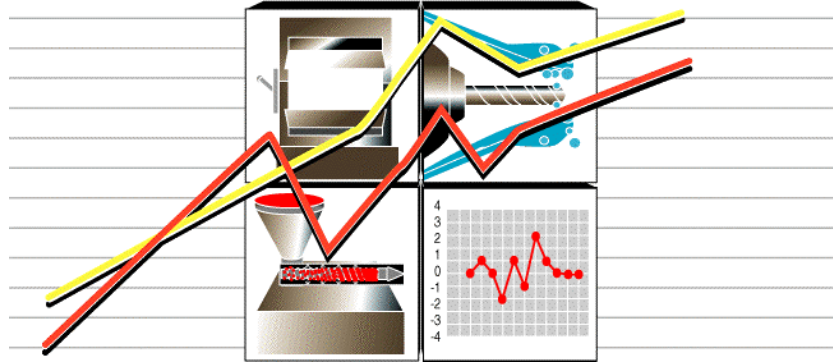




Instructions for Using This Electronic Form



At any time, you may elect to print this document and handwrite your responses, and return by either fax or by mail.

This form is designed to be **completed electronically**. To do so, you will need the newest form of Adobe Acrobat Reader software, version 9.0. A free copy is available for download from their website at <http://get.adobe.com/reader>

You can use your mouse or the tab key to move from one answer box to another. (To make the answer boxes visible, look for and click on the "Highlight Fields" button in the upper right hand corner of your screen.)

If you are using an earlier version of acrobat, please be aware of the following:

You may not have the ability to save your answers as part of the file. Alternatively, you may find that you are able to save your answers **ONLY ONCE** and that if you reopen the file, you are unable to make further changes.

We recommend printing a blank copy of this form as backup or go to www.performancebenchmarking.org to download another copy of this form.

To **submit** your data, you may:

Print a hard copy with your responses and fax or mail it to us.

Save your answers as part of the file and submit by email (using the button in the upper right hand corner). This opens a link to your email service (either outlook or internet mail) in order to create an email message with your responses attached. You may have to then open your email account and manually click the send button.

Save your answers and this file on your computer under another file name and attach it in a separate email to pbs@mmtc.org.

PERFORMANCE BENCHMARKING

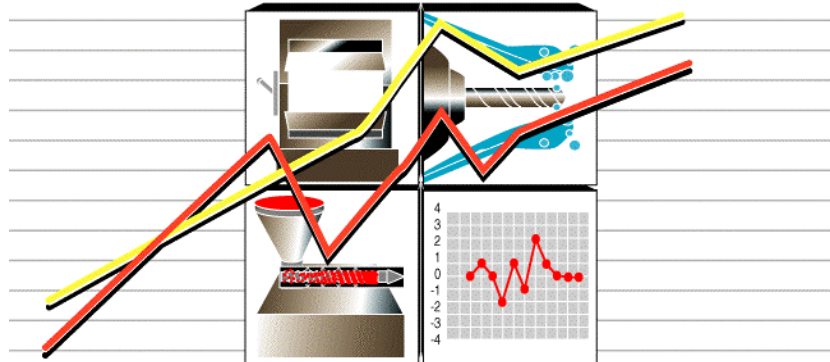
For Benchmarking Use Only

Site ID

Svkey

Foundries

(Valid through 4/15/11)



We also have sector-specific forms for many industries. Call us or go to www.performancebenchmarking.org to download other forms.

- Please try to report all of your data (financial and other) for the same 12-month period, preferably calendar 2009.
- Please indicate currency units if not U.S. Dollars: _____
- If you operate more than one plant, please provide data for each plant separately.

Company Contact Person

Contact Person: _____

Company Name: _____

(This is how it will appear on your report)

Address: _____

City/Town: _____

State/Province: _____

Country/Postal Code: _____

Phone: _____

Fax: _____

E-Mail: _____

Plant Location (If Different)

City/Town: _____

State/Province: _____

Country: _____

**Please return this questionnaire, and
direct any questions to:**

Performance Benchmarking Service

MMTC

47911 Halyard

Plymouth, MI 48170

(P) 888-414-6682

(F) 734-451-4202

E-mail pbs@mmtc.org

<http://www.performancebenchmarking.org>

Which of the following do you consider to be your core
business?

Non-ferrous Castings:

Copper? Yes No

Aluminum? Yes No

Zinc? Yes No

Other? Yes No

Ferrous Castings:

Steel? Yes No

Gray Iron? Yes No

Malleable Iron? Yes No

Ductile Iron? Yes No

Compacted Graphite Iron? Yes No

Please keep a copy of this questionnaire in the event that we need to contact you for clarification.

<p>Plant Information: What do you make at this plant? Using what processes? What materials? For what types of customers?</p>	<p>1. (You <u>must</u> provide a written description.)</p>		
<p>Please enter your industry code (whether U.S. SIC, NAICS, or other classification system), if you know it.</p>	<p>2. _____ <input type="checkbox"/> SIC <input type="checkbox"/> NAICS <input type="checkbox"/> Other _____</p>		
<p>Is this the only location of your company? [If no:] How many people work at your company, at all of its locations world-wide?</p>	<p>3. Only location? <input type="checkbox"/> Yes <input type="checkbox"/> No 4. [If no:] Total company employment (check one box): <input type="checkbox"/> 1-19 <input type="checkbox"/> 20-99 <input type="checkbox"/> 100-499 <input type="checkbox"/> 500+</p>		
<p>Consider a typical or representative product or job type made at this location in the past year. Roughly what was its typical/average unit price? What about your lowest-unit-price product or job? What about your highest unit price? [If you are in a process industry, and make output which can be packaged into units of virtually any size, please enter "NA."]</p>	<p>5. Typical/Average Unit Price \$ _____</p>	<p>6. Low Unit Price \$ _____</p>	<p>7. High Unit Price \$ _____</p>
<p>For a typical product or job, roughly how many units of a particular product do you make? For very long-term orders or products, please answer based on annual volumes. (Check one box.) [If you are in a process industry, think of a "unit" as one of whatever ends up on your customers' shelves, or – for output packaged into very large containers – whatever your customer handles as one item.]</p>	<p>8. (Check only one.) <input type="checkbox"/> One or very few <input type="checkbox"/> A dozen, or several dozen, or hundreds <input type="checkbox"/> Thousands or tens of thousands, or more <input type="checkbox"/> No such thing as "typical" – our volumes are unpredictable and can vary from a few to many thousands</p>		
<p>In the past year, roughly what percent of your sales fell into each of the following categories? [If you build machines or similar large, complex items, "specials" sales should be classified as Q9 work. "Standard" or "catalog" machines should be classified as a mix of Q11 and Q12, depending on how much of machine content is made to forecast (Q12), versus made only when the order is received (Q11).]</p>	<ul style="list-style-type: none"> • Engineer-to-Order (one-of-a-kind items: dies, prototypes, special machines, etc.) 9. _____% • Job Shop Products and Services (short-term or non-repeating orders) 10. _____% • Make-to-Order Jobs Run Regularly (long-term, repeating orders) 11. _____% • Make-to-Stock Work 12. _____% <li style="text-align: right;">Total (should sum to 100) % 		
<p>In the past year, approximately what percent of sales were to consumers, institutions, wholesalers, or retailers (i.e., NOT to other manufacturers)?</p>	<p>13. _____ % sales NOT to manufacturers</p>		
<p>In the past year, roughly what percent of your sales were:</p>	<ul style="list-style-type: none"> • Defense/military-related? 14. _____% • Medical/healthcare-related? 15. _____% 		
<p>In the past year, roughly what percent of your sales were to customers in the following industries?</p>	<ul style="list-style-type: none"> • Automotive 16. _____% • Aircraft/Aerospace 17. _____% • Computer, Communications, or Electronic Equipment 18. _____% 		
<p>In the past year, what percent of your sales were from:</p>	<ul style="list-style-type: none"> • Products you didn't make three years ago? 19. _____% • Customers you didn't serve three years ago? 20. _____% • Industries you didn't serve three years ago? 21. _____% 		
<p>In the past year, what percent of your sales were shipped outside your home continent or trade area (e.g., North America/NAFTA, European Union, Asia/Pacific, etc.)?</p>	<p>22. _____ % sales exported beyond trade area</p>		
<p>Financial: What were your total sales at this location in the past year? (Use calendar 2009 or your most recent fiscal year.) What were your sales <i>two years</i> earlier (i.e., calendar 2007)?</p>	<p>Annual Sales: • Calendar 2009 or most recent fiscal year 23. \$ _____ • Two years earlier (e.g., 2007) 24. \$ _____</p>		
<p>Receivables: On average during the past year, what were your receivables – the amount that your customers owed you?</p>	<p>25. \$ _____ average receivables</p>		
<p>Labor Costs: What was your total payroll in the past year? (<u>Include</u> payments for Social Security, Medicare, bonuses, and overtime. <u>Exclude</u> payments for health care, pension plans, and other fringe benefits. Also <u>exclude</u> any payments made to people who are not your employees.) How much of payroll was for :</p>	<p>26. Hourly employees who work on the shop floor? \$ _____ 27. All others who work in the shop or factory (e.g., foremen & supervisors) <u>plus</u> all design/engineering staff? \$ _____ 28. All other non-shop, non-engineering employees? \$ _____ 29. Total Payroll (Q26+Q27+Q28) \$ _____</p>		
<p>What was the average wage rate, <u>excluding</u> overtime, for hourly shop employees (from Q26)? Please include all skill/seniority levels in this average.</p>	<p>30. Avg. hourly wage \$ _____ per hour</p>		

<p>What were your expenses for health care, pension plans, workers' comp, and other fringe benefits not included in payroll? How much of those expenses were for:</p> <ul style="list-style-type: none"> • Factory employees (working in the shop or in design/engineering)? • Non-factory employees? 	<p>31. \$ _____ factory employees</p> <p>32. \$ _____ non-factory employees</p>
<p>What did you spend for temporary or contract personnel in the past year? How much of your spending was for:</p> <ul style="list-style-type: none"> • Factory temps (working in the shop or in design/engineering)? • Non-factory temps? 	<p>33. \$ _____ factory temps</p> <p>34. \$ _____ non-factory temps</p>
<p>Purchases from Other Firms and Locations: In the past year, how much did you spend on purchased raw material, parts, supplies, and perishable tools? (Do <u>not</u> include energy costs here.) Approximately what percent of these purchases were from supplier locations outside your home continent or trade area (e.g., North America/NAFTA, European Union, Asia/Pacific, etc.)?</p>	<p>35. \$ _____ raw material, parts, supplies</p> <p>36. _____ % not from home continent or trade area</p>
<p>In the past year, how much did you spend on services you paid others to provide? How much of this spending was for:</p> <ul style="list-style-type: none"> • Manufacturing-related services? (e.g., subcontracted processing, outside repair & maintenance, tooling design/build, design services, waste disposal, etc.) Include factory insurance and property taxes here. • Non-manufacturing-related services? (e.g., outside payroll, legal and accounting services; phone, postage, shipping, sales commissions to non-employees, etc.) 	<p>37. \$ _____ manufacturing services</p> <p>38. \$ _____ non-manufacturing services</p>
<p>In the past year, how much did you spend on energy, across all fuels (electricity, natural gas, fuel oil, etc.)?</p> <p>What percent of that was for the factory (i.e., <i>not</i> for the office)?</p>	<p>39. \$ _____ energy costs</p> <p>40. _____ % for factory</p>
<p>Plant & Equipment Costs: In the past year, what were your expenses for depreciation, rent, and leases? Be sure to include: 1) depreciation & amortization of factory buildings & equipment you own; 2) factory rent; and 3) factory equipment lease payments.</p>	<p>41. \$ _____ depreciation, rent, and lease payments</p>
<p>Roughly what is the replacement value of all the machines and equipment you use? Please include the value of machines that you <u>lease</u> as well as those you <u>own</u>. By replacement value, we mean that if you use a 20-year-old machine, how much it would cost to replace it with a roughly identical 20-year-old machine. (Please do NOT include the value of your building or land, and do NOT report book value.)</p>	<p>42. \$ _____ machinery/equipment replacement value</p>
<p>Order Processing, Scheduling and Delivery: Is yours a business that requires almost no inventory? By this we mean that you buy little or no material, and do very quick-turnaround processing on parts or tools your customers send to you.</p>	<p>43. <input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, SKIP TO QUESTION 46.]</p>
<p>How much total inventory (raw, WIP, and final) did you have on hand at the <u>end</u> of the past year?</p> <p>How much total inventory at the <u>beginning</u> of the year?</p>	<p>44. Year-End \$ _____</p> <p>45. Beginning-of-Year \$ _____</p>
<p>In the past year, what percent of your deliveries were made on time? What percent of deliveries from your suppliers were made on time?</p>	<p>46. _____ % deliveries you made on time</p> <p>47. _____ % deliveries your suppliers made on time</p>
<p>How much did you spend in the past year on "premium freight" charges for which customers did not reimburse you?</p>	<p>48. \$ _____ premium freight</p>
<p>In the past year, to what extent did you "bump" work from your planned production schedules in order to get "rush" or "hot" jobs done on time?</p> <ul style="list-style-type: none"> • [If you schedule "lots" or "jobs:"] Roughly what percent of lots or jobs required bumping another previously- scheduled lot or job? • [If you schedule project "tasks:"] Roughly what percent of shop labor hours were spent doing "rush" tasks that required bumping other previously-scheduled work? 	<p>49. _____ % of lots/jobs that bumped scheduled jobs OR 50. _____ % of shop labor hours that bumped scheduled work [If you do not schedule production, enter NA for both Q49 & Q50.]</p>
<p>What percent of your sales were from orders you got over the internet? What percent of your purchases were made over the internet?</p>	<p>51. _____ % of sales from internet orders</p> <p>52. _____ % of purchases made over internet</p>
<p>Are your order entry and/or production scheduling system(s) integrated with EDI or the internet, so that orders can be processed and scheduled automatically, without human intervention?</p>	<p>53. <input type="checkbox"/> Yes <input type="checkbox"/> No</p>

<p>Human Resources: On average in the past year, how many individuals worked at this location? Please include part-time and contract labor. (If your employment counts changed significantly over the past year, please be careful to report AVERAGE, not YEAR-END counts.)</p>	<p>54. _____ average number of individuals working at this location</p>
<p>How many of the personnel from your answer to Q54 were contractors, rather than people on your own payroll?</p>	<p>55. _____ contract personnel</p>
<p>Over the past year, how many different people did you have <u>on your payroll</u> for at least one day? That is, how many W2's did you generate? [Note: Your answer should not be less than Q54 minus Q55.]</p>	<p>56. _____ people on payroll for at least one day</p>
<p>How many of your total personnel (from Q54) were hourly people who worked on the shop floor? How many of these shop floor workers (from Q57):</p> <ul style="list-style-type: none"> • Were represented by labor unions? • Were covered by company-subsidized health insurance, for which you paid at least \$3000 per worker? 	<p>57. _____ hourly shop floor personnel</p> <p>Number of these shop floor workers:</p> <p>58. _____ in unions</p> <p>59. _____ for whom you paid >= \$3000/yr in health premiums</p>
<p>On average in the past year, how many hours per week did these shop workers (from Q57) work?</p>	<p>60. _____ hours per week, per worker</p>
<p>In the past year, roughly what percent of your shop labor time was spent doing work manually or with hand tools? That is, what percent was spent doing manual or hand-tool assembly, packaging, finishing, or other light manufacturing work?</p>	<p>61. _____ % shop labor time doing manual or hand-tool work</p>
<p>In the past year, what percent of your personnel at this location (from Q54) used a computer or programmable machine controller at least once a week as part of their job?</p>	<p>62. _____ % personnel using computer or programmable machine controller</p>
<p>Design and Manufacturing: In the past year, roughly what percent of your sales were from jobs where you designed the part or assembly? (Makers of large, one-to-an-order products should enter the percent of sales from design-and-build jobs.)</p>	<p>63. _____ % sales from products of own design</p>
<p>How large is your production or factory area?</p>	<p>64. _____ sq. ft.</p>
<p>How many machines do you have in regular use? (If you are in a process industry, think about "processing lines" rather than "machines.") Do not include any machines you use only for non-production activities such as tryout, fixture-building, etc. How many of these have programmable control of key process parameters (such as pressure, temperature, duration, etc.)? How many are programmable, with their programs generated directly from CAD models (CAD/CAM)?</p>	<p>65. _____ number of machines or lines in regular use</p> <p>Number of these machines or lines that:</p> <p>66. _____ Have programmable control of key process parameters</p> <p>67. _____ Are programmable, and have their CAM programs generated from CAD models</p>
<p>How many hours was your shop open for production last year? <i>Example: Two 8-hr shifts per day * 5 days per week* 50 weeks = 4000.</i></p> <p>The next 2 questions refer only to those machines included in Q65. What was your total number of available machine hours in the past year? By "available," we mean <i>staffed</i> with someone assigned to run it or scheduled to run unattended. <i>Example: The shop was open for two 8-hour shifts per day, 250 days per year. Staffing was set so that 25 machines were manned on the first shift and 10 on the second shift. Thus total available machine-hours were:</i> [25 machines x 8 hours/day x 250 days/year] + [10 machines x 8 hours/day x 250 days/year] = 70,000 machine-hrs</p>	<p>68. _____ hours shop was open last year</p> <p>69. _____ available machine-hours or line-hours ("available" = staffed machine-hours, plus machine-hours scheduled to run unattended)</p>
<p>How many of those available hours (from Q69) were machines actually <u>running</u> parts? (Do NOT include any hours that the machines were idle or waiting, such as setup time, maintenance time, time spent resolving quality problems, etc.)</p>	<p>70. _____ running machine-hours or line-hours</p>
<p>Quality Assurance: In the past year, what was your scrap rate? By "scrap," we mean work you rejected internally due to errors, not unavoidable material loss. If you can, please provide the dollar value of output scrapped (costs for wasted labor and machine time plus cost for ruined material). Otherwise, provide the proportion (% or PPM) of units or output scrapped. (Answer either Q71 and Q72, or just Q73.)</p>	<p>Scrap Due to Errors (Do NOT Include Offal or Design Scrap):</p> <p>71. \$ _____ cost of material ruined due to errors</p> <p>72. \$ _____ total scrap cost (ruined material plus cost of wasted labor and machine time)</p> <p>OR</p> <p>73. _____ % of units or output scrapped <input type="checkbox"/> % <input type="checkbox"/> PPM (Check % or PPM.)</p>
<p>In the past year, what percent of shop labor time was spent doing rework or reprocessing of output that was not done right the first time?</p>	<p>74. _____ % shop labor time spent doing rework</p>
<p>In the past year, what proportion (% or PPM) of the units you shipped were initially rejected for quality reasons or not-to-spec condition? [Even if your customers accept or reject entire lots, enter % or parts per million bad if you know it.]</p>	<p>75. _____ initially rejected due to quality <input type="checkbox"/> % <input type="checkbox"/> PPM (Check % or PPM.)</p>