

Section I: Demographics

- DM01** Approximately how many employees work at the plant in total? employees
- DM02** Approximately what percentage are direct production workers? % of total employees
- DM03** What percentage of the direct production workers is temporary? % of direct workers
- DM04** What percentage of plant ownership is international? % of plant ownership
- DM05** What percentage of total sales does the most important product line represent? % of sales
- DM06** For your plant's most important product line, what percent of sales come from (total number should be 100%):
 Domestic markets: % of sales Export markets: % of sales
- DM07** For your plant's most important product line, what percent of purchases come from (total number should be 100%):
 Domestic suppliers % Foreign suppliers %
- DM08** What percent of plant sales come from (total number should be 100%):
 Affiliates (within your firm) % External (outside) %
- DM09** What percent of plant sales come from (total number should be 100%):
 Industrial (B2B) % Consumer (B2C) % Government (B2G) % Other %
- DM10** What is the approximate average age (in years) of the plant's production equipment?
 <4 y 4-5 y 6-7 y 8-10 y 11-15 y 16-20 y more than 20 y
- DM11** What is the percentage of annual sales invested in new manufacturing equipment over past two years?
 <3% 3-4% 5-7% 8-10% 11-15% 16-20% more than 20%
- DM12** Considering your most important product line, the typical product life cycle is (check one box):
 < 1 year 1-2 years 3-4 years 5-6 years > 6 years
- DM13** What percentage of plant sales is currently from products that have been introduced in the last 2 years? % of sales
- DM14** What percentage of the value of parts or components that comprise the plant's products are fabricated within the plant? % of the value of parts or components
- DM15** What percentage of plant sales is from services provided by the plant? % of sales
- DM16** What percentage of the plant's sales is the total manufacturing cost including manufacturing management as well as overhead (services: security, travel, etc. and indirect materials Maintenance, Repair and Operations?) % of sales
- DM17** What percentage of the plant's total manufacturing cost is for labor including manufacturing managers? % of manufacturing cost
- DM18** What percentage of the plant's total manufacturing cost is for material? % of manufacturing cost
- DM19** What percentage of the plant's total manufacturing cost is for overhead cost? % of manufacturing cost
- DM20** The ratio of Cost of Goods Sold to Average Inventory value at cost is (COGS/Average Inventory) turns per year
- DM21** What is the approximate distribution of the plant's inventory value? (total number should be 100%)
 Purchased materials and parts % Work-in-process % Finished goods %

%

Section II: Competitive Priorities, Context and Performance (CG)

CG01 Please indicate the importance given to each of the following competitive goals by senior management (total number should be 100%)

	Weight percentage
1. Cost	%
2. Quality (Conformance to specifications)	%
3. Delivery timeliness	%
4. Flexibility (e.g., product variety/volume)	%
5. New product or process design/innovation	%
6. Environment/safety	%

CG02 Please indicate your level of agreement with these statements on competitive environment:

	Not at all		Some extent			Great extent	
1. The availability of critical inputs is difficult to predict	1	2	3	4	5	6	7
2. The competitive intensity in your industry is high	1	2	3	4	5	6	7
3. There are many substitutes in the market for your products	1	2	3	4	5	6	7
4. Demand for your products is difficult to predict	1	2	3	4	5	6	7
5. Suppliers of critical inputs have significant bargaining power	1	2	3	4	5	6	7
6. Your customers have significant bargaining power	1	2	3	4	5	6	7
7. Your industry is subject to rapid technological change	1	2	3	4	5	6	7
8. Your competitors are mainly local	1	2	3	4	5	6	7
9. Each year many new competitors enter your industry	1	2	3	4	5	6	7

CG03 What percentage of the plant's purchase orders do suppliers deliver late? % of purchase orders

CG04 Considering your most important product line, what is the demand level for a "peak" month (e.g., 20% more than normal = 120) % of normal

CG05 Considering your most important product line, what is the demand level for a "trough" month (e.g., 30% less than normal = 70) % of normal

CG06 Considering your most important product line, what average percentage would be the forecast error for 2 months in the future? % of error

CG07 For the total sales for this plant, what average percentage would be the forecast error for 24 months in the future? % of error

CG08 Please indicate your level of agreement with these statements on strategic alignment

Strategic Alignment	Not at all		Some extent			Great extent	
1. Manufacturing strategy is aligned with corporate strategy	1	2	3	4	5	6	7
2. Manufacturing strategy is aligned with that of other functions	1	2	3	4	5	6	7
3. Business functions meet frequently to coordinate activities	1	2	3	4	5	6	7
4. Manufacturing is powerful relative to other functions	1	2	3	4	5	6	7
5. Manufacturing has clearly defined strategic objectives	1	2	3	4	5	6	7
6. Manufacturing strategy leverages existing capabilities	1	2	3	4	5	6	7
7. Manufacturing strategy is clearly communicated to all staff	1	2	3	4	5	6	7
8. Manufacturing strategy is frequently reviewed and revised	1	2	3	4	5	6	7

CG09 Please indicate your level of agreement with these statements on plant's capabilities:

Capability	Not at all		Some extent			Great extent	
1. Your plant has state-of-the-art manufacturing processes	1	2	3	4	5	6	7

2. Your workforce has superior technological skills	1	2	3	4	5	6	7
3. Your plant has unique manufacturing process capabilities	1	2	3	4	5	6	7
4. You have superior technological know-how in your plant	1	2	3	4	5	6	7
5. This plant has equipment that is protected by the firm's patents	1	2	3	4	5	6	7
6. Proprietary equipment helps you gain competitive advantage	1	2	3	4	5	6	7

CG10 Please Indicate your plant's performance compared to your major competitor(s)?

Plant Performance	Far worse			Similar			Far better		
1. Labor unit costs	1	2	3	4	5	6	7		
2. Total product unit costs	1	2	3	4	5	6	7		
3. Raw material unit costs	1	2	3	4	5	6	7		
4. Product performance	1	2	3	4	5	6	7		
5. Product conformance to customer specifications	1	2	3	4	5	6	7		
6. Pre-sales service and after sales service	1	2	3	4	5	6	7		
7. Delivery speed	1	2	3	4	5	6	7		
8. Delivery reliability	1	2	3	4	5	6	7		
9. Response to changes in delivery due dates	1	2	3	4	5	6	7		
10. Production volume flexibility (increase/decrease volume)	1	2	3	4	5	6	7		
11. Production variety flexibility (increase/decrease product mix)	1	2	3	4	5	6	7		
12. Number of new products introduced each year	1	2	3	4	5	6	7		
13. Lead time to introduce new products	1	2	3	4	5	6	7		
14. Lead time to implement new or change existing processes	1	2	3	4	5	6	7		
15. Lost time accidents	1	2	3	4	5	6	7		
16. Consumption of scarce resources	1	2	3	4	5	6	7		
17. Discharge of hazardous materials	1	2	3	4	5	6	7		

CG11 How did the following financial measures change in the last fiscal year (check one box for each item)?

	Reduced more than 25%	Reduced 15% - 25%	Reduced 5% - 15%	Remained the same -5% - +5%	Increased 5% - 15%	Increased 15% - 25%	Increased more than 25%
1. Total sales of goods and services	1	2	3	4	5	6	7
2. Profitability	1	2	3	4	5	6	7
3. Market share	1	2	3	4	5	6	7

Please provide approximate values for the following measures for the past financial year for you plant:

CG12 Percentage of the total number of customer orders delivered in full and on time _____ % of customer orders

CG13 Average annual machine utilization (percentage of total available machine time) _____ % of total available machine time

CG14 Considering your most important product line, what is the average manufacturing time from starting production to finishing production (days) _____ days

CG15 Average customer lead time (from order to delivery, in days) _____ days

CG16 Please give the following reject rates:

1. Percent rejects of incoming material	_____ %
2. Percent rejects during processing	_____ %
3. Percent rejects at final inspection	_____ %
4. Percent returns from the customer	_____ %

CG17 Percentage of process changes that were considered major:

%

CG18 Percentage of accidents that are lost time accidents
accidents

% of

Section III: Internal Manufacturing Practices (IP)

IP01 Your plant processes are designed to make products in these quantities (total number should be 100%):

One of a kind	%	Small to medium batch	Large batch	Continuous production
		%	%	%

IP02 Equipment in your plant is grouped together in the following configurations (total number should be 100%):

By machine type	%	By product(s) (cells)	Assembly line(s)	%	Flow process	%
		%				

IP03 What percentage of your products are (total number should be 100%):

Engineered/configured to order (customized at the design stage)	%
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Standardized end products	%
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Standardized sub-assemblies that are interchangeable – end product is customized to order (postponed customization)	%
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IP04 Please indicate the extent of investment (money, time and/or people) in the following areas in the last two years:

Investment Areas	Not at all		Some extent			Great extent	
1. Quality management programs (e.g., TQM, Six-Sigma)	1	2	3	4	5	6	7
2. Cost reduction programs (e.g., Target Costing)	1	2	3	4	5	6	7
3. Manufacturing lead time reduction programs	1	2	3	4	5	6	7
4. Planning/scheduling processes and methods	1	2	3	4	5	6	7
5. Processing technologies (e.g., FMS, automation)	1	2	3	4	5	6	7
6. Flexible workforce	1	2	3	4	5	6	7
7. Supplier development	1	2	3	4	5	6	7
8. Workforce training and development							
9. Environmental impact of operations	1	2	3	4	5	6	7
10. Integrating manufacturing and design processes	1	2	3	4	5	6	7
11. Plant information flows automation	1	2	3	4	5	6	7
12. Work place health and safety	1	2	3	4	5	6	7
13. Customer service	1	2	3	4	5	6	7
14. Customer process integration	1	2	3	4	5	6	7
15. Supplier process integration							

Considering your plant's most important product line, , please answer the next three questions

IP05 Approximately, how many part numbers are on a typical end-item BOM for this product line? (check one)

<10 10-29 30-49 50-99 100-249 250-1000 more than 1000

IP06 Approximately how many permanent changes are made on a typical end-item BOM for this product line annually? (check one)

0 1-5 6-19 20-39 40-69 70-100 more than 100