

**2003**

*Celebrating 15 Years*

National Institute of Standards and Technology  
Technology Administration • Department of Commerce  
Baldrige National Quality Program



# GeoOrb Polymers, North America Scorebook

# GeoOrb Polymers, North America Scorebook

This case study scorebook was developed as an instructional tool for the 2003 Examiner Preparation Course. A consensus team of experienced Baldrige Examiners evaluated the GeoOrb Polymers, North America Case Study, using the Stage 2—Consensus Review Process, and site visit issues were developed and included as part of the scorebook. The GeoOrb Polymers, North America Case Study describes a fictitious manufacturing organization providing polymer products. There is no connection between the fictitious GeoOrb Polymers, North America and any organization, either named GeoOrb Polymers, North America or otherwise. Other organizations cited in the case study also are fictitious, with the exception of several national organizations. Because the case study is developed for educational use and appreciation of the possible content of an actual Baldrige application, there are areas in the case study where Criteria requirements are not addressed.

GeoOrb Polymers, North America scored in band 4, showing that the organization demonstrates effective, systematic approaches to the overall requirements of the Items, but deployment may vary in some areas or work units. In addition, fact-based evaluation and improvement address the efficiency and effectiveness of key processes. Results address key customer/stakeholder, market, and process requirements, and they demonstrate some areas of strength and/or good performance.

**Recommended Scoring Ranges for the GeoOrb Polymers, North America Case Study**

<b>Item</b>	<b>Scoring Range (%)</b>
1.1	60–70
1.2	45–55
2.1	50–60
2.2	45–55
3.1	55–65
3.2	55–65
4.1	55–65
4.2	50–60
5.1	50–60
5.2	45–55
5.3	45–55
6.1	55–65
6.2	40–50
7.1	50–60
7.2	50–60
7.3	50–60
7.4	45–55
7.5	45–55
7.6	50–60
<b>Scoring Range (points):</b>	<b>498–598</b>

## Key Factors Worksheet

To begin the evaluation process, review the applicant's Organizational Profile and the Additional Information Needed Form. List the key business/organization factors for this applicant, using the Areas to Address (Organizational Environment, Organizational Relationships, Competitive Environment, Strategic Challenges, Performance Improvement System) in the order presented in the Preface: Organizational Profile section of the appropriate *Criteria for Performance Excellence* booklet.

### P.1a. Organizational Environment

- A single-site (Baton Rouge, Louisiana) manufacturer of polymer materials, split equally among high-density polyethylene (HDPE), linear low-density polyethylene (LLDPE), and polypropylene (PP) plastic raw materials
- Net sales: \$1.97 billion in 2001 (34% HDPE, 30% LLDPE, and 36% PP) and \$2.5 billion in 2002
- Member of the Polyolefins Business Group, which provides 50% of the revenues of the 80-year-old parent organization, as well as strategic direction to the applicant
- Vision: Skilled associates developing and delivering plastics for a healthy planet
- Three guiding Principles: Support Communities, Achieve Highest Ethical Standards, and Invest in a Future Society
- Mission: Provide high-quality polymers that make customers more competitive and provide value to shareholders.
- Five Values: Growth Through Partnerships, Right Technology, Right Cost, Right Environment, and Successful Associates/Successful Teams
- Goal: 10% Return on Capital Employed (ROCE)
- Employee profile
  - Employees called “associates” regardless of position or level
  - 978 full-time associates in a nonunion environment
  - 300 full-time contract associates, primarily in maintenance functions
  - Manufacturing and quality control associates (about 50% of total) who work a rotating, 12-hour shift
  - All associates included in productivity base and safety tracking
  - All associates have a high school education, 12% hold associate's degrees, 31% have undergraduate degrees, and 15% have advanced degrees.
  - Experience: work requires significant technical competencies and experience; 40% of associates have more than 20 years with the company.
- Major technologies: polyolefin process technology, catalyst technology, and computer technology
- On-site Technology Center with 100 resident engineers, chemists, and technicians
- Regulated by FDA, OSHA, Louisiana Department of Natural Resources (LDNR), and EPA; follows International Chemical Society (ICS) Corporate Active Prevention Process (CAPP) guidelines
- Alliances, joint ventures (including an e-market venture with three other chemical firms and ChemTie, Inc.), and partnerships with academia, government, researchers, and industry leverage new technology.

### P.1b. Organizational Relationships

- Board of Directors for the parent corporation composed of four internal and eight external, independent members; has four standing committees: Nominating, Compensation, Audit, and Litigation
- Parent corporation Management Committee has four standing committees (Ethics; Safety, Health, and Environmental; Human Resources; and Strategic Materials); Corporate Services provides guidance on standards of practice
- Corporate Services provides shared services to the applicant, including financial, regional marketing and sales, strategic purchasing, computing support, logistics, legal, safety, health, environmental, and human resources services.
- Sales primarily to U.S. market (75% of sales); remainder to Canada, Mexico, and the Caribbean (15% of sales) and to South America (10% of sales)
- No consumer products are made. Materials are used in packaging (60% of sales), construction (12% of sales), automotive applications, and other consumer and industry applications. Major markets: HDPE—food

packaging, household chemical containers, and pipe and telecommunications conduits; LLDPE—rotational molding and plastic film; PP—compounders, fibers, automotive parts, and injection molding

- Customers are primarily repeat buyers. Large customers (25% of sales), medium customers (50% of sales), and small customers (25% of sales). Five distributors account for about 2% of total sales.
- Three critical quality and service requirements for all customers: product quality, product consistency, and on-time product delivery. Other key requirements: new properties (earliest possible access) and fair and flexible pricing at the prevailing, competitive market level
- Supplier base of about 500; 60 supply critical raw materials or services. Supplier categories: ethylene and propylene monomer suppliers; contractors; logistics suppliers; catalyst and additive suppliers; maintenance, repair, and operational (MRO) material suppliers; and internal staff services. Supplier requirements are quality, cost, and on-time delivery.

### **P.2a. Competitive Environment**

- Capacity share of the total North American market: HDPE—14.8%, LLDPE—16.4% (dominant position), PP—11.7%
- Annual worldwide growth: HDPE and LLDPE—4–5% and PP—7–8%
- Growth will be driven by increased margins and lowered cost rather than expanded capacity.
- Competitive competencies: single-site production facility, multiple liaisons with Research and Development (R&D) partners, closely integrated customer relationships, and world-class business practices
- Sources of competitive/comparative data: Chemical World Clearinghouse and Polymer Industry Institute subscriptions; Compass Point Research, Incorporated, survey; Customer Satisfaction Institute; Performance Excellence Clearinghouse; OSHA; National Bureau of Labor and Statistics; LDNR; Recycle Institute of America; and the CAPP Program. Comparative data focusing on governance issues are difficult to acquire.

### **P.2b. Strategic Challenges**

- Four key competitive threats and issues within industry: profitability in a cyclical business; plastics of the future; maturing workforce; worldwide parent corporation expansion

### **P.2c. Performance Improvement System**

- Approaches to performance improvement include Hoshin Kanri for business planning, the Kaizen Improvement Process, and knowledge sharing through many mechanisms.
- Performance improvement approaches include internal Baldrige-based self-assessment and applications for various Japanese and American quality awards.

**(For Stage 3, Site Visit Review, Only)** Thinking about the questions in the Organizational Profile, did the team have any new insights about the applicant as a result of the site visit? If so, please describe.

## **Key Factors Worksheet**

## Key Themes Worksheet

The Key Themes Worksheet provides an overall summary of the key points in the evaluation of the application and is an assessment of the key themes to be explored if the applicant proceeds to Stage 2, Consensus Review, and Stage 3, Site Visit Review. A key theme is a strength or opportunity for improvement that addresses a central requirement of the Criteria, is common to more than one Item or Category (cross-cutting), is especially significant in terms of the applicant's KFs, and/or addresses a Core Value of the Criteria.

The Key Themes Worksheet should respond to the three questions below:

- a. What are the most important strengths or outstanding practices (of potential value to other organizations) identified?
- b. What are the most significant opportunities, concerns, or vulnerabilities identified?
- c. Considering the applicant's key business/organization factors, what are the most significant strengths, opportunities, vulnerabilities, and/or gaps (related to data, comparisons, linkages) found in its response to Results Items?

### **a. What are the most important strengths or outstanding practices (of potential value to other organizations) identified?**

- The applicant's Steering Team, made up of the President and his direct reports, sets and deploys short- and long-term directions that are aligned with the organization's Vision, Principles, Mission, Goal, and Values. The Steering Team uses several key approaches, including the Gyroscope Planning System (GPS) to establish, monitor, and revise organizational direction; the Gyroscope Semi-Annual Calibration (CSAC) Process to collect and analyze data and address key factors; the Hoshin Catchball Process to communicate direction to associates; and Navigation Reviews to translate review findings into priorities for improvement. The Individual Development and Learning Map (IDLM), which documents each associate's improvement plan and goals, identifies linkages to overall organizational objectives.
- The applicant uses a variety of listening and learning approaches to determine customer requirements. These include customer focus groups, satisfaction surveys, industry scans, and complaint data scans. Information from these listening posts is correlated and regularly analyzed using statistical processes, verified by using information from Customer Account Teams (CATs), and translated into new and modified products and services using Quality Function Deployment (QFD). These approaches to listening and learning are assessed as part of the GPS cycle to keep current with changing market and business needs.
- The applicant uses an integrated business management software system called CHEM-ERS to capture both local and corporate data at the point of creation. The software provides financial, supply chain, manufacturing, and program management information, and it interfaces with the applicant's Customer Account Plans (CAPs) and the Complaint Management System (CMS). The GPS drives the selection, alignment, and integration of data for tracking overall organizational performance, and the Knowledge Transfer and Benchmarking Group (KTBG) has established processes for collecting comparative data to support strategic decision making and innovation.
- A variety of approaches encourage knowledge sharing across the organization, including Communities of Practice (COPs), rotational teams, cross-functional job training, and WINGS. The applicant also shares performance results, Kaizen ideas, and best practices through numerous mechanisms, such as newsletters, closed-circuit television postings, e-mail bulletins, shared servers, Steering Team quarterly forums, weekly departmental meetings, and bulletin boards.
- The applicant's team-based culture, including the Steering Team at the senior leader level, as well as self-directed, cross-functional, and cross-product teams at other organizational levels, helps promote cooperation, initiative, empowerment, and innovation. All associates participate on at least one work area team, and most participate on at least one cross-functional team. This approach helps reinforce new knowledge and skills, and it supports communication across the organization.

- To design value creation processes that meet key requirements, the applicant uses a 14-step Cartography Design Process (CDP) that involves development of a control plan, as well as service trials and pilot testing before any commercial production is approved. The process is guided by a sponsor team, project leaders and owners, and customer champions, and it was refined recently to incorporate a supplier champion and a Safety, Health, and Environmental (SH&E) advisor for each project. The applicant seeks input from suppliers, partners, and customers, as well as appropriate associates and sponsor teams, in order to improve value creation processes to achieve better performance.
- b. What are the most significant opportunities, concerns, or vulnerabilities identified?**
- The applicant does not have a systematic approach for accomplishing effective succession planning or for using information on training needs. This may limit the applicant's ability to carry out its organizational strategy related to human resources. There also is little evidence of a systematic approach for evaluating and improving the efficiency and effectiveness of processes related to social responsibility.
  - Although the applicant uses the Kaizen system in its team-based culture to capitalize on the diverse ideas and thinking of associates, it is not clear how the applicant capitalizes on the ideas and cultures of its diverse hiring communities. In addition, it is not evident that the applicant segments the individual factors driving associate satisfaction by different categories and types of associates or for a diverse workforce. This may limit the organization's ability to effectively address its Value of Successful Associates/Successful Teams.
  - Although Business Development Teams (BDTs) determine and select customers, customer groups, and market segments as part of their input to the GPS, there is little evidence of systematic approaches for differentiating customer listening and learning approaches for key customers or customer groups important to the applicant's business. In addition, while the applicant has stated that the importance of product and service attributes may differ among customer segments, it is not clear how this information is used in product and service planning, marketing, or other business development. This may impact the applicant's ability to achieve its growth strategies relative to new growth industries and markets outside the United States.
  - While the applicant has identified four key strategic challenges—profitability in a cyclical business, worldwide expansion of the corporation, a maturing workforce, and plastics of the future—it is not clear how the applicant is addressing some of these challenges. For example, the Strategy Map does not address human resource issues related to international expansion or training needs associated with new technologies. The applicant also does not describe a process for effective succession planning for leadership positions, which may hinder its ability to address its maturing workforce challenge.
- c. Considering the applicant's key business/organization factors, what are the most significant strengths, opportunities, vulnerabilities and/or gaps (related to data, comparisons, linkages) found in its response to Results Items?**
- Results for most of the measures presented demonstrate positive levels and trends. Specifically, the applicant demonstrates strong levels and trends in overall customer satisfaction, repurchase intent and perceived value, product quality, financial performance (Return on Capital Employed [ROCE] and Return on Net Assets [RONA], among others), and several operational measures.
  - Results are not included for some areas of importance to the applicant's strategy and requirements. These gaps include measures related to customer access mechanisms; associate absenteeism; the effectiveness of hiring and career progression; the effectiveness of training and education; associate health, security, or ergonomics; plant stream factor; average maintenance turnaround; invoice accuracy; business forecast

accuracy; Information System user feedback; data and information factors such as errors and security violations; and engineering design errors.

- Although the applicant's intent is that its performance results be the best in the industry, comparative data presented for many of the applicant's results include only industry average or top quartile for the industry. Without comparisons to the industry leader's performance, the applicant may have difficulty in effectively determining the size of performance gaps it needs to close.
- Results for some key measures are not segmented, including by customer group, product, or associate type. This may make it difficult for the applicant to assess its performance levels and trends across different customer and associate segments in order to drive effective decision making toward achieving its strategic objectives.

## Key Themes Worksheet



**Item Worksheet—Item 1.1**

Prepare one Item Worksheet for each Item, capturing the 6–10 most important strengths and opportunities for improvement based on the applicant’s response to the Criteria requirements and its key business/organization factors.

**Indicate the 4–6 most important key business/organization factors relevant to this Item.**

- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. Mission: Provide high-quality polymers that make customers more competitive and provide value to shareholders.</li> <li>2. Vision is “Skilled associates developing and delivering plastics for a healthy planet.”</li> <li>3. Three guiding Principles: Support Communities, Achieve Highest Ethical Standards, and Invest in a Future Society</li> <li>4. Five Values: Growth Through Partnerships, Right Technology, Right Cost, Right Environment, Successful Associates/Successful Teams</li> </ol> | <ol style="list-style-type: none"> <li>5. Board of Directors for the parent corporation composed of four internal and eight external, independent members; has four standing committees: Nominating, Compensation, Audit, and Litigation</li> <li>6. Approaches to performance improvement include Hoshin Kanri for business planning, the Kaizen Improvement Process, and knowledge sharing through many mechanisms.</li> </ol> |
|--|--|

**Include an indication of the relative importance/strength of the comment by using ++ or - - as appropriate. Include a reference to the most relevant Key Factor(s).**

+ / ++	Item Ref	KF Ref	Strengths (Include figure references, as appropriate.)
+	a1	1-3,6	The applicant’s Steering Team, made up of the President and his direct reports, is responsible for setting and deploying short-term (one-year) and long-term (five-year) directions that are aligned with the Vision, Principles, Mission, Goal, and Values (Figure 1.1-1). The Steering Team uses the GSAC Process as part of the GPS to establish, monitor, and revise organizational direction.
+	a1	1-4	Senior leaders communicate values, directions, and expectations through a variety of approaches, including the Hoshin Catchball Process, the <i>Compass</i> newsletter, GPS meetings, recognition events, a Web page, closed-circuit television, banners and posters, and new associate orientation.
+	a2	2,4,6	The applicant’s team-based culture facilitates setting performance targets and planning, assists associates in analysis and problem solving, supports the development of new approaches and innovative solutions, and creates an environment for empowerment and associate involvement. Some teams operate at the work unit level, while others are cross-functional or cross-product, and all associates are on at least one team.
+	b	3, 5	The applicant’s parent organization provides the primary governance system. An external accounting firm conducts quarterly and annual audits, and internal audits are conducted biannually. The Ethics Committee, a standing committee under the Management Committee, reviews all audit results. In addition, governance practices, including appointment of independent board members and consistent use of the <i>Code of Conduct</i> , help ensure protection of stockholder and stakeholder interests.

+	c1	1-4	The Steering Team conducts weekly organizational performance reviews in one of four topic areas that also address three of the five Values. Monthly Navigation Reviews, which focus on company-level measures called Course Coordinates, are used to identify improvements and areas where strategy is at risk. Kaizen Improvement Project Teams are chartered and deployed throughout the applicant's organization to address at-risk areas.
-/-	<b>Item Ref</b>	<b>KF Ref</b>	<b>Opportunities for Improvement (Include figure references, as appropriate.)</b>
-	b	3,5	Although the parent corporation's Board of Directors abides by principles for independent governance established by the Japanese Corporate Governance Forum (JCGF), it is not clear how these principles or the board's committee structure addresses management accountability, fiscal accountability, or the protection of stakeholder interests at the level of the applicant's organization.
-	c2,3	1-4	The process by which senior leaders translate performance review findings into priorities for improvement is not evident, and recent review findings are not provided. In addition, it is not clear how priorities and opportunities for improvement are deployed throughout the applicant's organization or to suppliers and partners to ensure organizational alignment.
-	c4	4	Although the applicant uses an annual Leadership Assessment Session to evaluate Steering Team performance, there is no evidence of a process for systematically evaluating the performance of the CEO or the Board of Directors. Also, it is not clear how senior leaders use organizational performance review findings to improve the effectiveness of their own leadership or that of the leadership system.

**SITE VISIT ISSUES (For Stage 2, Consensus Review, Only)**

- Verify that Course Coordinates are reviewed in monthly Navigation Reviews and that weekly reviews are focused on key topics and value. Clarify how review findings are translated into improvement priorities.
- Clarify how the governance system addresses management accountability, fiscal accountability, and the protection of stakeholder interests.
- Verify how senior leaders use the Hoshin Catchball Process and other approaches to communicate values, directions, and expectations to associates, and clarify how senior leaders communicate priorities and opportunities to suppliers and partners.
- Clarify how the applicant evaluates the performance of the CEO and Board of Directors, and clarify how senior leaders use organizational performance review findings to improve their leadership and the leadership system.

**Change Due to Site Visit Findings (For Stage 3, Site Visit Review, Only)**

raise large

raise small

no change

lower small

lower large

**Item Worksheet—Item 1.1**

**Item Worksheet—Item 1.2**

Prepare one Item Worksheet for each Item, capturing the 6–10 most important strengths and opportunities for improvement based on the applicant’s response to the Criteria requirements and its key business/organization factors.

**Indicate the 4–6 most important key business/organization factors relevant to this Item.**

<p>1. Three guiding Principles: Support Communities, Achieve Highest Ethical Standards, and Invest in a Future Society</p> <p>2. Five Values: Growth Through Partnerships, Right Technology, Right Cost, Right Environment, and Successful Associates/Successful Teams</p>	<p>3. Board of Directors for the parent corporation composed of four internal and eight external, independent members; has four standing committees: Nominating, Compensation, Audit, and Litigation</p> <p>4. Regulated by FDA, OSHA, LDNR, and EPA; follows ICS CAPP guidelines</p>
--	---

**Include an indication of the relative importance/strength of the comment by using ++ or - - as appropriate. Include a reference to the most relevant Key Factor(s).**

+ / ++	Item Ref	KF Ref	Strengths (Include figure references, as appropriate.)
+	a1	1,2,4	The applicant addresses potential environmental and health impacts of its products and operations through both its design and delivery processes and the Corporate Active Prevention Process (CAPP) guidelines. The applicant also identifies Safety, Health, and SH&E requirements, goals, and measures (Figure 1.2-1) that jointly are reviewed annually by the Safety Department and the Right Environment Team. These processes reflect both the applicant’s Invest in a Future Society Principle and the Right Environment Value.
+	b	1	Numerous mechanisms help ensure ethical practices in stakeholder transactions, including the <i>Code of Conduct</i> , which specifies strict standards of behavior for associates related to legal issues, conflicts of interest, equity, and fair treatment. An annual Partners in Trust meeting, where associates discuss the <i>Code of Conduct</i> and ethics-related incidents, is attended by all associates. Other mechanisms to help ensure ethical behavior include a module on ethics in the new hire orientation and biannual internal audits that focus on operating practices related to controls, customer relations, the environment, safety, conflicts of interest, fair treatment, and equity.
+	c	1	The Steering Committee establishes community focus areas through the GPS Process in order to support the applicant’s Support Communities Principle. These areas usually focus on programs related to education and public recycling, two areas closely related to the applicant’s Values and business success. The Steering Committee reviews the progress and impacts of its community involvement in monthly Right Environment meetings.
+	c	1	Senior leaders and associates contribute to improving communities through personal involvement in a variety of activities. The applicant also encourages associate volunteerism by providing a volunteer clearinghouse, running promotional efforts on volunteerism, and allowing volunteerism on company time.

-/- -	Item Ref	KF Ref	Opportunities for Improvement (Include figure references, as appropriate.)
-	a2	1,2	Although the applicant uses a variety of listening posts to gather information regarding public concerns, it is not clear how this input is used to anticipate and proactively prepare for public concerns.
-	b	1	Other than audit results and participation in Partners in Trust Seminars, it is not clear what measures or indicators the applicant uses to monitor ethical behavior throughout the organization, including among key partners, the Board of Directors, and other stakeholders. Without such measures or indicators, the applicant may not be able to fully assess performance levels for ethical behavior.
-	c	1	Although the applicant establishes community focus areas through the GPS Process, it is not clear how the process is used to identify key communities or areas of emphasis for community support. This may make it difficult for the applicant to ensure its community support activities are aligned with its organizational strategies and priorities.
-	a,b,c	1-4	A systematic process for evaluating and improving the efficiency and effectiveness of processes related to social responsibility does not appear to be in place.

**SITE VISIT ISSUES (For Stage 2, Consensus Review, Only)**

- Clarify how input from listening posts is used to anticipate public concerns.
- Verify the deployment of the various mechanisms used to help ensure ethical behavior, and clarify what measures are used to monitor ethical behavior throughout the organization.
- Clarify how the applicant identifies its key communities and areas of emphasis for organizational involvement and support.
- Clarify whether a systematic process is in place for improving the efficiency and effectiveness of processes related to social responsibility.

**Change Due to Site Visit Findings (For Stage 3, Site Visit Review, Only)**

raise large

raise small

no change

lower small

lower large

**Item Worksheet—Item 1.2**

**Item Worksheet—Item 2.1**

Prepare one Item Worksheet for each Item, capturing the 6–10 most important strengths and opportunities for improvement based on the applicant’s response to the Criteria requirements and its key business/organization factors.

**Indicate the 4–6 most important key business/organization factors relevant to this Item.**

1. Member of the Polyolefins Business Group, which provides 50% of the revenues of the 80-year-old parent organization, as well as strategic direction to the applicant
2. Mission: Provide high-quality polymers that make customers more competitive and provide value to shareholders; Five Values: Growth Through Partnerships, Right Technology, Right Cost, Right Environment, and Successful Associates/ Successful Teams.
3. Capacity share of the total North American market: HDPE—14.8%, LLDPE—16.4% (dominant position), PP—11.7%
4. Competitive competencies: single-site production facility, multiple liaisons with R&D partners, closely integrated customer relationships, and world-class business practices
5. Four key competitive threats and issues within industry: profitability in a cyclical business; plastics of the future; maturing workforce; worldwide parent corporation expansion
6. Approaches to performance improvement include Hoshin Kanri for business planning, the Kaizen Improvement Process, and knowledge sharing through many mechanisms.

**Include an indication of the relative importance/strength of the comment by using ++ or -- as appropriate. Include a reference to the most relevant Key Factor(s).**

+ / ++	Item Ref	KF Ref	Strengths (Include figure references, as appropriate.)
+	a1	1,6	The applicant conducts strategic planning using its GPS (Figure 2.1-1), which is modeled on the four-step Hoshin Kanri management philosophy. The GPS Process (Figure 2.1-2) starts with teams that incorporate external inputs and internal performance results, conduct appropriate analyses, combine Strengths, Weaknesses, Opportunities, and Threats (SWOT) analyses with external inputs to create a prioritization matrix to identify key issues, prioritize the gaps using the Analytical Hierarchy Process, and present recommendations to the Steering Team during the GSAC Process. During the GSAC Process, the Steering Team establishes a different or modified strategic direction, including new strategic objectives addressing short- (one-year) and long-term (five-year) time horizons, optimized scenarios, and new Course Coordinate goals and/or new metrics.
+	a2	6	The GPS Process, described in Figure 2.1-2, ensures that a variety of key factors are addressed during strategic planning. These include customer and market needs (Customer Check); competitive environment (Yardstick Stretch); technological and other key innovations (Original Thought); and financial, societal, ethical, and other potential risks (Environmental Entry, Risk Reward).
+	a1,2	6	The Steering Team assesses the overall effectiveness of the GPS Process each January to identify improvement opportunities for the next planning cycle. The decision to offset Global Scans by six months demonstrates evidence of at least one cycle of refinement in the GPS Process.
+	b1,2	2-5	The applicant has identified its key strategic objectives (Future Courses) in its Strategy Map (Figure 2.1-3). The Future Courses, along with short- and long-term action plans and specific Course Coordinates, are grouped by key Value. The Strategy Map provides

clear linkages between Future Courses, specific strategic challenges listed in the Organizational Profile, and Course Coordinates, which allows the applicant to determine when it is meeting goals and accomplishing action plans.			
-/-	<b>Item Ref</b>	<b>KF Ref</b>	<b>Opportunities for Improvement (Include figure references, as appropriate.)</b>
-	a2	2,4,5	Although the applicant includes inputs on regulations in its GPS Process (e.g., through the Environmental Entry Process), it is not clear how the GPS Process addresses regulations related to agencies the applicant identifies as part of its regulatory environment, including the Food and Drug Administration (FDA), Occupational Safety and Health Administration (OSHA), Louisiana Department of Natural Resources (LDNR), Superfund Amendment and Reauthorization Act (SARA) 313, and Environmental Protection Agency (EPA).
-	b2	3,5	Although the Strategy Map identifies strategic objectives to address the challenges identified in the Organizational Profile, along with short- and long-term Strategy Maps for each challenge, it is not clear how the applicant ensures that the strategic objectives balance short- and longer-term challenges and opportunities.
-	b2	2,6	It is not clear how the applicant ensures that its strategic objectives balance the needs of all key stakeholders, including the community. Although the community is a key stakeholder and Support Communities is one of three guiding Principles, community needs are not included within the Strategy Map.
<b>SITE VISIT ISSUES (For Stage 2, Consensus Review, Only)</b>			
<ul style="list-style-type: none"> <li>• Verify how the applicant conducts strategic planning using the GPS, including how it addresses key factors in its strategic planning process using the processes described in Figure 2.1-2.</li> <li>• Clarify whether the applicant addresses regulations related to key agencies in its regulatory environment in its strategic planning process.</li> <li>• Clarify how the applicant ensures that its strategic objectives balance short- and longer-term challenges and opportunities.</li> <li>• Clarify how the applicant ensures that its strategic objectives balance the needs of all key stakeholders.</li> </ul>			
<b>Change Due to Site Visit Findings (For Stage 3, Site Visit Review, Only)</b>			
raise large	raise small	no change	lower small
			lower large

**Item Worksheet—Item 2.1**

**Item Worksheet—Item 2.2**

Prepare one Item Worksheet for each Item, capturing the 6–10 most important strengths and opportunities for improvement based on the applicant’s response to the Criteria requirements and its key business/organization factors.

- Indicate the 4–6 most important key business/organization factors relevant to this Item.**
1. Mission: Provide high-quality polymers that make customers more competitive and provide value to shareholders.
  2. Competitive competencies: single-site production facility, multiple liaisons with R&D partners, closely integrated customer relationships, and world-class business practices
  3. Four key competitive threats and issues within industry: profitability in a cyclical business; plastics of the future; maturing workforce; worldwide parent corporation expansion
  4. 978 full-time associates in a nonunion environment; 300 full-time contract associates, primarily in maintenance functions; manufacturing and quality control associates (about 50% of total) who work a rotating, 12-hour shift.
  5. Sources of competitive/comparative data: Chemical World Clearinghouse and Polymer Industry Institute subscriptions; Compass Point Research, Incorporated, survey; Customer Satisfaction Institute; Performance Excellence Clearinghouse; OSHA; National Bureau of Labor and Statistics; LDNR; Recycle Institute of America; and the CAPP Program. Comparative data focusing on governance issues are difficult to acquire.
  6. Approaches to performance improvement include Hoshin Kanri for business planning, the Kaizen Improvement Process, and knowledge sharing through many mechanisms.

**Include an indication of the relative importance/strength of the comment by using ++ or -- as appropriate. Include a reference to the most relevant Key Factor(s).**

+ / ++	Item Ref	KF Ref	Strengths (Include figure references, as appropriate.)
+	a1	6	The applicant deploys action plans throughout the organization using a Hoshin Catchball Process. After the company Strategy Map is approved by the parent corporation, the Steering Team presents it at department-level Gyroscope meetings and to all work units; team Development and Learning Maps (TDLMs) and Individual Learning Maps (IDLMS) are developed; and, finally, TDLMs, which deploy the action plans, are presented to the Steering Team for review and approval. Two years ago, the applicant refined the Hoshin Catchball Process to include the external alignment of strategic partners.
+	a2	2,3	The applicant identifies key short-term (one-year) and long-term (two- to five-year) action plans within its Strategy Map (Figure 2.1-3). These illustrate how the applicant plans to invest in capital projects, adjust its customer profile, change its pricing and outsourcing arrangements with customers and suppliers, target international customers, and implement new technologies for a variety of purposes.
+	a3	3,4	The applicant also identifies its key human resource plans in its Strategy Map (Figure 2.1-3). These plans are aligned with the company Value of Successful Associates/ Successful Teams, and they are intended to address the strategic challenge of a maturing workforce through several strategies, including the WINGS cross-training and mentoring program for younger associates and a job rotation program for engineers.

+	a4	5,6	The applicant identifies its key performance measures and indicators (Course Coordinates) in its Scorecard Course Coordinates (Figure 2.2-1). These Course Coordinates are grouped by the five company Values to reinforce organizational alignment.
+	b	1,2,5,6	The applicant identifies its key performance projections for short- and long-term planning time horizons in its Scorecard Course Coordinates (Figure 2.2-1), as well as projected performance comparisons with competitors and benchmarks. Improvement trends are evident for most of the indicators, and performance is projected to be at least equal to best-in-class with respect to the key customer requirements of on-time delivery and product quality/consistency.

-/-	Item Ref	KF Ref	<b>Opportunities for Improvement (Include figure references, as appropriate.)</b>
-	a1	6	Although the applicant uses a Hoshin Catchball Process to identify resources needed for action plan implementation, it is not clear how the resources are allocated to ensure accomplishment of action plans. This may make it difficult for the applicant to allocate resources effectively in order to support its strategic plan.
-	a3	3,4	Although the applicant identifies three Future Courses associated with the maturing workforce strategic challenge, it is not clear how the Strategy Map addresses other human resource issues surrounding international expansion or training needs associated with new technologies.
-	a4	6	Although the applicant lists Future Courses in Figure 2.1-3 and Scorecard Course Coordinates in Figure 2.2-1, it is not clear how these measures are aligned. For example, while some measures appear to be linked to strategic challenges, others are tied to organizational Values, and others to Future Courses, which may make it difficult for the applicant to ensure alignment in the deployment of its strategies.
-	b	2,5,6	It is not evident that comparative targets/projections for different types of Course Coordinates allow an accurate comparison to the industry leader's performance. For example, financial measures are compared against best-in-industry goals, customer measures against top quartile-in-industry, operations measures against top quartile-in-industry, and associate-related measures against best-in-class across industries. Information on direct competitors is not evident. This may make it difficult for the applicant to assess its overall performance against its stated goal of being the best in its industry.

**SITE VISIT ISSUES (For Stage 2, Consensus Review, Only)**

- Verify how the applicant deploys action plans throughout the organization by using its Hoshin Catchball Process, and clarify how, as part of that process, the applicant allocates resources to ensure accomplishment of action plans.
- Clarify how the applicant's Strategy Map addresses human resource issues those other than those related to the maturing workforce strategic challenge (e.g., international expansion and training for new technologies).
- Clarify how the applicant aligns measures for Future Courses shown in Figure 2.1-3 and Scorecard Course Coordinates shown in Figure 2.2-1 and how it uses these measures to ensure alignment in the deployment of its strategies.



- Clarify how the applicant's comparative targets/projections for its different types of Course Coordinates allow an accurate comparison to the industry leader's performance.

**Change Due to Site Visit Findings (For Stage 3, Site Visit Review, Only)**

**raise large**

**raise small**

**no change**

**lower small**

**lower large**

**Item Worksheet—Item 2.2**

**Item Worksheet—Item 3.1**

Prepare one Item Worksheet for each Item, capturing the 6–10 most important strengths and opportunities for improvement based on the applicant’s response to the Criteria requirements and its key business/organization factors.

- Indicate the 4–6 most important key business/organization factors relevant to this Item.**
1. Sales primarily to U.S. market (75% of sales); remainder to Canada, Mexico, and the Caribbean (15% of sales) and to South America (10% of sales)
  2. Customers are primarily repeat buyers. Large customers (25% of sales), medium customers (50% of sales), and small customers (25% of sales). Five distributors account for about 2% of total sales.
  3. Capacity share of the total North American market: HDPE—14.8%, LLDPE—16.4% (dominant position), PP—11.7%
  4. Four key competitive threats and issues within industry: profitability in a cyclical business; plastics of the future; maturing workforce; worldwide parent corporation expansion
  5. Three critical quality and service requirements for all customers: product quality, product consistency, and on-time product delivery. Other key requirements: new properties (earliest possible access) and fair and flexible pricing at the prevailing, competitive market level.
  6. Competitive competencies: single-site production facility, multiple liaisons with R&D partners, closely integrated customer relationships, and world-class business practices

**Include an indication of the relative importance/strength of the comment by using ++ or - - as appropriate. Include a reference to the most relevant Key Factor(s).**

+ / ++	Item Ref	KF Ref	Strengths (Include figure references, as appropriate.)
+	a1	6	BDTs, Pathfinders, and Explorers determine market segments with the greatest growth potential and target customers that correspond to the applicant’s areas of expertise through the use of independent industry scans, sales information, and other market data.
+	a2	5	The applicant uses a variety of approaches for listening and learning (Figure 3.1-1) to determine customer requirements, including customer focus groups, satisfaction surveys, market and industry studies, and complaint data scans.
+	a2	5	Input from customers is correlated and regularly analyzed using statistical processes, verified by using information from CAT visits, and translated into new and modified products and services using QFD. This process helps ensure that evolving customer requirements are proactively identified.
+	a3	5	At the end of each GPS cycle, BDT members and Technology Center associates conduct an assessment to keep listening and learning approaches current with the changing market and with the applicant’s needs. As a result of this assessment, the applicant has adopted several improvements over time regarding how information is gathered, analyzed, and reported. In addition, Pathfinders and Explorers assess the customer and market segments at least twice a year as an input to the applicant’s new product launch process.

-/- -	Item Ref	KF Ref	Opportunities for Improvement (Include figure references, as appropriate.)	
-	a2	1,4,6	Although the applicant uses a variety of analytical tools to enhance its listening and learning processes, it is not evident that methods for determining customer requirements are differentiated for key customers or customer groups relative to its business strategies. For example, other than the use of focus groups for True North and Guiding Light customers, it is not evident that listening posts are differentiated for any other customer groups. Without differentiation, it may be difficult for the applicant to ensure that its expansion strategies fully benefit from the input of all key customer groups.	
-	a2	4,5	While the applicant indicates that the relative importance of product and service features differs among customer segments, how this information is used in product and service planning, marketing, or other business development areas is not described. This may make it difficult for the applicant to ensure that product and service features fully support its growth strategies relative to new industries and markets outside the United States.	
-	a2	6	It is not clear whether information regarding customer requirements is shared across functions that affect overall service planning for the organization, such as suppliers or the purchasing and billing departments. This may make it difficult for the applicant to effectively use information on key customer requirements and expectations for service planning and other business development.	
<b>SITE VISIT ISSUES (For Stage 2, Consensus Review, Only)</b>				
<ul style="list-style-type: none"> <li>• Verify the applicant’s approaches to determine or target customers and market segments.</li> <li>• Verify the use of data and analysis from listening posts to define, develop, and enhance the applicant’s products and services, and verify the approaches to keep listening and learning methods current with business needs and directions.</li> <li>• Clarify whether methods for determining customer requirements are differentiated for key customer groups.</li> <li>• Clarify the use of information on customer requirements in product and service planning, marketing, and other business development.</li> </ul>				
<b>Change Due to Site Visit Findings (For Stage 3, Site Visit Review, Only)</b>				
raise large	raise small	no change	lower small	lower large

**Item Worksheet—Item 3.1**

**Item Worksheet—Item 3.2**

Prepare one Item Worksheet for each Item, capturing the 6–10 most important strengths and opportunities for improvement based on the applicant’s response to the Criteria requirements and its key business/organization factors.

**Indicate the 4–6 most important key business/organization factors relevant to this Item.**

<p>1. Sales primarily to U.S. market (75% of sales); remainder to Canada, Mexico, and the Caribbean (15% of sales) and to South America (10% of sales)</p> <p>2. Customers are primarily repeat buyers. Large customers (25% of sales), medium customers (50% of sales), and small customers (25% of sales). Five distributors account for about 2% of total sales.</p> <p>3. Capacity share of the total North American market: HDPE—14.8%, LLDPE—16.4% (dominant position), PP—11.7%</p>	<p>4. Four key competitive threats and issues within industry: profitability in a cyclical business; plastics of the future; maturing workforce; worldwide parent corporation expansion</p> <p>5. Three critical quality and service requirements for all customers: product quality, product consistency, and on-time product delivery. Other key requirements: new properties (earliest possible access) and fair and flexible pricing at the prevailing, competitive market level.</p> <p>6. Competitive competencies: single-site production facility, multiple liaisons with R&amp;D partners, closely integrated customer relationships, and world-class business practices</p>
--	---

**Include an indication of the relative importance/strength of the comment by using ++ or - - as appropriate. Include a reference to the most relevant Key Factor(s).**

+ / ++	Item Ref	KF Ref	Strengths (Include figure references, as appropriate.)
+	a1	2,6	The applicant uses a variety of approaches to build relationships and increase customer loyalty. These include the use of CATs, which serve as high-level contacts with customer organizations; placement of engineers directly at key customers’ sites; assignment of Guides for each customer; and the creation of a CAP that stores information necessary to satisfy and retain a particular customer.
+	a2	6	The applicant has several customer contact mechanisms in place (Figure 3.2-1), and it gathers information on customer contact requirements through a variety of listening and learning methods. To deploy customer contact requirements, the applicant provides specific training for all associates who have any contact with customers. Customer contact approaches are assessed through the customer satisfaction survey and information gathered through direct contact with customers.
+	a3	5,6	A formal CMS Process features a 24-hour initial response and a resolution time negotiated between the customer and the applicant’s representative. Complaint information is aggregated and analyzed, results for complaint response time and customer satisfaction with the resolution of the problem are tracked, and the Steering Team reviews high-impact issues.
+	b1	5,6	The applicant’s satisfaction survey process includes an analysis to determine key satisfaction and dissatisfaction drivers, as well as the correlation of satisfaction with loyalty and revenues. Input from lost customers is included in the analysis to assist in preventing future losses. Indications of high dissatisfaction are incorporated into the CMS for follow-up and resolution.

+	b3	5,6	Customer satisfaction levels relative to the rest of the industry are monitored using surveys conducted by the Polymer Industry Institute (PII) and through benchmark data from world-class organizations obtained through the Customer Satisfaction Institute Index (CSII). The comparative information is used to evaluate performance and set goals and targets.
+	a4,b4	5,6	The applicant has integrated approaches for improving its methods for building relationships and determining customer satisfaction into the strategic planning process. For example, as input to the GSAC, the Marketing Department submits a list of prioritized approach improvements derived from a series of analyses. This process helps keep the approaches current with business needs and directions.
-/-	<b>Item Ref</b>	<b>KF Ref</b>	<b>Opportunities for Improvement (Include figure references, as appropriate.)</b>
-	a1	4	It is not evident that the applicant's approaches to relationship building incorporate input from potential customers, which may limit the applicant's ability to use its relationship-building processes effectively in the acquisition of new customers.
-	a2	2,5,6	It is not clear how the applicant systematically uses information gained from the customer contact processes to determine key contact requirements. While there are a variety of modes of customer access, a systematic approach for determining key customer contact requirements for each mode of customer access or for different customer segments is not evident.
-	b1	5,6	Although the applicant uses internal and external surveys to monitor customer satisfaction levels and incorporates some dissatisfaction feedback into the complaint process, a systematic approach for obtaining actionable data from satisfaction results in order to drive improvement initiatives is not described.
-	b2	5,6	Although the applicant states that information from Guides' follow-up with customer deliveries is entered into the CAP and incorporated into overall performance assessment, it is not clear how this information is systematically aggregated with other data to ensure that it is effectively translated into actionable feedback or improvement initiatives.
<b>SITE VISIT ISSUES (For Stage 2, Consensus Review, Only)</b>			
<ul style="list-style-type: none"> <li>• Verify the use of Guides' follow-up reports and CAP data in general in building customer relationships, and clarify how this information is systematically aggregated with other data and translated into actionable feedback or improvement initiatives. Clarify the use of input from potential customers in the development and improvement of relationship-building processes.</li> <li>• Clarify how listening post data are used to determine key contact requirements for each mode of customer access and different customer segments.</li> <li>• Verify the use of complaint process data to effect improvement initiatives and the use of comparative data related to customer satisfaction. Clarify the use of actionable data from the customer satisfaction surveys to inform improvement initiatives.</li> </ul>			
<b>Change Due to Site Visit Findings (For Stage 3, Site Visit Review, Only)</b>			
raise large	raise small	no change	lower small
lower large			

**Item Worksheet—Item 3.2**

**Item Worksheet—Item 4.1**

Prepare one Item Worksheet for each Item, capturing the 6–10 most important strengths and opportunities for improvement based on the applicant’s response to the Criteria requirements and its key business/organization factors.

**Indicate the 4–6 most important key business/organization factors relevant to this Item.**

1. Five Values: Growth Through Partnerships, Right Technology, Right Cost, Right Environment, and Successful Associates/Successful Teams
2. Important technologies: polyolefin process technology, catalyst technology, and computer technology
3. Four key competitive threats and issues within industry: profitability in a cyclical business; plastics of the future; maturing workforce; worldwide parent corporation expansion
4. Sources of competitive/comparative data: Chemical World Clearinghouse and Polymer Industry Institute subscriptions; Compass Point Research, Incorporated, survey; Customer Satisfaction Institute; Performance Excellence Clearinghouse; OSHA; National Bureau of Labor and Statistics; LDNR; Recycle Institute of America; and the CAPP Program. Comparative data focusing on governance issues are difficult to acquire.
5. Approaches to performance improvement include Hoshin Kanri for business planning, the Kaizen Improvement Process, and knowledge sharing through many mechanisms.

**Include an indication of the relative importance/strength of the comment by using ++ or -- as appropriate. Include a reference to the most relevant Key Factor(s).**

+ / ++	Item Ref	KF Ref	Strengths (Include figure references, as appropriate.)
++	a1	2,5	The applicant uses its Measurement and Analysis Process (Figure 4.1-1), a component of the GPS, to select, align, and integrate the data and information that are collected for tracking organizational performance. This information is integrated through a business management software system, CHEM-ERS, which captures both local and corporate data at the point of creation.
+	a2	4	The KTBG ensures that key comparisons are available to support organizational decision making and to align benchmarking resources with the applicant’s strategic objectives. The KTBG has established processes to support the collection of comparative data, to conduct benchmarking training for associates, and to ensure that benchmarking activity meets corporate benchmarking guidelines and that all outcomes are documented.
+	a3	3	The applicant reviews its performance measurement system both monthly and semi-annually as part of the GSAC Process to ensure that measurements and the measurement system keep current with changing business needs.
+	b1	1	A variety of analyses support senior leaders’ organizational performance reviews. These include the basic analysis tools described in Figure 4.1-3, as well as multivariate regression analysis. The Vice President of Total Quality is responsible for obtaining the results of these analyses from all departments, which are input to the monthly Navigation Reviews and to the GSAC Process.
+	b2	3	The applicant uses numerous approaches to communicate the results of organizational-level analyses to work groups. These include articles in the <i>Compass</i> , postings on closed-circuit television, e-mail bulletins, and quarterly communication forums held by the Steering Team. At the department level, weekly meetings are held to communicate metrics and are combined with team “Fix” sessions, a part of the Kaizen program, to

generate suggestions for improving organizational performance.			
-/- -	Item Ref	KF Ref	Opportunities for Improvement (Include figure references, as appropriate.)
-	a1	3	Although the GPS is used to select data and information that track overall organizational performance and progress against strategy, it is not clear how department-level data and information are selected to track day-to-day operations. This may limit the applicant's ability to effectively use data and information to support organizational decision making and innovation.
-	a2	4,5	While results of KTBG benchmarking studies are made available to the organization via the company intranet, there is little evidence of a systematic approach for ensuring that these results are used to support innovation.
-	b2	2	Although the applicant uses a variety of approaches to communicate organizational-level analyses to departments and work teams, it is not clear how these approaches are effectively used to communicate results throughout the nine production lines and the many other types of teams to enable effective support for their decision making.
<p><b>SITE VISIT ISSUES (For Stage 2, Consensus Review, Only)</b></p> <ul style="list-style-type: none"> <li>• Verify use of the Measurement and Analysis Process (Figure 4.1-1) to input data to CHEM-ERS and that these data analyses are used as part of monthly Navigation Reviews and the GSAC Process.</li> <li>• Clarify how data and information used for day-to-day operations are selected at the department level.</li> <li>• Verify that benchmarking data are made available to associates via the intranet, and clarify the process used to translate this information to support innovation.</li> <li>• Verify the use of analytical tools to conduct organizational-level analyses, and clarify how results of these analyses are communicated across production lines and with various teams.</li> </ul>			
<p><b>Change Due to Site Visit Findings (For Stage 3, Site Visit Review, Only)</b></p> <p style="text-align: center;"> <span style="margin-right: 100px;">raise large</span> <span style="margin-right: 100px;">raise small</span> <span style="margin-right: 100px;">no change</span> <span style="margin-right: 100px;">lower small</span> <span>lower large</span> </p>			

**Item Worksheet—Item 4.1**

**Item Worksheet—Item 4.2**

Prepare one Item Worksheet for each Item, capturing the 6–10 most important strengths and opportunities for improvement based on the applicant’s response to the Criteria requirements and its key business/organization factors.

**Indicate the 4–6 most important key business/organization factors relevant to this Item.**

<ol style="list-style-type: none"> <li>1. Five Values: Growth Through Partnerships, Right Technology, Right Cost, Right Environment, and Successful Associates/Successful Teams</li> <li>2. Important technologies: polyolefin process technology and equipment, catalyst technology, and computer technology</li> <li>3. Employee profile: 978 full-time associates in a nonunion environment; 300 full-time contract associates, primarily in maintenance functions; manufacturing and quality control associates (about 50% of total) work a rotating, 12-hour shift. All associates included in productivity base and safety tracking.</li> </ol>	<ol style="list-style-type: none"> <li>4. Corporate Services provides shared services to the applicant, including financial, regional marketing and sales, strategic purchasing, computing support, logistics, legal, safety, health, environmental, and human resources services.</li> <li>5. Supplier base of about 500; 60 supply critical raw materials or services. Supplier categories: ethylene and propylene monomer suppliers; contractors; logistics suppliers; catalyst and additive suppliers; MRO material suppliers; and internal staff services. Supplier requirements are quality, cost, and on-time delivery.</li> <li>6. Approaches to performance improvement include Hoshin Kanri for business planning, the Kaizen Improvement Process, and knowledge sharing through many mechanisms.</li> </ol>
---	--

**Include an indication of the relative importance/strength of the comment by using ++ or -- as appropriate. Include a reference to the most relevant Key Factor(s).**

+ / ++	Item Ref	KF Ref	Strengths (Include figure references, as appropriate.)
+	a1	2,3,6	The applicant uses a Hierarchical System of Information and Data (Figure 4.2-1) to distribute data and information electronically. The latitudinal (horizontal) data are provided to work teams through integrated systems that convey information such as manufacturing process levels, material distribution, and processing capabilities. The longitudinal (vertical) data, which are provided to managers and the Steering Team, involve only those issues that require higher-level approval or reports used for reviews and midcourse corrections.
+	a2	1,2,3	Information Technology (IT) uses several processes and metrics (Figure 4.2-2) to ensure that hardware and software are reliable, secure, and user friendly. For example, pilot testing of new systems, biannual user surveys, and customer focus groups conducted within each user community help ensure that hardware and software are user friendly. Security is maintained through nondisclosure agreements and passwords.
+	b1	1	The applicant collects and transfers organizational knowledge through the team-based culture and the use of Hoshin Kanri and the Kaizen Improvement Process. Associates share knowledge within the work team structure and COPs, through shared servers, and through a common database. To increase communication across the organization, the Polyolefins Business Group hosts an annual Best Practices Symposium; COPs hold regular meetings, issue newsletters, and host Web sites; and the applicant provides quarterly best practice luncheons for all teams that have added best practices to the organization’s intranet Web site.



+	b2	3,4	The applicant identifies processes and measures to ensure data and information integrity, timeliness, reliability, security, accuracy, and confidentiality (Figure 4.2-2). These processes and measures are the joint responsibility of the IT Team and Corporate Services.
-/-	<b>Item Ref</b>	<b>KF Ref</b>	<b>Opportunities for Improvement (Include figure references, as appropriate.)</b>
-	a1	4	It is not clear how the applicant addresses data and information availability needs for the 50 percent of associates who work a rotating 12-hour shift, for suppliers and international customers, for its headquarters in Japan, or for other key stakeholders. This may make it difficult for the applicant to determine whether data and information accessibility needs are being met for the various users of the information.
-	a3	2,4	Although the IT Department addresses current trends in software and hardware systems and an IT Roadmap charts future directions in information technology, a systematic process for keeping data and information availability mechanisms current with business needs and directions is not evident.
-	b1	5	While customers, suppliers, and research and development partners are encouraged to provide input through the COPs, the company Web site, and written feedback, there is little evidence of a systematic approach for transferring relevant knowledge from these stakeholders to appropriate associates.
<b>SITE VISIT ISSUES (For Stage 2, Consensus Review, Only)</b>			
<ul style="list-style-type: none"> <li>• Verify the use of the Hierarchical System for distributing data electronically, and clarify what process is used to ensure that operational data are available to all shifts and to all the various teams.</li> <li>• Verify the processes used by IT to ensure reliability, security, and user friendliness of hardware and software.</li> <li>• Clarify the process by which the applicant addresses the various information needs of its various stakeholder groups.</li> <li>• Clarify whether a systematic process is in place to keep data and information availability mechanisms current with business needs and directions.</li> <li>• Verify the use of COPs to transfer knowledge to associates, and clarify the process used to transfer knowledge from customers and suppliers and research and development partners.</li> </ul>			
<b>Change Due to Site Visit Findings (For Stage 3, Site Visit Review, Only)</b>			
raise large	raise small	no change	lower small
			lower large

**Item Worksheet—Item 4.2**

**Item Worksheet—Item 5.1**

Prepare one Item Worksheet for each Item, capturing the 6–10 most important strengths and opportunities for improvement based on the applicant’s response to the Criteria requirements and its key business/organization factors.

**Indicate the 4–6 most important key business/organization factors relevant to this Item.**

<p>1. Vision: Skilled associates developing and delivering plastics for a healthy planet; five Values: Growth Through Partnerships, Right Technology, Right Cost, Right Environment, and Successful Associates/Successful Teams</p> <p>2. Employees called “associates” regardless of position or level</p> <p>3. 978 full-time associates in a nonunion environment; 300 full-time contract associates, primarily in maintenance functions; manufacturing and quality control associates (about 50% of total) work a rotating, 12-hour shift. All associates included in productivity base and safety tracking.</p>	<p>4. Experience: Work requires significant technical competencies and experience; 40% of associates have more than 20 years with the company.</p> <p>5. Four key competitive threats and issues within industry: profitability in a cyclical business; plastics of the future; maturing workforce; worldwide parent corporation expansion</p> <p>6. Approaches to performance improvement include Hoshin Kanri for business planning, the Kaizen Improvement Process, and knowledge sharing through many mechanisms.</p>
--	---

**Include an indication of the relative importance/strength of the comment by using ++ or -- as appropriate. Include a reference to the most relevant Key Factor(s).**

+ / ++	Item Ref	KF Ref	Strengths (Include figure references, as appropriate.)
++	a1	2,3,6	The applicant’s team-based culture, including the Steering Team at the senior leader level and self-directed, cross-functional, and cross-product teams at other organizational levels, helps promote cooperation, initiative, empowerment, and innovation. All associates participate on at least one work area team, and most participate on at least one cross-functional team. Teams integrate data and conduct analysis for strategic planning, establish goals and targets in the Hoshin planning phase, identify problems, and develop new approaches and innovative solutions through use of Kaizen.
+	a2	6	The applicant has established an environment that capitalizes on the diverse ideas and thinking of its associates through the implementation of the Kaizen suggestion programs. Operating at both team (KAIZEN) and individual (kaIzen) levels, submissions must be acknowledged within a day, reviewed within a week, and either resourced or referred back to the originator within ten days. Recognition programs and cash awards for the best suggestions implemented are in place at both the team and individual levels.
+	a3	1,2,6	Effective communication across work units, jobs, and locations is achieved through the applicant’s team-based culture. The team structure brings together appropriate associates from different parts of the business to act on issues that affect both their functional areas and the business in general. Approaches for sharing Kaizen ideas and implementation efforts include the <i>Compass</i> , closed-circuit televisions in all break areas, monthly celebrations, daily “Fix” sessions, bulletin boards, a best practices Web site, and training sessions.
+	b	1,6	The applicant uses an IDLM as the basis for its performance management system. All associates develop an IDLM annually with the help of their supervisors to document work objectives and goals as a part of the Hoshin Catchball Process used in strategic

			<p>planning. In addition, team participation and performance, as well as training and learning needs, are covered. Performance reviews are conducted annually using the IDLM as a guide, and associates also receive feedback from peers, team members, internal members, internal customers, subordinates, and supervisors.</p>
+	c1,2	1,2,4	<p>Using results of the 2000 Culture Survey and considering the applicant's Mission, Vision, and Values, the Recruiting Team developed a formal list of attributes and skills needed in new associates. The Recruiting Team also mapped the process for identifying and interviewing potential new associates. Interviewers are trained to evaluate job candidates' fit with these attributes, and the Recruiting Team reevaluates the attributes annually to identify potential changes.</p>

-/- -	Item Ref	KF Ref	<b>Opportunities for Improvement (Include figure references, as appropriate.)</b>
-	a1	2,4	<p>Although the Performance Team participates in the Gyroscope Constant Calibration (GCC) Process and is charged with ensuring that team performance configurations enable associates to achieve high performance, it is not clear how work is organized and managed to achieve organizational agility and ensure that the team structure helps keep the applicant current with business needs.</p>
-	a2	1,6	<p>Although the applicant uses the Kaizen system in its team-based culture to capitalize on the diverse ideas and thinking of associates, it is not clear how the applicant capitalizes on the ideas and cultures of its diverse hiring communities. Without specific approaches in place to fully utilize the diversity of its hiring community, the applicant may be limited in its ability to address its Value of Successful Associates/Successful Teams.</p>
-	a3	2	<p>While approaches to communication within the applicant's team-based culture and rotational assignments enable communication across work units, jobs, and locations, there is little evidence of a systematic approach for achieving effective skill sharing throughout the organization.</p>
-	b	2	<p>While the applicant provides a variable compensation component of 20% based on company performance and there are programs to reward Kaizen team and individual improvement ideas, it is not clear how the applicant's overall compensation, recognition, and related reward and incentive practices reinforce high-performance work and a customer and business focus.</p>
--	c3	2,5,6	<p>The applicant does not describe a systematic approach for accomplishing effective succession planning for leadership positions, including senior leadership. While data from IDLMs may provide information, it is not clear how the information is used as part of a systematic approach to career management for all associates. Without this information, it may be difficult for the applicant to effectively address career progression as part of its strategic challenge of a maturing workforce.</p>

**SITE VISIT ISSUES (For Stage 2, Consensus Review, Only)**

- Verify that the team-based culture helps promote cooperation, initiative, empowerment, and innovation, including the use of Hoshin planning and the Kaizen Improvement Process. Clarify how the applicant evaluates and refines the use of teams to keep current with business needs.
- Verify the use of IDLMs, including their development, approval cycle, and use in annual performance reviews.
- Verify the use of the multiple communication approaches across the organization, and clarify how skill sharing is accomplished effectively throughout the organization.

- Clarify how the overall compensation, recognition, and reward practices support high-performance work and a customer and business focus.
- Clarify how the applicant capitalizes on the diverse ideas of its hiring communities and how it manages career progression for associates and conducts succession planning.

**Change Due to Site Visit Findings (For Stage 3, Site Visit Review, Only)**

**raise large**

**raise small**

**no change**

**lower small**

**lower large**

**Item Worksheet—Item 5.1**

**Item Worksheet—Item 5.2**

Prepare one Item Worksheet for each Item, capturing the 6–10 most important strengths and opportunities for improvement based on the applicant’s response to the Criteria requirements and its key business/organization factors.

**Indicate the 4–6 most important key business/organization factors relevant to this Item.**

<p>1. Vision: Skilled associates developing and delivering plastics for a healthy planet</p> <p>2. Five Values: Growth Through Partnerships, Right Technology, Right Cost, Right Environment, and Successful Associates/Successful Teams</p> <p>3. 978 full-time associates in a nonunion environment; 300 full-time contract associates, primarily in maintenance functions; manufacturing and quality control associates (about 50% of total) work a rotating, 12-hour shift. All associates included in productivity base and safety tracking.</p>	<p>4. Experience: Work requires significant technical competencies and experience; 40% of associates have more than 20 years with the company.</p> <p>5. Approaches to performance improvement include Hoshin Kanri for business planning, the Kaizen Improvement Process, and knowledge sharing through many mechanisms.</p>
---	---

**Include an indication of the relative importance/strength of the comment by using ++ or - - as appropriate. Include a reference to the most relevant Key Factor(s).**

+ / ++	Item Ref	KF Ref	Strengths (Include figure references, as appropriate.)
+	a1	1,5	The applicant uses the GCC Process to align training plans and Development and Learning (D&L) Team Department objectives with organizational goals. The IDLMs and Competency Maps developed for each job function balance each associate’s needs against organizational objectives, using a four-element approach to design and deliver education and training. The Directions training on team culture, KAIZEN and kaizen suggestion programs, and Hoshin planning further addresses associates’ key needs relative to organizational performance assessment.
+	a2	1,2	Through the actions of the D&L Team, the applicant ensures its education, training, and development programs address key organizational needs related to new associate orientation, diversity, ethical business practices, and management development. This team maintains a matrix of training programs and organizational needs that is modified during the GCC Process as needed, and it delivers training. All new associates receive a one-day orientation to the company and the required Directions I training within the first two months of employment.
+	a5	1	The applicant uses several approaches to reinforce the use of new knowledge and skills on the job. For example, functional team members often attend training sessions together, develop projects, and establish improvement objectives during training to implement on the job, and managers reinforce new skills when the team returns from training. The performance appraisal system focuses on reinforcing individuals and teams that use quality tools and techniques that lead to improvement.
+	b	2,3	The IDLMs motivate associates to develop and utilize their full potential. Supervisors and associates work together to identify goals and related training and development objectives for the IDLMs. The KAIZEN and kaizen suggestion systems also motivate associates by rewarding improvement ideas.

-/- -	Item Ref	KF Ref	Opportunities for Improvement (Include figure references, as appropriate.)	
-	a3	2	Although the applicant uses several approaches to collect data on education and training needs, such as the IDLMs and needs assessments, there is little evidence of a systematic approach for using information from associates and their supervisors and managers on education and training needs. The applicant appears to be in the early stages of incorporating organizational learning and knowledge assets into training efforts with programs such as WINGS.	
-	a4	2	While the applicant, with the support of the parent corporation, uses a variety of delivery approaches to provide education and training opportunities, it is not clear how input from associates and their supervisors is used to select delivery options. Without this information, the applicant may be limited in its ability to most effectively select delivery options for its diverse workforce.	
-	a6	2,5	Although the applicant references the use of four levels of evaluation to assess training effectiveness, there is little evidence of a systematic approach for evaluating the effectiveness of training and education. Without such an approach, the applicant may have difficulty ensuring that it delivers the most effective training and development to meet organizational and strategic needs.	
-	b	2,5	While the IDLM review process appears to support associates in job-related goals, it is not clear how the applicant uses formal or informal mechanisms to help associates attain career-related learning and development objectives.	
<b>SITE VISIT ISSUES (For Stage 2, Consensus Review, Only)</b>				
<ul style="list-style-type: none"> <li>• Verify how the IDLMs and the Competency Maps are used for individual development and to balance associates' needs against organizational objectives. Clarify how formal or informal mechanisms are used to help associates attain career-related learning and development objectives.</li> <li>• Clarify how information from associates and their supervisors is used to determine training needs and to select training delivery options.</li> <li>• Clarify whether a systematic process is in place for evaluating the effectiveness of training and education efforts.</li> </ul>				
<b>Change Due to Site Visit Findings (For Stage 3, Site Visit Review, Only)</b>				
raise large	raise small	no change	lower small	lower large

**Item Worksheet—Item 5.2**

**Item Worksheet—Item 5.3**

Prepare one Item Worksheet for each Item, capturing the 6–10 most important strengths and opportunities for improvement based on the applicant’s response to the Criteria requirements and its key business/organization factors.

**Indicate the 4–6 most important key business/organization factors relevant to this Item.**

<p>1. Vision: Skilled associates developing and delivering plastics for a healthy planet</p> <p>2. Five Values: Growth Through Partnerships, Right Technology, Right Cost, Right Environment, and Successful Associates/Successful Teams</p> <p>3. 978 full-time associates in a nonunion environment; 300 full-time contract associates, primarily in maintenance functions; manufacturing and quality control associates (about 50% of total) work a rotating, 12-hour shift. All associates included in productivity base and safety tracking.</p>	<p>4. Regulated by FDA, OSHA, LDNR, and EPA; follows ICS CAPP guidelines</p> <p>5. Four key competitive threats and issues within industry: profitability in a cyclical business; plastics of the future; maturing workforce; worldwide parent corporation expansion</p> <p>6. Approaches to performance improvement include Hoshin Kanri for business planning, the Kaizen Improvement Process, and knowledge sharing through many mechanisms.</p>
---	---

**Include an indication of the relative importance/strength of the comment by using ++ or - - as appropriate. Include a reference to the most relevant Key Factor(s).**

+ / ++	Item Ref	KF Ref	Strengths (Include figure references, as appropriate.)
+	a1	2	Several approaches are in place to improve workplace safety and ergonomics, including EAGLE (Eliminating Accidents Gives Lessons in Excellence), a behavior-based safety program. Associates have the authority to halt production or maintenance in unsafe conditions or to submit a Safety Improvement Sheet. EAGLE Teams also participate in audits and monitor SH&E performance measures (Figure 5.3-1).
+	a2	3,4	An Emergency Response Team (ERT) with 168 active participants is responsible for coordinating all in-plant activities when an accident or emergency occurs. The ERT also works with the EAGLE Program on monthly audits, and team members are trained on procedures related to fire, rescue, hazardous materials, and medical and emergency care.
+	b1	1,3	The applicant uses an outside consulting firm to help determine key factors that affect associate satisfaction. The firm conducts an analysis of the annual Culture Survey that allows the applicant to assess the importance and interrelationships among factors that drive associate satisfaction.
+	b2	2,3	The applicant provides a variety of benefits and services to support its associates. These include health insurance plans, financial services, health services, and other services such as tuition reimbursement, an in-plant fitness center, child care referral, a leave-of-absence policy, vacation benefits, and preretirement counseling. In order to address the diverse needs of its workforce, the applicant allows associates to select the benefits they desire and encourages them to suggest changes at any time through the Kaizen program.
+	b3	3,5	The applicant uses a variety of formal and informal methods to assess employee satisfaction and well-being. The primary approach is the annual Culture Survey, and other methods include exit interviews, safety data, Kaizen program data, and Steering Team interviews (Figure 5.3-2).

-/- -	Item Ref	KF Ref	Opportunities for Improvement (Include figure references, as appropriate.)	
-	a1	1	The applicant does not describe significant differences in workplace factors or associated measures/targets for different job areas, departments, or shifts. Without this information, it may be difficult for the applicant to assess the effectiveness of its approaches across different associate groups and work units.	
-	a2	3,4	While the ERT addresses workplace preparedness for emergencies, a systematic approach for ensuring business continuity in the event of a disaster or other emergency is not described. This may make it difficult for the applicant to ensure that the needs of associates and customers will be adequately addressed in times of emergency.	
-	b1	1,3	Although the Culture Survey is conducted and reported by departments and eight job groups, the applicant does not segment individual factors that drive associate satisfaction by different categories or types of associates or for a diverse workforce. Given the diversity of its workforce, this gap may limit the applicant's ability to effectively address its strategic challenge of retaining associates in the long term.	
-	b4	2,6	Although the Performance and Steering Teams use Culture Survey data to improve the work climate, it is not clear how the applicant relates Culture Survey findings to key business results in order to identify priorities for improvement.	
<b>SITE VISIT ISSUES (For Stage 2, Consensus Review, Only)</b>				
<ul style="list-style-type: none"> <li>• Verify the deployment of the EAGLE Program and the use of the Safety Improvement Sheets across the organization.</li> <li>• Clarify whether the applicant has determined significant differences in workplace factors or associated measures/targets for different job areas, departments, and shifts.</li> <li>• Clarify whether the applicant has a process to ensure the continuity of the business in case of emergency or disaster.</li> <li>• Clarify whether the applicant segments the factors from the Culture Survey by categories, types, or diversity of associates. Clarify how the applicant relates findings from the Culture Survey to key business results.</li> </ul>				
<b>Change Due to Site Visit Findings (For Stage 3, Site Visit Review, Only)</b>				
<b>raise large</b>	<b>raise small</b>	<b>no change</b>	<b>lower small</b>	<b>lower large</b>

**Item Worksheet—Item 5.3**



**Item Worksheet—Item 6.1**

Prepare one Item Worksheet for each Item, capturing the 6–10 most important strengths and opportunities for improvement based on the applicant’s response to the Criteria requirements and its key business/organization factors.

- Indicate the 4–6 most important key business/organization factors relevant to this Item.**
1. Major technologies: polyolefin process technology, catalyst technology, and computer technology
  2. Three critical quality and service requirements for all customers: product quality, product consistency, and on-time product delivery. Other key requirements: new properties (earliest possible access) and fair and flexible pricing at the prevailing, competitive market level
  3. A single-site (Baton Rouge, Louisiana) manufacturer of polymer materials, split equally among HDPE, LLDPE, and PP plastic raw materials
  4. Mission: Provide high-quality polymers that make customers more competitive and provide value to shareholders.
  5. Competitive competencies: single-site production facility, multiple liaisons with R&D partners, closely integrated customer relationships, and world-class business practices

**Include an indication of the relative importance/strength of the comment by using ++ or - - as appropriate. Include a reference to the most relevant Key Factor(s).**

+ / ++	Item Ref	KF Ref	Strengths (Include figure references, as appropriate.)
+	a1	2,3	The Steering Team uses a process ranking method during the Risk Reward Analysis step of the GSAC Process to identify key value creation processes. The process ranking method focuses on four key areas: resources, fit to the organization, impact on profitability and business success, and impact on customer satisfaction or attainment of Values. The key value creation processes, shown in Figure 6.1-1, create value for the applicant through their alignment with key customer requirements or company Values.
+	a2	2	Requirements for the key value creation processes (Figure 6.1-1) are determined during the process design phase when customer requirements and product or service features are gathered using QFD. The sponsor team for each process, guided by ISO 9001:2000 Procedure B14-22-004, reviews requirements, measures, and results semi-annually and submits conclusions and results to the GSAC Process.
+	a3	1	The applicant uses a 14-step CDP, shown in Figure 6.1-3, to design value creation processes that meet key requirements, and its Technology Council is responsible for incorporating new technology into the design of these processes, as well as monitoring progress in industry technology. The CDP includes assignment of a sponsor team, project leaders and owners, and customer champions; development of a control plan; service trials; and pilot testing before commercial production is approved. The process recently was refined to incorporate a supplier champion and a Safety, Health, and Environmental advisor for each project to ensure that supplier requirements and environmental and health impacts are addressed early in the process.
+	a4	4	The applicant identifies key performance measures and indicators for the control and improvement of its value creation processes (Figure 6.1-1). A Distributed Control System (DCS) helps manufacturing functional areas monitor processes daily to ensure that they are meeting key process requirements. Other functional areas monitor

			in-process measures at daily, weekly, or monthly intervals, based on the cycle time of the data.
+	a6	4,5	The applicant seeks input from suppliers, partners, and customers, as well as appropriate associates and sponsor teams, in order to improve value creation processes to achieve better performance. These improvements are shared across the company through several methods, including COPs, rotation teams, and publication in the <i>Compass</i> .
-/-	<b>Item Ref</b>	<b>KF Ref</b>	<b>Opportunities for Improvement (Include figure references, as appropriate.)</b>
-	a2,3	1,5	Although the applicant notes in the Organizational Profile the importance of its Research and Development (R&D) partners in developing new products and processes, it is unclear how their input is used in determining requirements for key value creation processes or how results of their research are incorporated into the design of value creation processes.
-	a3	1	While the applicant describes a control plan with requirements, measurements, and critical process parameters for each new process, it is not clear how factors such as cycle time, productivity, cost control, and other efficiency and effectiveness factors are incorporated into the design of value creation processes.
-	a5	5	Although the applicant minimizes overall costs associated with inspections, tests, and process or performance audits through reviews and use of technology (e.g., the reduction of in-process testing of monomers by electronically linking pipeline process outputs from monomer suppliers to the company's manufacturing DCS), there is little evidence of a systematic approach for preventing defects and rework in the key value creation processes.

**SITE VISIT ISSUES (For Stage 2, Consensus Review, Only)**

- Verify the use of Risk Reward Analysis to identify key value creation processes.
- Verify the use of QFD in determining customer requirements and product and service features, and clarify whether input from R&D partners is used in determining these requirements.
- Verify the use of the 14-step CDP in designing value creation processes to meet key requirements. Clarify how research results from R&D partners and factors such as cycle time, productivity, cost control, and other efficiency and effectiveness factors are incorporated into process design.
- Verify how key performance measures or indicators are used for the control and improvement of value creation processes (Figure 6.1-1). Verify how customer, partner, and supplier input is used in improving these processes.
- Clarify how the applicant prevents defects and rework in the key value creation processes.

**Change Due to Site Visit Findings (For Stage 3, Site Visit Review, Only)**

raise large

raise small

no change

lower small

lower large

**Item Worksheet—Item 6.1**

**Item Worksheet—Item 6.2**

Prepare one Item Worksheet for each Item, capturing the 6–10 most important strengths and opportunities for improvement based on the applicant’s response to the Criteria requirements and its key business/organization factors.

**Indicate the 4–6 most important key business/organization factors relevant to this Item.**

<p>1. Mission: Provide high-quality polymers that make customers more competitive and provide value to shareholders.</p> <p>2. Major technologies: polyolefin process technology, catalyst technology, and computer technology</p> <p>3. Corporate Services provides shared services to the applicant, including financial, regional marketing and sales, strategic purchasing, computing support, logistics, legal, safety, health, environmental, and human resources services.</p>	<p>4. Approaches to performance improvement include Hoshin Kanri for business planning, the Kaizen Improvement Process, and knowledge sharing through many mechanisms.</p> <p>5. Strategic challenges: Profitability in a cyclical business, plastics of the future, worldwide parent corporation expansion</p> <p>6. Three critical quality and service requirements for all customers: product quality, product consistency, and on-time product delivery. Other key requirements: new properties (earliest possible access) and fair and flexible pricing at the prevailing, competitive market level</p>
---	--

**Include an indication of the relative importance/strength of the comment by using ++ or -- as appropriate. Include a reference to the most relevant Key Factor(s).**

+ / ++	Item Ref	KF Ref	Strengths (Include figure references, as appropriate.)
+	a1	2	Key support processes are identified using the same process ranking method as for key value creation processes. The applicant has identified its key support processes (Figure 6.2-1), along with related quality and service customer requirements.
+	a4	1,3	In-process Course Coordinates (Figure 6.2-1) associated with each key support process are used to control and improve processes. Functional work units monitor in-process Course Coordinates on a daily, weekly, or monthly basis. Most work units use Course Coordinate data as the primary signal to indicate when action is required. As a part of the ISO 9001:2000 system, support functions use a variety of methods to track nonconformances and take preventive action to address system problems.
+	a6	4	The applicant uses a variety of formal and informal approaches to improve support process performance, including Internal Customer Day, the CAPP initiative, ISO 9001:2000 audits, Baldrige-based assessments, and the Compass Point Research, Incorporated (CPRI) Customer Satisfaction Survey results. An annual Internal Customer Day uses a trade show format to facilitate discussions between key support process owners and internal customers in order to generate process improvement ideas and document ideas for improvement efforts.

- / - -	Item Ref	KF Ref	Opportunities for Improvement (Include figure references, as appropriate.)
-	a2,3	1,3	There is little evidence of a systematic approach for using input from external customers or suppliers to determine key support process requirements. In addition, it is not clear how the applicant interacts with Corporate Services to identify requirements for and design support processes. Without a systematic approach to determine support process requirements, the applicant may have difficulty ensuring that current requirements

			address both external customer needs and supplier capabilities.
-	a3	2	While the applicant uses the CDP to ensure that support processes meet key requirements, it is not clear how this approach incorporates new technology, organizational knowledge, cycle time, productivity, cost control, and other efficiency and effectiveness factors in the design of support processes.
-	a4	4	While the applicant uses Course Coordinates as the primary control and improvement measures for key support processes, it is not clear how customer, supplier, and partner input is obtained and used to help manage these processes. Without input from these key stakeholders, it may be difficult for the applicant to ensure that its organizational strategy is being achieved.
-	a5	5	Although testing and auditing are discussed during support process reviews and examples are provided of how audits have been reduced, there is little evidence of a systematic approach for minimizing costs associated with inspections, tests, and audits of support processes.
-	a6	4	Although the applicant has many mechanisms to obtain ideas to improve support processes, there is little evidence of a systematic approach for sharing improvements in support processes across organizational units and processes.

**SITE VISIT ISSUES (For Stage 2, Consensus Review, Only)**

- Verify how the process ranking methodology is used to select key support processes (what criteria are used).
- Clarify how the applicant interacts with Corporate Services to identify requirements for and design support services. Clarify how new technology, organizational knowledge, cycle time, productivity, cost control, and other efficiency and effectiveness factors are incorporated into the design of these processes.
- Clarify how input from suppliers or external customers is used to determine key support process requirements and manage key support processes. Verify the use of Course Coordinates to control and improve support processes.
- Clarify how the applicant systematically minimizes costs associated with inspections, tests, and audits.
- Verify the mechanisms used to improve support process performance, including Internal Customer Day, CAPP initiative safety improvements, ISO 9001:2000 audits, Baldrige assessments, and the CPRI Customer Satisfaction Survey. Clarify how key support process improvements are shared with other organizational units and processes.

**Change Due to Site Visit Findings (For Stage 3, Site Visit Review, Only)**

raise large

raise small

no change

lower small

lower large

**Item Worksheet—Item 6.2**

**Item Worksheet—Item 7.1**

Prepare one Item Worksheet for each Item, capturing the 6–10 most important strengths and opportunities for improvement based on the applicant’s response to the Criteria requirements and its key business/organization factors.

- Indicate the 4–6 most important key business/organization factors relevant to this Item.**
1. Sales primarily to U.S. market (75% of sales); remainder to Canada, Mexico, and the Caribbean (15% of sales) and to South America (10% of sales)
  2. Customers are primarily repeat buyers. Large customers (25% of sales), medium customers (50% of sales), and small customers (25% of sales). Five distributors account for about 2% of total sales.
  3. Capacity share of the total North American market: HDPE—14.8%, LLDPE—16.4% (dominant position), PP—11.7%
  4. Four key competitive threats and issues within industry: profitability in a cyclical business; plastics of the future; maturing workforce; worldwide parent corporation expansion
  5. Three critical quality and service requirements for all customers: product quality, product consistency, and on-time product delivery. Other key requirements: new properties (earliest possible access) and fair and flexible pricing at the prevailing, competitive market level
  6. Competitive competencies: single-site production facility, multiple liaisons with R&D partners, closely integrated customer relationships, and world-class business practices

**Include an indication of the relative importance/strength of the comment by using ++ or -- as appropriate. Include a reference to the most relevant Key Factor(s). Indicate which characteristics apply to the comment using the following key: L = Levels and Trends; S = Segmentation; C= Comparisons; G = Gap**

+ / ++	Item Ref	KF Ref	L/S or C	Strengths (Include figure references, as appropriate.)
+	a1	6	L/C	Results for Complaints Resolved Within the Customer’s Expectations (Figure 7.1-1) consistently improved over the past three years, from 40% in 2000 to nearly 80% in 2002, with 2002 performance exceeding that of a Baldrige recipient benchmark. During the same time period, Results for Complaints Resolved on First Contact (Figure 7.1-2), a key customer contact requirement, increased from 30% to 55%, with 2002 performance approaching the Baldrige recipient benchmark. Customer Satisfaction With Complaint Resolution (Figure 7.1-3) improved from approximately 40% in 2000 to approximately 85% in 2002, and current performance equals the benchmark.
+	a1	6	L/C	Results for Overall Customer Satisfaction (Figure 7.1-4) demonstrate a 7% improvement from 1998 to 2002, placing the applicant near the top quartile of the industry. In a separate study of overall satisfaction, the Customer Satisfaction Institute Index (CSII) for polymer suppliers (Figure 7.1-9), the applicant has been rated in the top five for the last five years and first or second among its competitors for the past three years.
+	a1	5	L/C	Results of the CSII Service Satisfaction Survey (Figure 7.2-5) demonstrates the applicant’s steady improvement in customer satisfaction with several service attributes. In addition, Overall Satisfaction With Service increased from 60% in 1998 to 82% in 2002, and results for the past three years equal best-in-industry levels.

++	a2	6	L/C	Results for Recommend to Others (Figure 7.1-5), a measure of customer-perceived value, improved from 60% in 1998 to about 75% in 2002. Results for Repurchase intent (Figure 7.1-6) improved from 80% in 1998 to near 90% in 2002, and current performance is equal to the best in class. Results for perceived value (Figure 7.1-7) improved from 50% to 70% from 1998 to 2002. Current performance for all three measures is at the industry top quartile benchmark.
+	a2	6	L/C	The applicant reduced the number of customers lost from 49 per year to 22 per year between 1998 and 2002, and it increased the number of customers won from 11 per year to 37 per year during the same time frame (Figure 7.1-10).
-/-	<b>Item Ref</b>	<b>KF Ref</b>	<b>L/S/C or G</b>	<b>Opportunities for Improvement (Include figure references, as appropriate.)</b>
--	a1,2	4	S	Although the customer-focused results (Figures 7.1-1 through 7.1-7) indicate generally improving trends, they are not segmented (e.g., by size of customer, location, or other key factors). This may make it difficult for the applicant to ensure that its strategic goals (e.g., increase of True North and Guiding Light customers, increased sales outside the United States, and sales to customers and industries poised for growth) are being appropriately supported by its customer satisfaction and relationship improvement efforts.
-	a1	6	L	While the applicant's results for Overall Satisfaction With Service on the CSII Customer Satisfaction Survey (Figure 7.2-5) are at best-in-industry levels, results for the two key attributes of Satisfaction With Immediate Response and Resolution on the First Call have remained flat.
-	a1	6	S	Although the applicant presents results addressing customer complaint resolution, there are no results for measures or indicators of dissatisfaction, such as trends in the "Very Dissatisfied" customer satisfaction ratings that drive complaint entries and high-level review.
-	a1,2	6	C	Although results demonstrate consistently improving trends and industry leadership performance in some metrics, results for Overall Customer Satisfaction (Figure 7.1-4), Recommend to Others (Figure 7.1-5), and Value (Figure 7.1-7) remain below the applicant's stated goal of being the best in its industry.
<b>SITE VISIT ISSUES (For Stage 2, Consensus Review, Only)</b>				
<ul style="list-style-type: none"> <li>• Review all updated data for results presented in Item 7.1.</li> <li>• Verify results for customers won and lost relative to the total number of customers (Figure 7.1-10).</li> <li>• Clarify whether segmentation data exists for customer-related measures and whether dissatisfaction metrics are available.</li> <li>• Clarify the results for the individual attributes presented in Figure 7.2-5.</li> </ul>				
<b>Change Due to Site Visit Findings (For Stage 3, Site Visit Review, Only)</b>				
raise large	raise small	no change	lower small	lower large

**Item Worksheet—Item 7.1**

**Item Worksheet—Item 7.2**

Prepare one Item Worksheet for each Item, capturing the 6–10 most important strengths and opportunities for improvement based on the applicant’s response to the Criteria requirements and its key business/organization factors.

**Indicate the 4–6 most important key business/organization factors relevant to this Item.**

1. Sales primarily to U.S. market (75% of sales); remainder to Canada, Mexico, and the Caribbean (15% of sales) and to South America (10% of sales)
2. Customers are primarily repeat buyers. Large customers (25% of sales), medium customers (50% of sales), and small customers (25% of sales). Five distributors account for about 2% of total sales.
3. Capacity share of the total North American market: HDPE—14.8%, LLDPE—16.4% (dominant position), PP—11.7%
4. Four key competitive threats and issues within industry: profitability in a cyclical business; plastics of the future; maturing workforce; worldwide parent corporation expansion
5. Three critical quality and service requirements for all customers: product quality, product consistency, and on-time product delivery. Other key requirements: new properties (earliest possible access) and fair and flexible pricing at the prevailing, competitive market level
6. Competitive competencies: single-site production facility, multiple liaisons with R&D partners, closely integrated customer relationships, and world-class business practices

**Include an indication of the relative importance/strength of the comment by using ++ or -- as appropriate. Include a reference to the most relevant Key Factor(s). Indicate which characteristics apply to the comment using the following key: L = Levels and Trends; S = Segmentation; C= Comparisons; G = Gap**

+ / ++	Item Ref	KF Ref	L/S Or C	Strengths (Include figure references, as appropriate.)
+	a	5	L/C	Results for variation in melt viscosity (Figure 7.2-1), a key characteristic of product quality, improved steadily over the past five years, decreasing from 6.3% in 1998 to approximately 2% in 2002. These results demonstrate performance levels at or better than the best-in-class benchmark from 2000 through 2002.
+	a	5	L/C	Results for On-Time Delivery (Figure 7.2-2) have consistently improved from 65% in 1998 to 90% in 2002, and they are currently at the industry top quartile level.
+	a	6	L/C	Results for Overall Performance from the PII Survey (Figures 7.2-4A, B, and C) have improved since 1996 for all three product segments (HDPE, PP, and LLDPE). In addition, in Overall Ranking, the applicant was first for HDPE from 1998 to 2002 and first for PP from 2000 to 2002.
+	a	5	L/C	Overall Product Price (Figure 7.2-3) increases have been below the industry average from 1998 through 2002.
- / - -	Item Ref	KF Ref	L/S/C or G	Opportunities for Improvement (Include figure references, as appropriate.)
-	a	5	L/C	Although price increases for all products combined have been below the industry average for the past five years (1998 through 2002), as shown in Figure 7.2-3, the net prices for HDPE (Figure 7.3-7), LLDPE (Figure 7.3-8), and PP (Figure 7.3-9) have increased during the same time period. In addition, results from the PII Survey (Figures 7.2-4A, B, and C) for customers’ ranking of companies for price

				indicate that the applicant still is rated lower than several of its competitors for all three product groups.
--	a	1,4,5	S	Product and service performance results are not provided for customer groups the applicant considers key to its strategic plan, including Guiding Light and True North customers, industries and customers poised for growth, and customers outside the United States. Without such information, the applicant may have difficulty assessing its performance for all its customer segments.
-	a	5	G	Although the applicant presents customers' perceptions of key service attributes such as immediate response, first-call resolution, and continuous service (CSII Customer Satisfaction With Service, Figure 7.2-5), actual performance results for these attributes are not provided. This gap may limit the applicant's ability to assess its progress in improving toward best-in-industry target levels for these processes.

**SITE VISIT ISSUES (For Stage 2, Consensus Review, Only)**

- Review updated data for all results presented in Item 7.2, and verify variation in melt viscosity as the single key measurement of product quality.
- Verify the respondents to and content of the PII Survey and the relationship among the individual attributes and the overall ratings.
- Clarify the relationship among the price for all products combined, net prices, and customers' rankings for price.
- Clarify whether product and service performance results segmented by customer groups are available.
- Clarify whether there are actual performance results for the applicant's key service attributes, such as immediate response, first-call resolution, and continuous service.

**Change Due to Site Visit Findings (For Stage 3, Site Visit Review, Only)**

raise large                      raise small                      no change                      lower small                      lower large

**Item Worksheet—Item 7.2**



**Item Worksheet—Item 7.3**

Prepare one Item Worksheet for each Item, capturing the 6–10 most important strengths and opportunities for improvement based on the applicant’s response to the Criteria requirements and its key business/organization factors.

**Indicate the 4–6 most important key business/organization factors relevant to this Item.**

- |  |   |
|--|---|
| <p>1. Mission: Provide high-quality polymers that make customers more competitive and provide value to shareholders; five Values: Growth Through Partnerships, Right Technology, Right Cost, Right Environment, and Successful Associates/Successful Teams</p> <p>2. Sales primarily to U.S. market (75% of sales); remainder to Canada, Mexico, and the Caribbean (15% of sales) and to South America (10% of sales)</p> <p>3. Capacity share of the total North American market: HDPE—14.8%, LLDPE—16.4% (dominant position), PP—11.7%</p> | <p>4. Annual worldwide growth: HDPE and LLDPE—4–5% and PP—7–8%</p> <p>5. Growth will be driven by increased margins and lowered cost rather than expanded capacity.</p> <p>6. Four key competitive threats and issues within industry: profitability in a cyclical business; plastics of the future; maturing workforce; worldwide parent corporation expansion</p> |
|--|---|

**Include an indication of the relative importance/strength of the comment by using ++ or - - as appropriate.**

**Include a reference to the most relevant Key Factor(s).**

**Indicate which characteristics apply to the comment using the following key:**

**L = Levels and Trends; S = Segmentation; C = Comparisons; G = Gap**

+ / ++	Item Ref	KF Ref	L/S Or C	Strengths (Include figure references, as appropriate.)
++	a1	1,5,6	L,C	Results for two key indicators of financial performance, Return on Capital Employed (ROCE), shown in Figure 7.3-1, and Return on Net Assets (RONA), shown in Figure 7.3-2, both demonstrate improvements over the last seven years. ROCE increased from about 8.5% in 1998 to nearly 11% in 2002, with current performance above that of the best competitor. RONA increased from about 12% in 1998 to about 17% in 2002, with current performance also above that of the best competitor. Despite the fact that both measures are highly dependent on the overall cyclical market, the applicant’s performance trend over the last five years surpasses that of the industry average.
+	a1	1,2,5	L, C	Results for two measures that contribute to profitability improved over the last several years. Working Capital as a Percent of Sales (Figure 7.3-3) improved from about 7% in 1997 to about 6.5% in 2002, and current performance is significantly better than that of the industry’s top quartile. Business Costs for all three product lines—HDPE, LLDPE, and PP—decreased since 1998 (Figures 7.3-4, 7.3-5, 7.3-6), and 2002 costs are lower than those of the best competitor for LLDPE and are improving at a faster rate than the best competitor’s costs for HDPE and PP.
+	a1	4,5,6	L,S,C	Results for Net Price in HDPE (Figure 7.3-7), LLDPE (Figure 7.3-8), and PP (Figure 7.3-9) since 1998 demonstrate the applicant’s competitive strategies in the area of competitive pricing. The applicant’s 2002 Net Price is slightly below the level of its best competitor for HDPE and PP, and it is just above the level of its best competitor for LLDPE. Results for Margin in HDPE (Figure 7.3-10), LLDPE (Figure 7.3-11), and PP (Figure 7.3-12) also demonstrate improvements

				over the last five years. Margins in 2002 for LLDPE outperform those of the best competitor, and margins for HDPE and PP are approaching the best competitor's performance.
+	a2	2, 4	L, C	Market share increased since 1996 in all three product groups. In the most mature market, LLDPE (Figure 7.3-14), results demonstrate moderate increases (about 14% in 1998 to 16.4% in 2002), while the two main competitors show flat or downward trends. Results for market share in both PP (Figure 7.3-13) and HDPE (Figure 7.3-15) demonstrate steady growth from 1996 through 2002.
+	a2	1, 2	L, C	Total Sales (Figure 7.3-16) increased from about \$1.7 billion in 1996 to about \$2.1 billion in 2002, with growth coming primarily from HDPE and PP sales. Sales Outside the United States (Figure 7.3-17) demonstrate significant growth increases for the last seven years (1996 through 2002) in both South America and Canada.
-/-	<b>Item Ref</b>	<b>KF Ref</b>	<b>L/S/C or G</b>	<b>Opportunities for Improvement (Include figure references, as appropriate.)</b>
-	a1	6	L	Although the applicant demonstrates an 18% improvement in PP business costs (Figure 7.3-6) between 1998 and 2002, the current performance levels are still below the industry average. This may make it difficult for the applicant to reach its stated goal of being the best in its industry.
-	a2	3,4,6	L,S,C	While the applicant's market share for LLDPE (Figure 7.3-14) is higher than that of three competitors, market share levels for HDPE (Figure 7.3-13) and PP (Figure 7.3-15) are lower than those for two of the competitors shown. In addition, since it is not clear if the competitors shown are best-in-industry performers, it is difficult to understand whether the applicant is monitoring current performance relative to best-in-industry performance.
-	a2	2,4,6	C,S,G	Although results for Sales Outside the United States (Figure 7.3-17) demonstrate an increase, sales from some areas critical to the key challenge of worldwide expansion are not included, such as sales in the Caribbean area or sales to existing customers with facilities outside the United States. In addition, comparative data are not included for any Sales Outside the United States.
-	a1-2	6	G, S	While the applicant describes specific processes for identifying and communicating with True North and Guiding Light customer groups, there are no results presented to demonstrate financial or market performance relative to these critical customer groups.
<b>SITE VISIT ISSUES (For Stage 2, Consensus Review, Only)</b>				
<ul style="list-style-type: none"> <li>• Verify updated financial and market results.</li> <li>• Clarify business costs for PP versus the industry average and the strategy for addressing it.</li> <li>• Clarify market share for HDPE (Figure 7.3-13) and PP (Figure 7.3-15) versus that of competitors and if competitors shown are best-in-industry performers.</li> </ul>				

- Clarify the existence of results for sales in the Caribbean area and to existing customers with facilities outside the United States.
- Clarify the availability of financial and market results for True North and Guiding Light customer groups

**Change Due to Site Visit Findings (For Stage 3, Site Visit Review, Only)**

**raise large**

**raise small**

**no change**

**lower small**

**lower large**

**Item Worksheet—Item 7.3**

**Item Worksheet—Item 7.4**

Prepare one Item Worksheet for each Item, capturing the 6–10 most important strengths and opportunities for improvement based on the applicant’s response to the Criteria requirements and its key business/organization factors.

- Indicate the 4–6 most important key business/organization factors relevant to this Item.**
1. Vision: Skilled associates developing and delivering plastics for a healthy planet
  2. Five Values: Growth Through Partnerships, Right Technology, Right Cost, Right Environment, and Successful Associates/Successful Teams
  3. 978 full-time associates in a nonunion environment; 300 full-time contract associates, primarily in maintenance functions; manufacturing and quality control associates (about 50% of total) work a rotating, 12-hour shift. All associates included in productivity base and safety tracking.
  4. Experience: Work requires significant technical competencies and experience; 40% of associates have more than 20 years with the company
  5. Four key competitive threats and issues within industry: profitability in a cyclical business; plastics of the future; maturing workforce; worldwide parent corporation expansion
  6. Approaches to performance improvement include Hoshin Kanri for business planning, the Kaizen Improvement Process, and knowledge sharing through many mechanisms.

**Include an indication of the relative importance/strength of the comment by using ++ or - - as appropriate. Include a reference to the most relevant Key Factor(s). Indicate which characteristics apply to the comment using the following key: L = Levels and Trends; S = Segmentation; C= Comparisons; G = Gap**

+ / ++	Item Ref	KF Ref	L/S Or C	Strengths (Include figure references, as appropriate.)
+	a1	1,2	L	From 1996 to 2002, the number of teams increased from 43 to 110, and the percentage of performance targets achieved for Production Shift Teams, as well as for other teams, increased from 80% to 95% (Figure 7.4-1). In addition, from 1996 to 2002, the number of KAIZEN Team Suggestions submitted (Figure 7.4-5) increased from about 75 to over 1,000, and the number of team suggestions implemented also increased significantly. The number of Kaizen Individual Suggestions submitted (Figure 7.4-6) increased from about 800 in 1996 to over 4,800 in 2002, with implemented suggestions also increasing proportionately.
+	a2	1,4	L,C	Results for the percentage of Associates Receiving Training (Figure 7.4-7) increased from 1998 to 2002, with a current level of 98%, which is at the best-in-class level. The number of Training Hours per Associate (Figure 7.4-8) increased from about 36 in 1997 to about 49 in 2002, which exceeds the best-in-class benchmark.
++	a3	1,3	L,C	Results for two OSHA measures of workplace safety demonstrate current levels meeting best-in-class performance. Results for Total Case Incidence Rate (TCIR), shown in Figure 7.4-2, improved from 3.1 cases in 1998 to 1.1 cases in 2002, and the Days Away, Restricted, or Transferred (DART) rate, shown in Figure 7.4-3, improved from 1.9 in 1996 to 0.5 in 2002. The applicant was awarded OSHA “Star Site” status based on these results and the EAGLE program efforts. Results for the number of implemented Safety Improvement Sheets (SISs), shown in Figure 7.4-4, demonstrate increasing levels of both SIS submissions and implementation rates.
+	a(3)	3,5	L,C	Overall associate satisfaction, as measured by the Culture Survey (Figure 7.4-10), increased from about 97% in 1998 to about 98.5% in 2002, and satisfaction appears to be increasing across three major job functions. Current satisfaction

levels greatly exceed the industry average and are approaching the top quartile level. Although results for Associate Turnover (Figure 7.4-9), another indicator of associate satisfaction, remained relatively flat over the last four years (1999 through 2002) at around 9%, this percentage is better than both the industry average and the best-in-class comparison.

-/- -	Item Ref	KF Ref	L/S/C or G	Opportunities for Improvement (Include figure references, as appropriate.)
-	a2	1	G	While the applicant indicates in Item 5.2 that it uses four levels of evaluation for training and education processes, there are no results for associate learning and development other than number of training hours and percentage of associates receiving training. Without evaluation results, it may be difficult for the applicant to systematically assess the overall effectiveness of its training and development efforts.
-	a3	1,4	G, S	Although results for associate satisfaction are reported by job function, other human resource results are not segmented by various associate categories, such as level, tenure, or shift. This may limit the applicant's ability to evaluate the effectiveness of processes for work systems, training, and associate well-being across different segments and types of associates.
-	a3	2	G	No results are provided for several measures discussed in Category 5, including absenteeism. There also are no results to demonstrate the effectiveness of the applicant's approaches to hiring and career progression or to associate health, security, and ergonomics.
-	a	6	G	Comparative data or best-in-class results are not provided for some human resource results, including the number of SIS and Kaizen suggestions submitted and team performance. This may make it difficult for the applicant to assess whether current performance levels are achieving the stated goal of being the best in its industry.

**SITE VISIT ISSUES (For Stage 2, Consensus Review, Only)**

- Verify updated results in this Item. Verify the results related to OSHA measures, the TCIR and DART, and the growth in the SIS program.
- Clarify whether results are available to demonstrate training effectiveness.
- Clarify whether the results from the associate satisfaction survey are segmented by associate categories other than job function.
- Clarify whether the applicant has results for other human resources indicators, i.e., absenteeism; career progression; and associate health, security, or ergonomics.
- Clarify whether additional comparative data (within or outside the industry) are available for human resource results (e.g., results related to SIS and Kaizen suggestions).

**Change Due to Site Visit Findings (For Stage 3, Site Visit Review, Only)**

raise large                      raise small                      no change                      lower small                      lower large

**Item Worksheet—Item 7.4**

**Item Worksheet—Item 7.5**

Prepare one Item Worksheet for each Item, capturing the 6–10 most important strengths and opportunities for improvement based on the applicant’s response to the Criteria requirements and its key business/organization factors.

- Indicate the 4–6 most important key business/organization factors relevant to this Item.**
1. Major technologies: polyolefin process technology, catalyst technology, and computer technology
  2. Strategic Challenges: Profitability in a cyclical business, plastics of the future
  3. Corporate Services provides shared services to the applicant, including financial, regional marketing and sales, strategic purchasing, computing support, logistics, legal, safety, health, environmental, and human resources services.
  4. Supplier categories: ethylene and propylene monomer suppliers; contractors; logistics suppliers; catalyst and additive suppliers; MRO material suppliers; and internal staff services. Supplier requirements are quality, cost, and on-time delivery.
  5. Competitive competencies: single-site production facility, multiple liaisons with R&D partners, closely integrated customer relationships, and world-class business practices

**Include an indication of the relative importance/strength of the comment by using ++ or -- as appropriate. Include a reference to the most relevant Key Factor(s). Indicate which characteristics apply to the comment using the following key: L = Levels and Trends; S = Segmentation; C= Comparisons; G = Gap**

+ / ++	Item Ref	KF Ref	L/S or C	Strengths (Include figure references, as appropriate.)
+	a1	4,5	L/C	Success in raw material procurement, a key value creation process, is demonstrated through sustained improvement trends in Ethylene Monomer Cpk (Figure 7.5-1A), Propylene Monomer Cpk (Figure 7.5-1B), and Additive Cpk (Figure 7.5-2). Results for all three measures exceed those for the industry top quartile and for the Osaka best supplier in Ethylene Monomer Cpk and Propylene Monomer Cpk.
++	a1	2,5	L/C	Results for MM Pounds/FTE (Figure 7.5-4), a measure of productivity, show an increase from 3.9 in 1996 to 5.0 in 2002, with performance levels from 1996 through 2002 exceeding those of the two competitors shown and the PII top quartile.
+	a1,3	1,5	L/C	The applicant shortened product development time, increased the commercialization of new products, and has favorable performance results related to the key customer requirements of product consistency and on-time product delivery. Results for New Products as Percent of Sales (Figure 7.5-5) outperform those for all the comparisons provided, and results for Product Development Cycle Time (Figure 7.5-6) show an overall improvement trend, with current results outperforming the industry top quartile. Results for Melt Index Cpk (Figure 7.5-9), a measure of product consistency, also improved within each of the applicant’s three product groups from 1996 through 2002, and performance exceeds the industry’s top quartile for all three product groups..
+	a1,3	2,4	L	Three measures that address the applicant’s Right Cost Value demonstrate improvement. Capacity Utilization (Figure 7.5-3) increased between 1998 and 2002, with results exceeding the PII average for all three product lines. Supplier Costs (Figure 7.5-7) decreased between 1998 and 2002 to a current level equal to the PII top quartile. In addition, Maintenance Costs (Figure 7.5-8) decreased between 1998 and 2002 to a current level that is better than the top quartile and

				approaching best in class.
+	a1	5	L	The number of COPs, as well as associate participation in COPs (Figure 7.5-10), increased from 1999 to 2003 YTD, and current levels are approaching best-in-class performance. The number of best practices posted to the Web site and the number of Web hits per week increased over the same period (Figure 7.5-11). These measures reflect the applicant's increasing ability to share information and best practices.
-/-	<b>Item Ref</b>	<b>KF Ref</b>	<b>L/S/C or G</b>	<b>Opportunities for Improvement (Include figure references, as appropriate.)</b>
-	a1	4	S	Supplier performance results are not segmented by category (e.g., contractors; maintenance, repair, and operational material suppliers; and internal staff services). This may limit the applicant's ability to evaluate relative results for all suppliers. In addition, results are not included for other key measures of organizational effectiveness, such as overall performance across key Course Coordinates.
-	a1	2	C	Although the applicant's Capacity Utilization by Product (Figure 7.5-3) shows sustained improvement trends since 1998 across the three product lines, performance is compared only against the industry average. This may make it difficult for the applicant to assess progress toward its stated goal of being the best in the industry.
--	a2	3	G	There are no results presented to demonstrate performance for most key requirements related to key support processes (Figure 6.2-1), which may make it difficult for the applicant to evaluate its performance across support areas.
-	a2	1,3	G	Although the applicant has several measures in place related to data and information management (Figure 4.2-2), with the exception of system uptime (Figure 7.5-12), which increased from approximately 71% in 1996 to an availability level of 99.7% in 2003 YTD, no results are provided for these measures. This gap may make it difficult for the applicant to assess the effectiveness of its performance in this area.
<b>SITE VISIT ISSUES (For Stage 2, Consensus Review, Only)</b>				
<ul style="list-style-type: none"> <li>• Verify current levels and trends for all measures of organizational effectiveness.</li> <li>• Clarify performance indicators for key requirements related to support processes.</li> <li>• Clarify the availability of best-in-industry data for capacity utilization by product.</li> <li>• Clarify whether results are available for measures (other than system uptime) of data and information management listed in Figure 4.2-2</li> </ul>				
<b>Change Due to Site Visit Findings (For Stage 3, Site Visit Review, Only)</b>				
	<b>raise large</b>	<b>raise small</b>	<b>no change</b>	<b>lower small</b>
				<b>lower large</b>

**Item Worksheet—Item 7.5**

**Item Worksheet—Item 7.6**

Prepare one Item Worksheet for each Item, capturing the 6–10 most important strengths and opportunities for improvement based on the applicant’s response to the Criteria requirements and its key business/organization factors.

**Indicate the 4–6 most important key business/organization factors relevant to this Item.**

<p>1. Three guiding Principles: Support Communities, Achieve Highest Ethical Standards, and Invest in a Future Society</p> <p>2. Five Values: Growth Through Partnerships, Right Technology, Right Cost, Right Environment, and Successful Associates/Successful Teams</p> <p>3. Board of Directors for the parent corporation composed of four internal and eight external,</p>	<p>independent members; has four standing committees: Nominating, Compensation, Audit, and Litigation</p> <p>4. Regulated by FDA, OSHA, LDNR, and EPA; follows ICS CAPP guidelines</p>
--	--

**Include an indication of the relative importance/strength of the comment by using ++ or -- as appropriate. Include a reference to the most relevant Key Factor(s). Indicate which characteristics apply to the comment using the following key: L = Levels and Trends; S = Segmentation; C= Comparisons; G = Gap**

+ / ++	Item Ref	KF Ref	L/S Or C	Strengths (Include figure references, as appropriate.)
+	a1	1,3	L, C	The applicant received internal audit ratings (Figure 7.6-1) of “satisfactory” or above in each of the last three audits (2000 through 2002); in 2002, its rating exceeded that of both the Business Group and the parent corporation. No incidents or concerns were noted on the applicant’s recent external audits, and its accounting firm has filed 10Q and 10K reports without qualification.
+	a2	1, 3	L, C	The applicant’s parent corporation aligns its corporate governance structure with the Japanese Corporate Governance Forum (JCGF), as shown in Figure 7.6-2. The corporation exceeds JCGF Principles and compares favorably to most large cap and chemical industry group companies.
+	a2	1,2	L, C	Associate attendance at Partners in Trust Seminars (Figure 7.6-3), a training event that discusses ethics and the applicant’s <i>Code of Conduct</i> , has been 100% over the last two years (2001 and 2002). This compares favorably to the average of 90% for the Business Group and the parent corporation. In addition, there have been no ethical incidents reported through any of the applicant’s feedback mechanisms, including customer surveys, the Customer Dissatisfaction Alert Process, and the CMS.
+	a3	3, 4	L, C	Results for environmental, health, and safety performance show generally positive trends. The level of implementation of key CAPP Scores (Figure 7.6-4) for pollution prevention, process safety, associate health and safety, community awareness and emergency response, distribution, and product safety all have improved over the last six years (1997 through 2002) and are well over industry averages. From 1996 through 2002, the number of EPA Reportables also decreased and exceeds top-quartile levels (Figure 7.6-5). Results for Waste to the Environment (Figure 7.6-6) show significant decreases from 1996 to 2002, and the total pounds of recycled material (Figure 7.6-7) increased to more than double the industry average from 1997 to 2002.



+	a4	1, 2	L	The percentage of associates who participate as volunteers more than tripled from 1996 to 2002, while the Total Volunteer Hours more than quadrupled to about 10,000 (Figure 7.6-8).
-/-	<b>Item Ref</b>	<b>KF Ref</b>	<b>L/S/C or G</b>	<b>Opportunities for Improvement (Include figure references, as appropriate.)</b>
-	a2	1,2,4	G	Although all associates attend the Partners in Trust seminars and no incidents of ethical wrongdoing have been reported, no actual results on ethics are provided, and no results are provided regarding the level of stakeholder trust in the governance of the organization. This gap may make it difficult for the applicant to assess the effectiveness of its corporate governance efforts.
-	a3	1,2,4	G	The applicant does not report results for several key measures related to regulatory and legal compliance, including compliance with OSHA 1910, energy consumption, hazardous materials reduction, FDA compliance, and LDNR regulatory compliance.
-	a4	1,2,4	G	Although the applicant describes education support within the community and social agency support as key community activities, no related results are provided.
-	a4	1,2,4	C	The applicant does not report comparative data for several measures, including Waste to the Environment and Volunteer Hours and Participation. This gap may make it difficult for the applicant to assess its relative performance in these areas.
<b>SITE VISIT ISSUES (For Stage 2, Consensus Review, Only)</b>				
<ul style="list-style-type: none"> <li>• Verify social responsibility results, including information updated since the application.</li> <li>• Clarify whether comparative data are available for waste to the environment and for volunteer hours and participation.</li> <li>• Clarify whether data exist for social responsibility measures such as OSHA 1910, energy consumption, hazardous waste, FDA compliance, LDNR regulatory compliance, community efforts (i.e., education support and social agency support), or ethics (including data on stakeholder trust).</li> </ul>				
<b>Change Due to Site Visit Findings (For Stage 3, Site Visit Review, Only)</b>				
raise large	raise small	no change	lower small	lower large

**Item Worksheet—Item 7.6**

## Baldrige National Quality Program

**Baldrige National Quality Program**  
**National Institute of Standards and Technology**  
**Technology Administration**

**United States Department of Commerce**

Administration Building, Room A600

100 Bureau Drive, Stop 1020

Gaithersburg, MD 20899-1020

The National Institute of Standards and Technology is a nonregulatory federal agency within the Commerce Department's Technology Administration. NIST's primary mission is to develop and promote measurement, standards, and technology to enhance productivity, facilitate trade, and improve the quality of life. The Baldrige National Quality Program (BNQP) at NIST is a customer-focused federal change agent that enhances the competitiveness, quality, and productivity of U.S. organizations for the benefit of all citizens. BNQP develops and disseminates evaluation criteria and manages the Malcolm Baldrige National Quality Award. It also provides global leadership in promoting performance excellence and in the learning and sharing of successful performance practices, principles, and strategies.

Call BNQP for

- information on improving the performance of your organization
- information on eligibility requirements for the Baldrige Award
- information on applying for the Baldrige Award
- information on becoming a Baldrige Examiner
- information on the Baldrige Award recipients
- individual copies of the Criteria for Performance Excellence—Business, Education, and Health Care (no cost)
- information on BNQP educational materials

Telephone: (301) 975-2036; Fax: (301) 948-3716; E-mail: [nqp@nist.gov](mailto:nqp@nist.gov)

Web address: [www.baldrige.nist.gov](http://www.baldrige.nist.gov)

## American Society for Quality

600 North Plankinton Avenue

P.O. Box 3005

Milwaukee, WI 53201-3005

The American Society for Quality advances individual, organizational, and community excellence through learning, quality improvement, and knowledge exchange. ASQ administers the Malcolm Baldrige National Quality Award under contract to NIST.

Call ASQ to order

- bulk copies of the Criteria
- case studies
- Award recipients videos

Telephone: (800) 248-1946; Fax: (414) 272-1734; E-mail: [asq@asq.org](mailto:asq@asq.org)

Web address: [www.asq.org](http://www.asq.org)