	27.6%	5.1%	0.0%	4.0/3.6
Tolerant/others’ beliefs	42.5%	8.2%	33.6%	15.7%	0.0%	3.5/3.3
Punctuality	64.7%	10.3%	21.8%	2.6%	0.6%	4.0/3.7

Note: Some respondents checked one response to this question rather than writing a number characterizing the importance of the issue as requested in the survey instructions. Those checking are recorded under the ‘assumed very important’ category.

COMPETENCE – ENTRY LEVEL EMPLOYEE MOST RECENTLY HIRED	VERY COMPETENT (4)	SOMEWHAT COMPETENT (3)	NOT VERY COMPETENT (2)	NOT AT ALL COMPETENT (1)	MEDIAN/ MEAN
English – speaking	56.8%	23.7%	16.5%	2.9%	4.0/3.3
English – reading	48.5%	29.5%	15.2%	6.8%	3.0/3.2
English – writing	47.7%	23.4%	22.7%	6.3%	3.0/3.1
Basic math	37.8%	37.8%	17.6%	6.7%	3.0/3.1
Statistics	14.6%	26.8%	22.0%	36.6%	2.0/2.2
Algebra	13.2%	18.4%	44.7%	23.7%	2.0/2.2
Advanced math	10.3%	23.1%	38.5%	28.2%	2.0/2.2
Computers/word processing	18.2%	45.5%	25.5%	10.9%	3.0/2.7
Computers/spread sheets	17.4%	37.0%	26.1%	19.6%	3.0/2.5
Computers/overall literacy	18.8%	46.4%	21.7%	13.0%	3.0/2.7
Chemistry – basic	11.1%	11.1%	50.0%	27.8%	2.0/2.1
Biology – basic	7.7%	7.7%	46.2%	38.5%	2.0/1.8
Problem solving ability	16.8%	39.6%	31.7%	11.9%	3.0/2.6
Work ethic	43.9%	37.9%	15.9%	2.3%	3.0/3.2
Teamwork	42.4%	40.9%	13.6%	3.0%	3.0/3.2
Tolerant/others’ beliefs	33.3%	45.9%	17.1%	3.6%	3.0/3.1
Punctuality	52.3%	30.8%	14.6%	2.3%	4.0/3.3

# Advantage Marketing Information

## Critical Skills for Skilled Employees Overall (all positions)

IMPORTANCE OF SKILL FOR SKILLED EMPLOYEES	CRITICAL (4)	ASSUMED VERY (+) IMPT(3.5)*	VERY IMPT (3)	SOME-WHAT IMPT (2)	NOT VERY IMPT (1)	NOT AT ALL IMPT DNA (0)	MEDIAN /MEAN
English – speaking	58.0%	14.2%	24.7%	2.5%	0.6%	0.0%	4.0/3.6
English – reading	63.1%	11.5%	20.4%	4.5%	0.6%	0.0%	4.0/3.6
English – writing	53.5%	11.6%	23.9%	9.7%	0.6%	0.6%	4.0/3.5
Basic math	63.4%	9.8%	22.2%	2.0%	0.0%	2.6%	4.0/3.6
Statistics	22.5%	0.0%	15.5%	11.6%	14.0%	36.4%	1.0/1.7
Algebra	27.4%	1.5%	11.9%	17.0%	12.6%	29.6%	2.0/2.0
Advanced math	25.9%	5.8%	16.5%	12.2%	11.5%	28.1%	2.0/2.1
Computers/word processing	4.3%	0.7%	13.5%	15.6%	7.1%	22.0%	3.0/2.4
Computers/spread sheets	35.2%	5.6%	12.0%	13.4%	7.7%	26.1%	3.0/2.3
Computers/overall literacy	37.8%	8.8%	17.6%	14.9%	5.4%	15.5%	3.0/2.7
Chemistry – basic	5.2%	1.5%	9.7%	11.2%	11.2%	61.2%	0.0/0.9
Biology – basic	3.8%	0.0%	0.8%	7.6%	11.4%	76.5%	0.0/0.4
Problem solving ability	58.7%	11.0%	23.9%	3.2%	0.0%	3.2%	4.0/3.5
Work ethic	72.3%	14.5%	13.2%	0.0%	0.0%	0.0%	4.0/3.8
Teamwork	68.8%	12.1%	18.5%	0.6%	0.0%	0.0%	4.0/3.7
Tolerant/others beliefs	50.7%	4.3%	28.3%	9.4%	0.0%	7.2%	4.0/3.2
Punctuality	70.3%	12.7%	14.6%	2.5%	0.0%	0.0%	4.0/3.7

COMPETENCE – SKILLED EMPLOYEE MOST RECENTLY HIRED	VERY COMPETENT (4)	SOMEWHAT COMPETENT (3)	NOT VERY COMPETENT (2)	NOT AT ALL COMPETENT (1)	NOT RELEVANT/ DNA (0)	MEDIAN /MEAN
English – speaking	80.8%	15.4%	2.9%	1.0%	0.0%	4.0/3.8
English – reading	76.7%	17.5%	4.9%	1.0%	0.0%	4.0/3.7
English – writing	65.0%	25.2%	5.8%	1.9%	1.9%	4.0/3.5
Basic math	53.4%	37.9%	3.9%	1.9%	2.9%	4.0/3.4
Statistics	17.2%	13.8%	9.2%	10.3%	49.4%	1.0/1.4
Algebra	19.1%	18.1%	13.8%	8.5%	40.4%	2.0/1.7
Advanced math	16.3%	19.6%	9.8%	10.9%	43.5%	1.0/1.5
Computers/word processing	30.5%	26.3%	8.4%	4.2%	30.5%	3.0/2.2
Computers/spread sheets	29.8%	23.4%	7.4%	4.3%	35.1%	3.0/2.1
Computers/overall literacy	31.3%	28.1%	8.3%	5.2%	27.1%	3.0/2.3
Chemistry – basic	3.4%	10.2%	12.5%	2.3%	71.6%	0.0/0.7
Biology – basic	2.3%	3.4%	9.2%	6.9%	78.2%	0.0/0.4
Problem solving ability	39.8%	39.8%	14.3%	2.0%	4.1%	3.0/3.1
Work ethic	61.0%	27.0%	10.0%	2.0%	0.0%	4.0/3.5
Teamwork	57.4%	30.7%	9.9%	2.0%	0.0%	4.0/3.4
Tolerant/others' beliefs	47.4%	28.9%	12.4%	3.1%	8.2%	3.0/3.0
Punctuality	65.0%	21.0%	8.0%	4.0%	2.0%	4.0/3.4

# Advantage Marketing Information

## Critical Skills for Skilled Employees

Overall (all positions) – Edited – ‘Not Important/DNA’ - Eliminated

IMPORTANCE OF SKILL FOR SKILLED EMPLOYEES	CRITICAL (4)	ASSUMED VERY (+) IMPT (3.5)*	VERY IMPT (3)	SOME-WHAT IMPT (2)	NOT VERY IMPT (1)	MEDIAN /MEAN
English – speaking	58.0%	14.2%	24.7%	2.5%	0.6%	4.0/3.6
English – reading	63.1%	11.5%	20.4%	4.5%	0.6%	4.0/3.6
English – writing	53.9%	11.7%	24.0%	9.7%	0.6%	4.0/3.5
Basic math	65.1%	10.1%	22.8%	2.0%	0.0%	4.0/3.7
Statistics	35.4%	0.0%	24.4%	18.3%	22.0%	3.0/2.7
Algebra	38.9%	2.1%	16.8%	24.2%	17.9%	3.0/2.8
Advanced math	36.0%	8.0%	23.0%	17.0%	16.0%	3.0/2.9
Computers/word processing	47.3%	6.4%	17.3%	20.0%	9.1%	3.5/3.1
Computers/spread sheets	47.6%	7.6%	16.2%	18.1%	10.5%	3.5/3.1
Computers/overall literacy	44.8%	10.4%	20.8%	17.6%	6.4%	3.5/3.2
Chemistry – basic	13.5%	3.8%	25.0%	28.8%	28.8%	2.0/2.3
Biology – basic	16.1%	0.0%	3.2%	32.3%	48.4%	2.0/1.9
Problem solving ability	60.7%	11.3%	24.7%	3.3%	0.0%	4.0/3.6
Work ethic	72.3%	14.5%	13.2%	0.0%	0.0%	4.0/3.8
Teamwork	68.8%	12.1%	18.5%	0.6%	0.0%	4.0/3.7
Tolerant/others beliefs	54.7%	4.7%	30.5%	10.2%	0.0%	4.0/3.5
Punctuality	70.3%	12.7%	14.6%	2.5%	0.0%	4.0/3.7

COMPETENCE –SKILLED EMPLOYEE MOST RECENTLY HIRED	VERY COMPETENT (4)	SOMEWHAT COMPETENT (3)	NOT VERY COMPETENT (2)	NOT AT ALL COMPETENT (1)	MEDIAN /MEAN
English – speaking	80.8%	15.4%	2.9%	1.0%	4.0/3.8
English – reading	76.7%	17.5%	4.9%	1.0%	4.0/3.7
English – writing	66.3%	25.7%	5.9%	2.0%	4.0/3.6
Basic math	55.0%	39.0%	4.0%	2.0%	4.0/3.5
Statistics	34.1%	27.3%	18.2%	20.5%	3.0/2.8
Algebra	32.1%	30.4%	23.2%	14.3%	3.0/2.8
Advanced math	28.8%	34.6%	17.3%	19.2%	3.0/2.7
Computers/word processing	43.9%	37.9%	12.1%	6.1%	3.0/3.2
Computers/spread sheets	45.9%	36.1%	11.5%	6.6%	3.0/3.2
Computers/overall literacy	42.9%	38.6%	11.4%	7.1%	3.0/3.2
Chemistry – basic	12.0%	36.0%	44.0%	8.0%	2.0/2.5
Biology – basic	10.5%	15.8%	42.1%	31.6%	2.0/2.1
Problem solving ability	41.5%	41.5%	14.9%	2.1%	3.0/3.2
Work ethic	61.0%	27.0%	10.0%	2.0%	4.0/3.5
Teamwork	57.4%	30.7%	9.9%	2.0%	4.0/3.4
Tolerant/others’ beliefs	51.7%	31.5%	13.5%	3.4%	4.0/3.3
Punctuality	66.3%	21.4%	8.2%	4.1%	4.0/3.5

# Advantage Marketing Information

Note

Critical Skills And Competence Ratings For  
The Top Five Job Positions  
In Both Entry Level And Skilled Employees  
Appear In Appendix I

# Advantage Marketing Information

## Other Issues Impacting The Respondents Organizations

The preliminary focus groups conducted as part of this study identified a number of non-skill factors that impact the Rhode Island workforce. In an effort to understand how significant these issues are, the study addressed this as well.

A number of issues rank as significant problems, with the most significant being the limited interest in manufacturing employment expressed by younger people today. Excessive absenteeism is also creating a significant problem for manufacturers.

	VERY SIGNIFICANT	SOMEWHAT SIGNIFICANT	NOT VERY SIGNIFICANT	NOT AN ISSUE	MEAN
Limited interest in manufacturing jobs/younger people	43.2%	39.9%	8.2%	8.7%	3.2
Other personal issues resulting in excessive absenteeism	32.8%	39.5%	16.4%	11.3%	2.9
Potential employees live significant distances from work	16.5%	45.6%	26.4%	11.5%	2.7
Dependent children creating reliability issues	14.8%	35.7%	30.8%	18.7%	2.5
Inadequate public transportation	7.7%	28.7%	35.4%	28.2%	2.2
Failure to pass drug screening	18.5%	12.9%	25.8%	42.7%	2.1
Criminal records that exclude people from being hired	16.9%	10.7%	33.7%	38.8%	2.0

Utilization of work force training and development programs offered by the State or other agencies is estimated at 35.7% of companies responding to the survey.

The respondents offered a variety of suggestions and comments regarding the programs currently being offered. However, there wasn't a broad consensus as to any one or two issues that are critical.

Those most frequently mentioned included:

- Better agency follow through (4 respondents)
- Better communication, agency to employer (3 respondents)
- Make the application process easier and more understandable (3 respondents)

An examination of the entire list of comments appearing on the following page shows that many of the responses fall under the general heading of 'perceptions regarding bureaucratic issues,' which the respondents recommend be addressed.

# Advantage Marketing Information

## Respondent comments regarding program changes

Ability to qualify for multiple programs  
Add problem solving skills training  
Be able to apply yearly  
Be more aggressive  
Be more industry specific  
Be more proactive regarding vacancies  
Better communications-agency to employers  
Better training at RIMES  
Bring back NTMA program  
Bring back OJT program  
Flexibility  
Follow thru by agencies  
Go back to low cost instruction classes  
Increase & train talent pool at the ACI  
Less bureaucratic  
Make application process easier/more understandable  
Make more funds available  
More effective work ethic & learning skills  
More help for small businesses  
More technical training  
No changes (mentioned by five respondents)  
Offer services more frequently  
Quality of candidates  
Reduce paperwork  
Some price challenges  
Utility costs

Internship programs have been successfully implemented in a variety of settings (and countries) in an effort to upgrade worker competence. Unfortunately, interest in participating in such programs by Rhode Island manufacturers is not particularly high. Note: this question was designed to elicit a 'top of mind response.'

INTEREST IN INTERNSHIP PROGRAMS	RESPONSE
Very	16.4%
Somewhat	32.8%
Not very	34.9%
Unsure	15.9%

## Advantage Marketing Information

The respondents were also asked their opinions about existing workforce assistance organizations. It was interesting to note the lack of awareness of some of these organizations. In all cases, 'not familiar with' was the top ranked response.

### Opinions Regarding Key Workforce Related Organizations

	NOT FAMILIAR	VERY POSITIVE	SOMEWHAT POSITIVE	SOMEWHAT NEG	VERY NEG	UNSURE
Network RI	52.4%	8.6%	12.4%	3.8%	3.8%	18.9%
RI Dept Labor & Training	22.5%	17.6%	30.5%	9.6%	4.8%	15.0%
RI Manufacturing Ext. Service	50.3%	11.9%	10.8%	3.2%	3.8%	20.0%
Local Chamber of Commerce	37.0%	9.8%	18.5%	11.4%	6.0%	17.4%
RI Manufacturers Association	34.4%	11.3%	19.9%	7.5%	4.3%	22.6%

Given the lack of awareness of the organizations, viewing the previous table does not give a clear look at how respondents familiar with the organizations rated them. In order to provide this clearer view, the analysis was repeated on only those respondents who had an opinion about the organization.

The Rhode Island Department of Labor and training ties with RIMES as the highest scoring organization.

	VERY POSITIVE	SOMEWHAT POSITIVE	SOMEWHAT NEGATIVE	VERY NEGATIVE	MEAN
Network RI	30.2%	43.4%	13.2%	13.2%	2.9
RI Dept Labor & Training	28.2%	48.7%	15.4%	7.7%	3.0
RI Manufacturing Ext. Service	40.0%	36.4%	10.9%	12.7%	3.0
Local Chamber of Commerce	21.4%	40.5%	25.0%	13.1%	2.7
RI Manufacturers Association	26.3%	46.3%	17.5%	10.0%	2.9

The low awareness of Network Rhode Island may be a function of listing only the name 'Network RI.' No descriptor beyond the name was used (for example, the unemployment office).

## Advantage Marketing Information

The respondents were asked a final question regarding other issues that affect them or that they believe should be examined. The top concern related to health care and taxes.

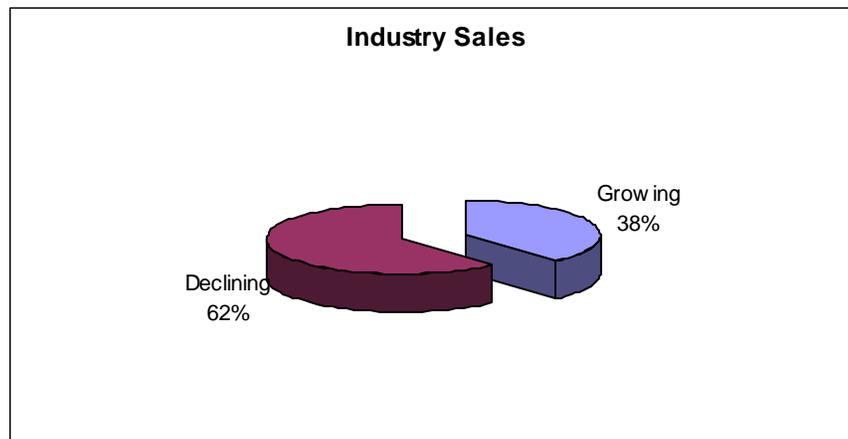
<u>Issue</u>	<u>Number responding</u>
Affordable health care	10
Taxes	10
RI cost of living too high	5
Closing/looking at relocation	4
Foreign competition/outsourcing	3
Need more basic training at voc-tech	3
Wage demands	3
Disinterest in shop work by young people	2
HS students, math, literacy, attitude	2
Immigration reform	2
Regulations	2
Utility costs	2
Workers comp costs/issues	2
Chinese imports	1
Decline of large companies	1
Drug and alcohol abuse	1
High cost of raw materials	1
Keeping qualified young people in state	1
More mfg needed in RI	1
Real estate cost for expansion	1
Where are the taxes that should be paying for training	1
Youth can program but not operate machines	1

# Advantage Marketing Information

## Supplemental Research

Supplemental questions were asked of the sample and 51 companies responded to the additional issues relative to the objectives of the study. This phase of the study was handled in entirety by RIMES.

In the initial phase of the study respondents were asked if they were planning to increase employment. Firms adding staff represented 35.7% of the respondents. To explore this issue further, the respondents were asked if their industry was growing. The results were similar.



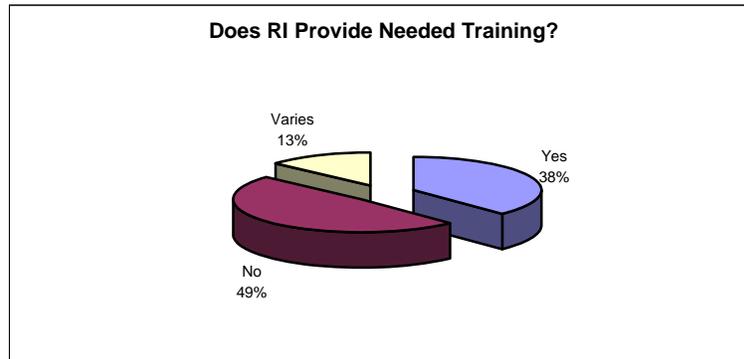
The initial phase of the research probed on utilization of workforce training and development programs, which was estimated at 35.7% of companies responding to the survey. The supplemental phase went further and asked respondents if they believed that Rhode Island provided the training your workers need. The response suggests cause for concern.



## Advantage Marketing Information

While there is some concern about outside training programs, there was complete agreement with the idea that better trained workers would be more competitive and that business would increase.

The supplement also asked whether companies have well defined career paths for their employees. The answer suggests that companies have some work to do in this area.

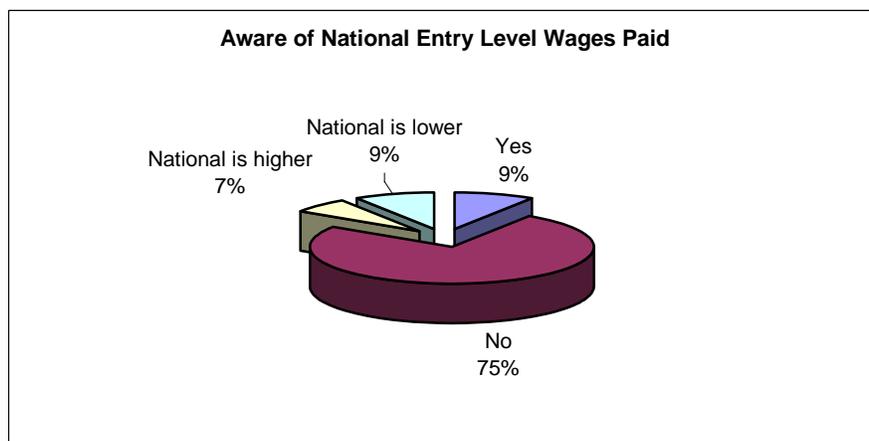


Most of the respondents were aware of the starting wage paid to their entry-level workers.

- Median starting hourly wage \$10.00 per hour
- Mean (or average wage) was \$10.84 per hour

Some firms noted that they paid benefits; others did not.

To obtain some perspective, respondents were asked if they were aware of starting wages paid to entry-level employees nationally. Most did not.



## Advantage Marketing Information

In order to drill down into more detail, the respondents were asked what training they would provide to different categories of employee if money were no object. For office staff, computer skills/IT training is in most demand.

### Training For Office Staff

Percent of Respondents Interested	Training Programs
34.2%	Computer skills/IT
9.2%	CSR skills
5.3%	MS office
5.3%	Teamwork
5.3%	Lean office
5.3%	Accounting
3.9%	Communication skills
3.9%	Professional development
3.9%	Project Management
3.9%	Cad drawing
2.6%	Excel
2.6%	Problem solving
2.6%	Engineering
1.3%	Access
1.3%	Bryant Executive Development Program
1.3%	Leadership
1.3%	ERP
1.3%	Inventory shipping & control
1.3%	HR training
1.3%	10 Key adding machine
1.3%	Selling support
1.3%	Internet research
100.0%	

# Advantage Marketing Information

## Floor Training

Efficiency training and English are of most interest for floor staff.

Percent of Respondents Interested	Training Programs
12.9%	Efficiency
10.0%	English
8.6%	Lean manufacturing
8.6%	Problem solving
8.6%	Team work
7.1%	Machining skills
5.7%	Basic math
4.3%	6-Sigma
4.3%	CNC skills
4.3%	Quality control
2.9%	Health habits
2.9%	Safety practices
2.9%	Process control
1.4%	Blueprint reading
1.4%	Computer skills
1.4%	ERP
1.4%	Interpersonal skills
1.4%	Measuring skills
1.4%	Polishing plating
1.4%	Preventative maintenance
1.4%	RIMES lean 101
1.4%	SPC
1.4%	Tool making
1.4%	Welding Pipefitting
1.4%	Work ethic

# Advantage Marketing Information

## Training for shipping staff

Computer skills tops the list of programmatic needs for shipping staff, followed by lean manufacturing.

Percent of Respondents Interested	Training Programs
17.6%	Computer skills
9.8%	Lean manufacturing
9.8%	Teamwork
9.8%	Efficiency
7.8%	Bills of lading/warehouse
7.8%	6-Sigma
5.9%	English
5.9%	Problem solving
3.9%	Inventory systems
3.9%	Following directions
2.0%	Interpersonal skills
2.0%	CSR skills
2.0%	Excel
2.0%	RIMES lean 101
2.0%	Forklift training
2.0%	Logistics
2.0%	Supply chain mgmt
2.0%	Shipping scheduling
2.0%	SPC
100.0%	

As can be seen, the study shows some significant differences in training requirements by type of employee.

## Advantage Marketing Information

Respondents were then asked what skills they would look for in a job description. The top skills for office were computer related, by far.

### Office staff

Percent of Respondents Interested	Skills listed in a job description
20.0%	Computer skills
17.3%	MS office experience
6.7%	CSR skills
6.7%	Communication skills
5.3%	Interpersonal skills
5.3%	Detail oriented
4.0%	Accounting skills
4.0%	Professionalism
4.0%	Flexibility
4.0%	Problem solving
4.0%	Multi-tasking
2.7%	Lean concepts
2.7%	Math skills
2.7%	Organization
2.7%	Typing
1.3%	Adobe CS3 suite
1.3%	AR/AP
1.3%	Meeting facilities management
1.3%	ERP
1.3%	Work ethic
1.3%	Internet research
100.0%	

# Advantage Marketing Information

## Floor staff

From the perspective of floor staff, management is most interested in an ability to understand and take direction. This is followed closely by machine experience and basic math.

Percent of Respondents Interested	Skills listed in a job description
11.3%	Literate/GED level/take direction
9.9%	Machine operations experience
9.9%	Basic math skills/science
7.0%	Teamwork/Interpersonal
7.0%	Problem solving
5.6%	Lean manufacturing
5.6%	Read blueprints
4.2%	Measuring device experience
4.2%	Basic computer skills
4.2%	Dependability
4.2%	CNC experience
4.2%	Advanced math skills
2.8%	Flexibility
2.8%	Lift 50 pounds
2.8%	Mechanical ability
1.4%	Dexterity
1.4%	ERP systems
1.4%	Jewelry experience
1.4%	Welding/pipefitting
1.4%	Sample/jig experience
1.4%	Supervisory skills
1.4%	Food safety principles
1.4%	Assembly
1.4%	Desire to work in mfg
1.4%	Focus
100.0%	

# Advantage Marketing Information

## Shipping staff

Computer and math skills lead the list, followed by experience in inventory and general warehouse issues.

Percent of Respondents Interested	Skills listed in a job description
14.0%	Computer skills
8.0%	Math skills
8.0%	Generational warehouse mgmt
8.0%	Inventory mgmt experience
8.0%	Routing/scheduling experience
8.0%	Work ethic/team/problem solving
6.0%	Detail oriented
4.0%	Multi-tasking
4.0%	Efficiency
4.0%	Lean manufacturing skills
4.0%	Organizational skills
4.0%	English speaking
4.0%	MS office
2.0%	Packing experience
2.0%	Flexibility
2.0%	Negotiation skills
2.0%	Logistics
2.0%	ERP systems
2.0%	UPS/DHL/Internet
2.0%	SAP experience
2.0%	Cost saving initiative
100.0%	

## Advantage Marketing Information

These questions were asked in regard to management positions as well. Not surprisingly, most respondents indicated an ability to manage and listed traits of:

- Leadership
- People skills
- Coaching

Full text responses to the management questions is provided in an appendix.

The respondents were also asked what training programs would be helpful in the long and short term. There were many similarities to previous answers.

Percent of Respondents Interested	Interest in Training Programs
15.2%	Computer skills
13.9%	Machine operation
10.1%	Management skills/training
6.3%	Lean Mfg
5.1%	Funding for training
5.1%	Advanced math
5.1%	Voc Tech manufacturing
3.8%	Hard skills
3.8%	Customer service
3.8%	English
3.8%	Mechanics
3.8%	CNC/SPC
2.5%	Welding/metal working
2.5%	6-sigma
2.5%	Problem solving
2.5%	Safety
1.3%	Office skills
1.3%	Funded apprenticeships
1.3%	Graphics & printing
1.3%	Best practices
1.3%	Blue print reading
1.3%	Chemistry/biology
1.3%	Supply chain mgmt
1.3%	Optics & lighting
100.0%	

## Advantage Marketing Information

The full text responses to these questions are also provided in the appendix. To summarize however, the top responses were computer and machine skills followed by management skills training.

# Advantage Marketing Information

## Appendix I Critical Skills And Competence Ratings For Specific Job Positions Top 5 Entry Level and Skilled Job Categories

# Advantage Marketing Information

## Critical Skills & Competence Ratings for Entry-Level Employees Position 1: Machine Operator

IMPORTANCE OF SKILL FOR ENTRY LEVEL EMPLOYEES	CRITICAL (4)	ASSUMED VERY (+) IMPT(3.5)*	VERY IMPT (3)	SOME-WHAT IMPT (2)	NOT VERY IMPT (1)	NOT AT ALL IMPT DNA (0)	MEDIAN /MEAN
English – speaking	25.8%	3.2%	45.2%	19.4%	3.2%	3.2%	3.0/2.9
English – reading	32.3%	3.2%	51.6%	6.5%	3.2%	3.2%	3.0/3.1
English – writing	19.4%	3.2%	35.5%	35.5%	3.2%	3.2%	3.0/2.7
Basic math	58.1%	3.2%	16.1%	22.6%	0.0%	0.0%	4.0/3.4
Statistics	6.7%	0.0%	10.0%	20.0%	40.0%	23.3%	1.0/1.4
Algebra	6.7%	0.0%	16.7%	6.7%	16.7%	53.3%	0.0/1.0
Advanced math	0.0%	3.2%	6.5%	3.2%	25.8%	61.3%	0.0/0.6
Computers/word processing	6.5%	3.2%	3.2%	29.0%	12.9%	45.2%	1.0/1.2
Computers/spread sheets	3.2%	3.2%	3.2%	22.6%	19.4%	48.4%	1.0/1.0
Computers/overall literacy	6.5%	3.2%	9.7%	41.9%	12.9%	25.8%	2.0/1.6
Chemistry – basic	0.0%	0.0%	0.0%	3.3%	6.7%	90.0%	0.0/0.1
Biology – basic	0.0%	0.0%	0.0%	0.0%	6.7%	93.3%	0.0/0.1
Problem solving ability	25.8%	3.2%	41.9%	22.6%	6.5%	0.0%	3.0/2.9
Work ethic	75.0%	6.3%	18.8%	0.0%	0.0%	0.0%	4.0/3.8
Teamwork	62.5%	6.3%	25.0%	6.3%	0.0%	0.0%	4.0/3.6
Tolerant/others' beliefs	45.2%	6.5%	25.8%	16.1%	0.0%	6.5%	3.5/3.1
Punctuality	71.9%	6.3%	15.6%	3.1%	3.1%	0.0%	4.0/3.7

Note: Some respondents checked one response to this question rather than writing a number characterizing the importance of the issue as requested in the survey instructions. Those checking are recorded under the 'assumed very important' category.

# Advantage Marketing Information

## Critical Skills & Competence Ratings for Entry-Level Employees Position 2: Distribution

IMPORTANCE OF SKILL FOR ENTRY LEVEL EMPLOYEES	CRITICAL (4)	ASSUMED VERY (+) IMPT(3.5)*	VERY IMPT (3)	SOME-WHAT IMPT (2)	NOT VERY IMPT (1)	NOT AT ALL IMPT DNA (0)	MEDIAN /MEAN
English – speaking	33.3%	16.7%	27.8%	22.2%	0.0%	0.0%	3.2/3.2
English – reading	44.4%	16.7%	27.8%	11.1%	0.0%	0.0%	3.5/3.4
English – writing	33.3%	16.7%	27.8%	16.7%	5.6%	0.0%	3.2/3.1
Basic math	44.4%	16.7%	11.1%	22.2%	5.6%	0.0%	3.5/3.2
Statistics	20.0%	0.0%	0.0%	26.7%	6.7%	46.7%	1.0/1.4
Algebra	0.0%	0.0%	0.0%	20.0%	20.0%	60.0%	0.0/0.6
Advanced math	0.0%	0.0%	0.0%	20.0%	26.7%	53.3%	0.0/0.7
Computers/word processing	0.0%	6.3%	37.5%	18.8%	0.0%	37.5%	2.0/1.7
Computers/spread sheets	6.7%	0.0%	20.0%	26.7%	6.7%	40.0%	2.0/1.5
Computers/overall literacy	12.5%	6.3%	31.3%	25.0%	6.3%	18.8%	2.5/2.2
Chemistry – basic	0.0%	0.0%	0.0%	13.3%	13.3%	73.3%	0.0/0.4
Biology – basic	0.0%	0.0%	0.0%	13.3%	13.3%	73.3%	0.0/0.4
Problem solving ability	17.6%	11.8%	47.1%	23.5%	0.0%	0.0%	3.0/3.0
Work ethic	52.9%	11.8%	23.5%	11.8%	0.0%	0.0%	4.0/3.5
Teamwork	52.9%	11.8%	23.5%	11.8%	0.0%	0.0%	4.0/3.5
Tolerant/others' beliefs	29.4%	11.8%	23.5%	23.5%	0.0%	11.8%	3.0/2.8
Punctuality	55.6%	16.7%	16.7%	11.1%	0.0%	0.0%	4.0/3.5

Note: Some respondents checked one response to this question rather than writing a number characterizing the importance of the issue as requested in the survey instructions. Those checking are recorded under the 'assumed very important' category.

# Advantage Marketing Information

## Critical Skills & Competence Ratings for Entry-Level Employees Position 3: Assembler

IMPORTANCE OF SKILL FOR ENTRY LEVEL EMPLOYEES	CRITICAL (4)	ASSUMED VERY (+) IMPT(3.5)*	VERY IMPT (3)	SOME-WHAT IMPT (2)	NOT VERY IMPT (1)	NOT AT ALL IMPT DNA (0)	MEDIAN /MEAN
English – speaking	25.0%	25.0%	8.3%	33.3%	8.3%	0.0%	3.2/2.9
English – reading	27.3%	18.2%	18.2%	18.2%	18.2%	0.0%	3.0/2.8
English – writing	10.0%	10.0%	30.0%	20.0%	20.0%	10.0%	2.5/2.2
Basic math	18.2%	18.2%	9.1%	45.5%	9.1%	0.0%	2.0/2.6
Statistics	0.0%	0.0%	0.0%	11.1%	33.3%	55.6%	0.0/5.6
Algebra	0.0%	0.0%	0.0%	0.0%	22.2%	77.8%	0.0/0.2
Advanced math	0.0%	0.0%	0.0%	11.1%	22.2%	66.7%	0.0/0.4
Computers/word processing	0.0%	10.0%	0.0%	10.0%	20.0%	60.0%	0.0/0.8
Computers/spread sheets	0.0%	0.0%	0.0%	0.0%	22.2%	77.8%	0.0/0.2
Computers/overall literacy	0.0%	10.0%	0.0%	10.0%	40.0%	40.0%	1.0/1.0
Chemistry – basic	0.0%	0.0%	0.0%	0.0%	11.1%	88.9%	0.0/0.1
Biology – basic	0.0%	0.0%	0.0%	0.0%	11.1%	88.9%	0.0/0.1
Problem solving ability	18.2%	18.2%	9.1%	45.5%	0.0%	9.1%	2.0/2.5
Work ethic	45.5%	18.2%	36.4%	0.0%	0.0%	0.0%	3.5/3.5
Teamwork	41.7%	25.0%	33.3%	0.0%	0.0%	0.0%	3.5/3.5
Tolerant/others' beliefs	25.0%	25.0%	33.3%	16.7%	0.0%	0.0%	3.2/3.2
Punctuality	41.7%	25.0%	33.3%	0.0%	0.0%	0.0%	3.5/3.5

Note: Some respondents checked one response to this question rather than writing a number characterizing the importance of the issue as requested in the survey instructions. Those checking are recorded under the 'assumed very important' category.

# Advantage Marketing Information

## Critical Skills & Competence Ratings for Entry-Level Employees Position 4: General Factory Labor

IMPORTANCE OF SKILL FOR ENTRY LEVEL EMPLOYEES	CRITICAL (4)	ASSUMED VERY (+) IMPT(3.5)*	VERY IMPT (3)	SOME-WHAT IMPT (2)	NOT VERY IMPT (1)	NOT AT ALL IMPT DNA (0)	MEDIAN /MEAN
English – speaking	8.3%	0.0%	58.3%	16.7%	16.7%	0.0%	3.0/2.6
English – reading	33.3%	0.0%	41.7%	16.7%	0.0%	8.3%	3.0/2.9
English – writing	16.7%	0.0%	25.0%	41.7%	8.3%	8.3%	2.0/2.3
Basic math	33.3%	0.0%	33.3%	16.7%	8.3%	8.3%	3.0/2.8
Statistics	0.0%	0.0%	0.0%	0.0%	41.7%	58.3%	0.0/0.4
Algebra	0.0%	0.0%	0.0%	0.0%	33.3%	66.7%	0.0/0.3
Advanced math	0.0%	0.0%	0.0%	0.0%	41.7%	58.3%	0.0/0.4
Computers/word processing	8.3%	0.0%	0.0%	16.7%	25.0%	50.0%	0.5/0.9
Computers/spread sheets	8.3%	0.0%	0.0%	0.0%	50.0%	41.7%	1.0/0.8
Computers/overall literacy	8.3%	0.0%	8.3%	16.7%	25.0%	41.7%	1.0/1.2
Chemistry – basic	0.0%	0.0%	0.0%	8.3%	16.7%	75.0%	0.0/0.3
Biology – basic	0.0%	0.0%	0.0%	0.0%	16.7%	83.3%	0.0/0.2
Problem solving ability	8.3%	0.0%	41.7%	25.0%	16.7%	8.3%	2.5/2.2
Work ethic	50.0%	0.0%	50.0%	0.0%	0.0%	0.0%	3.5/3.5
Teamwork	50.0%	0.0%	41.7%	8.3%	0.0%	0.0%	3.5/3.4
Tolerant/others' beliefs	33.3%	0.0%	41.7%	16.7%	0.0%	8.3%	3.0/2.9
Punctuality	66.7%	0.0%	33.3%	0.0%	0.0%	0.0%	4.0/3.7

Note: Some respondents checked one response to this question rather than writing a number characterizing the importance of the issue as requested in the survey instructions. Those checking are recorded under the 'assumed very important' category.

# Advantage Marketing Information

## Critical Skills & Competence Ratings for Entry-Level Employees Position 5: Production

IMPORTANCE OF SKILL FOR ENTRY LEVEL EMPLOYEES	CRITICAL (4)	ASSUMED VERY (+) IMPT(3.5)*	VERY IMPT (3)	SOME-WHAT IMPT (2)	NOT VERY IMPT (1)	NOT AT ALL IMPT DNA (0)	MEDIAN /MEAN
English – speaking	33.3%	44.4%	11.1%	11.1%	0.0%	0.0%	3.5/3.4
English – reading	50.0%	37.5%	12.5%	0.0%	0.0%	0.0%	3.8/3.7
English – writing	37.5%	37.5%	12.5%	0.0%	12.5%	0.0%	3.5/3.3
Basic math	37.5%	37.5%	0.0%	12.5%	0.0%	12.5%	3.5/3.1
Statistics	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0
Algebra	0.0%	0.0%	0.0%	20.0%	0.0%	80.0%	0.0/0.4
Advanced math	0.0%	0.0%	0.0%	0.0%	20.0%	80.0%	0.0/0.2
Computers/word processing	0.0%	0.0%	20.0%	0.0%	0.0%	80.0%	0.0/0.6
Computers/spread sheets	0.0%	0.0%	0.0%	0.0%	20.0%	80.0%	0.0/0.2
Computers/overall literacy	0.0%	0.0%	40.0%	0.0%	0.0%	60.0%	0.0/1.2
Chemistry – basic	0.0%	0.0%	0.0%	20.0%	0.0%	80.0%	0.0/0.4
Biology – basic	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0
Problem solving ability	0.0%	0.0%	60.0%	20.0%	20.0%	0.0%	3.0/2.4
Work ethic	42.9%	28.6%	28.6%	0.0%	0.0%	0.0%	3.5/3.6
Teamwork	25.0%	37.5%	37.5%	0.0%	0.0%	0.0%	3.5/3.4
Tolerant/others' beliefs	33.3%	16.7%	33.3%	16.7%	0.0%	0.0%	3.2/3.2
Punctuality	57.1%	28.6%	14.3%	0.0%	0.0%	0.0%	4.0/3.7

Note: Some respondents checked one response to this question rather than writing a number characterizing the importance of the issue as requested in the survey instructions. Those checking are recorded under the 'assumed very important' category.

# Advantage Marketing Information

## Critical Skills & Competence Ratings for Skilled Employees Position 1: Machinist

IMPORTANCE OF SKILL FOR SKILLED EMPLOYEES	CRITICAL (4)	ASSUMED VERY (+) IMPT(3.5)*	VERY IMPT (3)	SOME-WHAT IMPT (2)	NOT VERY IMPT (1)	NOT AT ALL IMPT DNA (0)	MEDIAN /MEAN
English – speaking	46.9%	9.4%	40.6%	3.1%	0.0%	0.0%	3.5/3.5
English – reading	51.6%	6.5%	38.7%	3.2%	0.0%	0.0%	4.0/3.5
English – writing	43.3%	6.7%	36.7%	13.3%	0.0%	0.0%	3.2/3.3
Basic math	73.3%	6.7%	10.0%	3.3%	0.0%	6.7%	4.0/3.5
Statistics	20.0%	0.0%	12.0%	12.0%	12.0%	44.0%	1.0/1.5
Algebra	37.0%	0.0%	14.8%	14.8%	7.4%	25.9%	3.0/2.3
Advanced math	29.6%	3.7%	11.1%	18.5%	7.4%	29.6%	2.0/2.1
Computers/word processing	11.1%	0.0%	11.1%	14.8%	18.5%	44.4%	1.0/1.3
Computers/spread sheets	14.8%	0.0%	11.1%	22.2%	3.7%	48.1%	1.0/1.4
Computers/overall literacy	17.2%	6.9%	17.2%	31.0%	6.9%	20.7%	0.0/0.3
Chemistry – basic	3.8%	0.0%	0.0%	7.7%	3.8%	84.6%	0.0/0.3
Biology – basic	3.8%	0.0%	0.0%	0.0%	7.7%	88.5%	0.0/0.2
Problem solving ability	56.7%	6.7%	26.7%	6.7%	0.0%	3.3%	4.0/3.4
Work ethic	76.7%	10.0%	13.3%	0.0%	0.0%	0.0%	4.0/3.8
Teamwork	69.0%	3.4%	27.6%	0.0%	0.0%	0.0%	4.0/3.7
Tolerant/others' beliefs	33.3%	0.0%	55.6%	7.4%	0.0%	3.7%	3.0/3.1
Punctuality	68.8%	9.4%	15.6%	6.3%	0.0%	0.0%	4.0/3.7

Note: Some respondents checked one response to this question rather than writing a number characterizing the importance of the issue as requested in the survey instructions. Those checking are recorded under the 'assumed very important' category.

# Advantage Marketing Information

## Critical Skills & Competence Ratings for Skilled Employees Position 2: Engineer

IMPORTANCE OF SKILL FOR SKILLED EMPLOYEES	CRITICAL (4)	ASSUMED VERY (+) IMPT(3.5)*	VERY IMPT (3)	SOME-WHAT IMPT (2)	NOT VERY IMPT (1)	NOT AT ALL IMPT DNA (0)	MEDIAN /MEAN
English – speaking	52.9%	11.8%	35.3%	0.0%	0.0%	0.0%	4.0/3.6
English – reading	64.7%	11.8%	17.6%	5.9%	0.0%	0.0%	4.0/3.6
English – writing	58.8%	11.8%	23.5%	5.9%	0.0%	0.0%	4.0/3.6
Basic math	81.3%	6.3%	6.3%	0.0%	0.0%	6.3%	4.0/3.7
Statistics	53.3%	0.0%	13.3%	0.0%	13.3%	20.0%	4.0/2.7
Algebra	50.0%	6.3%	6.3%	6.3%	18.8%	12.5%	3.8/2.7
Advanced math	56.3%	6.3%	12.5%	0.0%	12.5%	12.5%	4.0/3.0
Computers/word processing	56.3%	6.3%	6.3%	12.5%	12.5%	6.3%	4.0/3.0
Computers/spread sheets	47.1%	11.8%	11.8%	5.9%	17.6%	5.9%	3.5/2.9
Computers/overall literacy	47.1%	11.8%	23.5%	5.9%	5.9%	5.9%	3.5/3.2
Chemistry – basic	13.3%	0.0%	33.3%	13.3%	20.0%	20.0%	2.0/2.0
Biology – basic	13.3%	0.0%	0.0%	13.3%	20.0%	53.3%	0.0/1.0
Problem solving ability	58.8%	11.8%	23.5%	5.9%	0.0%	0.0%	4.0/3.6
Work ethic	64.7%	11.8%	23.5%	0.0%	0.0%	0.0%	4.0/3.7
Teamwork	64.7%	11.8%	23.5%	0.0%	0.0%	0.0%	4.0/3.7
Tolerant/others' beliefs	68.8%	6.3%	18.8%	6.3%	0.0%	0.0%	4.0/3.7
Punctuality	64.7%	11.8%	17.6%	5.9%	0.0%	0.0%	4.0/3.6

Note: Some respondents checked one response to this question rather than writing a number characterizing the importance of the issue as requested in the survey instructions. Those checking are recorded under the 'assumed very important' category.

# Advantage Marketing Information

## Critical Skills & Competence Ratings for Skilled Employees Position 3: Sales/Marketing

IMPORTANCE OF SKILL FOR SKILLED EMPLOYEES	CRITICAL (4)	ASSUMED VERY (+) IMPT(3.5)*	VERY IMPT (3)	SOME-WHAT IMPT (2)	NOT VERY IMPT (1)	NOT AT ALL IMPT DNA (0)	MEDIAN /MEAN
English – speaking	80.0%	13.3%	6.7%	0.0%	0.0%	0.0%	4.0/3.9
English – reading	80.0%	13.3%	6.7%	0.0%	0.0%	0.0%	4.0/3.9
English – writing	73.3%	13.3%	6.7%	6.7%	0.0%	0.0%	4.0/3.7
Basic math	53.3%	13.3%	33.3%	0.0%	0.0%	0.0%	4.0/3.6
Statistics	8.3%	0.0%	33.3%	16.7%	16.7%	25.0%	2.0/1.8
Algebra	16.7%	0.0%	8.3%	8.3%	25.0%	41.7%	1.0/1.3
Advanced math	16.7%	0.0%	8.3%	16.7%	25.0%	33.3%	1.0/1.5
Computers/word processing	53.3%	13.3%	26.7%	6.7%	0.0%	0.0%	4.0/3.5
Computers/spread sheets	57.1%	7.1%	21.4%	7.1%	7.1%	0.0%	4.0/3.4
Computers/overall literacy	46.7%	13.3%	33.3%	6.7%	0.0%	0.0%	3.5/3.5
Chemistry – basic	0.0%	0.0%	8.3%	0.0%	16.7%	75.0%	0.0/0.4
Biology – basic	0.0%	0.0%	0.0%	0.0%	25.0%	75.0%	0.0/0.2
Problem solving ability	66.7%	13.3%	20.0%	0.0%	0.0%	0.0%	4.0/3.7
Work ethic	66.7%	13.3%	20.0%	0.0%	0.0%	0.0%	4.0/3.7
Teamwork	80.0%	13.3%	6.7%	0.0%	0.0%	0.0%	4.0/3.9
Tolerant/others' beliefs	50.0%	14.3%	28.6%	0.0%	0.0%	7.1%	3.8/3.4
Punctuality	71.4%	14.3%	14.3%	0.0%	0.0%	0.0%	4.0/3.8

Note: Some respondents checked one response to this question rather than writing a number characterizing the importance of the issue as requested in the survey instructions. Those checking are recorded under the 'assumed very important' category.

# Advantage Marketing Information

## Critical Skills & Competence Ratings for Skilled Employees Position 4: Manager – Production/Operations

IMPORTANCE OF SKILL FOR SKILLED EMPLOYEES	CRITICAL (4)	ASSUMED VERY (+) IMPT(3.5)*	VERY IMPT (3)	SOME-WHAT IMPT (2)	NOT VERY IMPT (1)	NOT AT ALL IMPT DNA (0)	MEDIAN /MEAN
English – speaking	77.8%	11.1%	11.1%	0.0%	0.0%	0.0%	4.0/3.8
English – reading	77.8%	11.1%	11.1%	0.0%	0.0%	0.0%	4.0/3.8
English – writing	66.7%	11.1%	22.2%	0.0%	0.0%	0.0%	4.0/3.7
Basic math	87.5%	0.0%	12.5%	0.0%	0.0%	0.0%	4.0/3.9
Statistics	37.5%	0.0%	0.0%	25.0%	12.5%	25.0%	2.0/2.1
Algebra	50.0%	0.0%	12.5%	12.5%	12.5%	12.5%	3.5/2.8
Advanced math	55.6%	11.1%	11.1%	0.0%	0.0%	22.2%	4.0/2.9
Computers/word processing	62.5%	0.0%	0.0%	37.5%	0.0%	0.0%	4.0/3.2
Computers/spread sheets	55.6%	11.1%	11.1%	22.2%	0.0%	0.0%	4.0/3.4
Computers/overall literacy	55.6%	11.1%	11.1%	22.2%	0.0%	0.0%	4.0/3.4
Chemistry – basic	0.0%	11.1%	11.1%	22.2%	0.0%	55.6%	0.0/1.2
Biology – basic	0.0%	0.0%	0.0%	12.5%	0.0%	87.5%	0.0/0.2
Problem solving ability	44.4%	11.1%	44.4%	0.0%	0.0%	0.0%	3.5/3.5
Work ethic	66.7%	11.1%	22.2%	0.0%	0.0%	0.0%	4.0/3.7
Teamwork	75.0%	0.0%	25.0%	0.0%	0.0%	0.0%	4.0/3.8
Tolerant/others' beliefs	75.0%	0.0%	12.5%	0.0%	0.0%	12.5%	4.0/3.4
Punctuality	75.0%	0.0%	25.0%	0.0%	0.0%	0.0%	4.0/3.8

Note: Some respondents checked one response to this question rather than writing a number characterizing the importance of the issue as requested in the survey instructions. Those checking are recorded under the 'assumed very important' category.

# Advantage Marketing Information

## Critical Skills & Competence Ratings for Skilled Employees Position 5: Production - All

IMPORTANCE OF SKILL FOR SKILLED EMPLOYEES	CRITICAL (4)	ASSUMED VERY (+) IMPT(3.5)*	VERY IMPT (3)	SOME-WHAT IMPT (2)	NOT VERY IMPT (1)	NOT AT ALL IMPT DNA (0)	MEDIAN
English – speaking	40.0%	20.0%	40.0%	0.0%	0.0%	0.0%	3.5/3.5
English – reading	40.0%	20.0%	40.0%	0.0%	0.0%	0.0%	3.5/3.5
English – writing	20.0%	20.0%	40.0%	20.0%	0.0%	0.0%	3.0/3.1
Basic math	20.0%	20.0%	60.0%	0.0%	0.0%	0.0%	3.0/3.3
Statistics	0.0%	0.0%	0.0%	33.3%	0.0%	66.7%	0.0/0.7
Algebra	0.0%	0.0%	0.0%	50.0%	25.0%	25.0%	1.5/1.2
Advanced math	0.0%	20.0%	0.0%	40.0%	20.0%	20.0%	2.0/1.7
Computers/word processing	25.0%	0.0%	25.0%	0.0%	0.0%	50.0%	1.5/1.8
Computers/spread sheets	0.0%	0.0%	0.0%	25.0%	0.0%	75.0%	0.0/0.5
Computers/overall literacy	0.0%	0.0%	25.0%	25.0%	0.0%	50.0%	1.0/1.2
Chemistry – basic	25.0%	0.0%	25.0%	0.0%	0.0%	50.0%	1.5/1.8
Biology – basic	0.0%	0.0%	0.0%	50.0%	0.0%	50.0%	1.0/1.0
Problem solving ability	20.0%	20.0%	40.0%	0.0%	0.0%	20.0%	3.0/2.7
Work ethic	40.0%	20.0%	40.0%	0.0%	0.0%	0.0%	3.5/3.5
Teamwork	40.0%	20.0%	40.0%	0.0%	0.0%	0.0%	3.5/3.5
Tolerant/others' beliefs	0.0%	0.0%	0.0%	66.7%	0.0%	33.3%	2.0/1.3
Punctuality	40.0%	20.0%	40.0%	0.0%	0.0%	0.0%	3.5/3.5

Note: Some respondents checked one response to this question rather than writing a number characterizing the importance of the issue as requested in the survey instructions. Those checking are recorded under the 'assumed very important' category.

# Advantage Marketing Information

## Appendix II Employee Training Programs Open-ended comments

<b>• What training programs (long and short term) are/would be helpful?</b>
Hard skills
Communication, Teamwork, Managing people, Management skills including Reviewing performance, understanding financial information, customer service, Hiring, Termination, resolving conflict, Excel, Word, basic computers, math, English, Spanish.
Technical training. Not necessarily at the degree level
It is becoming increasingly difficult to locate injection molding equipment operators. Screw-machine operators are also scarce. Older employees are not experienced enough on computers.
Basic Machining and CNC
Metalworking; machine operation; machine repair; machinist training; blueprint reading; remedial English and Mathematics; Customer Service
Operating a computer, lean Mfg
More reimbursement for equipment training and computer training
Good Manufacturing Practices and pharmaceutical regulations. Basic chemistry/biology - hands on cell culture and purification
See answers to questions 3,4, 5, & 6
The writing of a strategic plan and the integration of the key business functions, through measurement, into the implementation of the strategic plan.
In Ohio and Europe, in particular Northern Europe, my new employees all were part of the government-training program for the first 90 days. All training on and off site was the responsibility of the local government to handle. The greatest threat to business in RI is employee retention. Fully 50% of new hires do not complete their initial 90-day assessment at a great cost to the company. For employees with growth potential, I would like the government to provide funding to get these individuals and groups more intense training.
We currently rely on software/hardware vendors for training and also upon hired consultants. It would be interesting to see what and how the state might contribute to this effort and at what cost and effectiveness (value).
It goes beyond training. Applicants come ill prepared from High School. That being said: Advanced math skills PLCs/Ladder Logic Optics and lighting Troubleshooting/problem solving
It goes beyond training. Applicants come ill prepared from High School. That being said: Advanced math skills PLCs/Ladder Logic Optics and lighting Troubleshooting/problem solving
OFFICE SKILLS, ADVANCED COURSES IN MFG, FORKLIFT TRAINING,
Computer, basic mechanics, machine repair,
Fix our schools or give out vouchers so we can send our children to good schools
Industry specific mechanical skills, basic mechanical skills
Technical school training in machinery operations and maintenance. Basic computer skills
A program that supports skilled labor, trainer, apprenticeships in the workplace that are paid by through education funds

## Advantage Marketing Information

At this time, the only training/education program for graphic and printing is located at RI College. However, the administration has decided to eliminate it based on fiscal constraints." Once that happens we will have no high level ed/training program for future employees of the printing industry."
A larger emphasis on Technical schools as an option for young people. We find a general shortage of metal working candidates. With our aging workforce we need to generate interest in young people early on.
Basic math, sciences, computer skills like bookkeeping and records keeping, basic office skills, customer service, machining
Mgt training, new computer skills, basic math
Training, customer service, computer, machining
I need people who understand how to run machines well and safely and do that with the least mistakes
BASIC MATH, MACHINING, LATEST COMPUTER SKILLS,
These surveys never get anything done
Management/Leadership training. Would like to have access to old apprenticeship training outlines. Lean Manufacturing, Six Sigma, Quality Control
English as a second language/ remedial math programs/Supply Chain Optimization training
Need to implement a comprehensive welding training program
Effective communication and writing skills, computer training, front line supervisor training, safety and project management training
We must find qualified CNC workers if we are to keep up with our customers demand
Production supervisory training and all computer training
Any programs in Lean
The vocational schools should provide training in manufacturing again.
Remove the waiting period for the grant program. We can find the trainer, but many times the cost of the training is prohibitive.
QuickBooks training on the job training management and scheduling training
Lean Manufacturing, Cause and Effect Analysis, Project Management and Reporting

# Advantage Marketing Information

## Appendix III Open-ended Comments Management Training

<b>Management Team Training</b>
Managing
Teambuilding Skills
Best practice performance
Teamwork, communication, accountability, respect
Financial Training
Computer Training, Health and Fitness.
Bryant's Executive Development Program, Intro to Computers @CCRI
Team Building
Teamwork, Lean Mfg., communication
Motivational skills, managing diverse workforce
Professional Development, Program Development
Critical thinking
People skills
Management, equipment
Leadership
Supervisory & management training
Leadership, Employee Development/Coaching
Developing the foundation for strategic plan development, performance measurement, action item implementation and create a win/win/win culture for customers/ employees/ management, in that order
Leadership
Leadership
Better use of existing ERP
Strategic visioning / planning
Supervisory management, team building & problem solving
<b>ADVANCED MANUFACTURING SKILLS</b>
Customer svc, planning, budgeting
Lean manufacturing
Management, equipment
Lean principles, On time delivery of product, QC programs
Everything from basic management to advance skills in people and productivity
Variable Data printing

## Advantage Marketing Information

Management Development, Lean Mfg., Compliance based training
Strategic Thinking/Planning
SALES
Staff training skills
How to manage the floor teams better; sales techniques
How to get along with the floor staff better and get them to work harder how to sell our products better
HOW TO INCREASE INVENTORY TURNS, HOW TO TRAIN NEW HIRES, BETTER SALES SKILLS INCLUDING USING POWERPOINT
How to get their departments to run efficiently
Optimization of our computer system
Supply Chain/Effective Communication
Manufacturing and Quality Control Best Practices
No openings
Employee relations, quality assurance, safety, pro active maintenance scheduling
Lean Manufacturing
Human resources and understanding and working with employees
Environmental and Safety Training
Bill of materials and production scheduling
Goal and Direction Setting, Formal Management and Leadership Training

# Advantage Marketing Information

## Appendix IV Open-ended Comments Management Job Description

<b>The management job description</b>
Managing
Ability to manage people, customer service oriented, able to work with all levels of the organization, computer experience including Excel, Word and Access, College degree required
Understanding and skilled with Microsoft Office, Familiarity with Lean Concepts a plus, Professional phone skills required
Ability to manage people; customer focused; Familiarity with MS Windows and MS Office; Communicates well
Ability to initiate cost savings initiatives, ability to motivate employees, ability to hire and fire, ability to troubleshoot problems and identify root cause and recommend changes.
Enterprise wide software systems, lean, strong leadership skills, manufacturing management skills
Good math skills, organized, multi task capable, good under pressure
Management experience in matrix environment. Team leadership fundamentals cGMP
Depends on the position
Team Building and leadership skills. Accounting
Same personal attributes as above plus demonstrated leadership ability; Experience with ERP systems, ISO and quality management, budgeting, planning (tactical and strategic).
Computer skills Interpersonal skills Project/time management
Computer skills Interpersonal skills Project/time management
GROWTH MANAGEMENT, PRODUCT DEVELOPMENT, SUCCESSFUL SALES BACKGROUND, INDUSTRY EXPERIENCE
experience, prototype design, sales
same as above
Math skills, multi tasking, organization skills
Supervisory skills, motivation, team work
Manager must have ability to work with and rally the staff - must be analytical and able to make decisions based on data - quick and confident in the decisions - committed to doing whatever it takes to get it done
Must be familiar with variable data printing and one-to-one marketing. Able to look at research data and develop plans for growth.
Organization, Supervisory, Multi-tasking, Negotiations, Coaching, Teambuilding.
Computer skills, ability to manage processes and provide leadership. Ability to identify opportunities for and advocate change/continuous improvement.
Proven sales skills, proven training skills
How to manage better

## Advantage Marketing Information

Must have provable experience in motivating workers
How not to waste our inventory
EXPERIENCE IN TRAINING AND MOTIVATING WORKERS; SALES AND MARKETING BACKGROUND A PLUS FOR SOME
Experience working in a manufacturing environment with metal processes, strong technical background
Ability to communicate effectively/ Bi-lingual preferred. Must have experience in manufacturing/Quality Control
Set departmental goals and objectives that support overall company objectives, provide clear direction to front line supervisors, experience in lean manufacturing and system controls
No openings
Supervise day-to-day activities. Meet scheduling commitments on a timely basis to meet sales requirements. In charge of line quality assurance. Oversee plant maintenance, quality control, warehousing and delivery.
Experience in Lean Manufacturing preferred
Experience in management and in manufacturing
Environmental and Safety training is a key issue for us. We must have individuals who are well versed in State and Federal guidelines and then be able to implement and ensure they are strictly adhered to.
Looking for a production scheduler now
Must understand Lean manufacturing and how the implementation of improvement plans will must be monitored and adjusted to meet company goals. Must be able to monitor several projects at one time and have the ability to change direction based on results.