

2007



Malcolm Baldrige Application Summary

For the betterment of our industry. Associates, and community.



P.1 Organizational Description

A small business centrally located to the American automotive industry in northwest Ohio, PRO-TEC Coating Company (PRO-TEC) provides world-class coated sheet steel products and services primarily to the most demanding customers and applications in the automotive market. We were established as a 50/50 joint venture partnership in 1990 by two global leaders in steel technology - United States Steel Corporation (USS) and KOBE Steel (KOBE) of Japan. Referring to Figure P.1-1, functionalities shaded in gray are external processes provided to PRO-TEC by the parent companies under the legal terms of the joint venture agreement. Beyond these external processes and governance, we have a high degree of autonomy. The balance of the processes shown on the simplified "Joint Venture Model," and all other processes typical of a standalone company, are our responsibility.

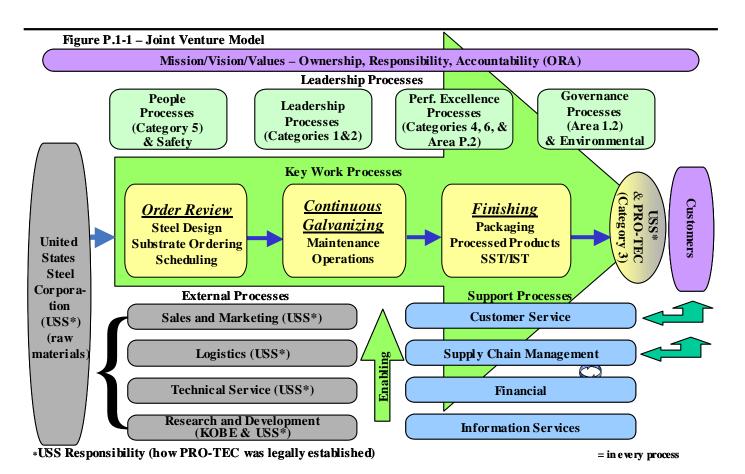
The joint venture was a green-field start-up, beginning with a blank piece of paper (a non-traditional approach in the steel industry) and taking the opportunity to create a unique Numerous best management practices were culture. incorporated including: a self-directed workforce, lean manufacturing. continuous improvement. empowered workforce exercising Ownership, Responsibility, Accountability (ORA). We are also committed to organizational and personal learning.

We are currently producing and selling above 100% of our equipment's design capacity. We sell 100% of what we make. As such, "market share" growth is not an important measure. Instead we have evolved to produce more of the most difficult products (i.e., more value-added) for the most progressive and demanding customers.

P.1a Organizational Environment

P.1a(1)

- Products:
 - > Coated sheet steel (in coil form)
 - > Coils up to 45 tons each
 - > Coils from 36" to 84" outside diameter
- Services:
 - ➤ Supply Chain Management (SCM)
 - ➤ Electronic Data Interchange (EDI) (Info. Services)
 - SteelTrack (USS Extranet mechanical properties reports) (Customer Service)
 - ➤ Metallurgical test reports (Performance Excellence)
- Delivery Mechanisms:
 - > Transportation modes rail and truck
 - Delivery modes
 - Direct customer shipment
 - Just-in-Time (JIT) warehouse (near customer)







What Our Customers Make from Our Product

Each coated sheet steel coil is designated for a specific customer application, and it is likely that there is some of our product in your car, truck, or sport utility vehicle.

<u>P.1a(2)</u> – The organizational culture at PRO-TEC is a unique blend of three very different influences. First is the strong American steel-making tradition of USS, second is the very technical and analytical Japanese style, and third is the regional influence of rural northwest Ohio. That regional influence is characterized by a strong work ethic, innovation, and strong family values. Our organizational style is supported and enhanced by established core values, as every Associate is considered a leader.

Our strategic plan, with identified stakeholders (customers, owners, Associates, suppliers, community, and public) and key success factors, is in alignment with and supports our mission (purpose), vision, and values (see Figures P.1-2, P.1-3, and P.1-4). Our Associate Guide sets expectations for both the company and the Associates regarding culture and policy by defining a genuine open-door policy, direct communication, peer review, and Associate and family development.

Figure P.1-2 – Mission Statement

To foster human potential, a spirit of cooperation, and technical innovation for the betterment of our industry, Associates, and community.

Figure P.1-3 – Vision Statement

Be: Totally committed to personal safety and wellness.

Be: Consistently profitable.

Be: Recognized as the industry technology leader in both product and process.

Do: Maintain high standard for community citizenship and service.

Do: Provide on-time delivery with world-class quality.

Do: Develop/maintain world-class facility/business systems.

Have: A highly skilled, engaged workforce committed to ongoing performance excellence.

Have: Optimal utilization of production capacity/capability.

Have: Valuable vendors/supplier relationship.

Figure P.1-4 – Core Values

★ Honesty ★ Trust ★ Integrity ★ Humility ★ Respect ★
 ★ Willingness to Serve ★ Effective Communicator ★

P.1a(3) – PRO-TEC's Associate diversity is a reflection of the local population with about XX% Caucasian. The joint venture parent companies contribute five Associates on direct assignment to PRO-TEC (four Japanese). gender breakdown is XX% male and XX% female, reflecting the applicant pool, since we are a continuous manufacturing operation. Every Associate has at least a high school diploma, and 69% of the workforce has an educational attainment beyond that level (see Figure P.1-5). Currently, 15 Associates are making progress toward degrees. With this profile we characterize our workforce as relatively young, well-educated, and constantly learning. Academic studies toward 2-year, 4-year, and masters degrees are available and encouraged by leaders and funded by PRO-TEC through a 100% tuition and books reimbursement program, demonstrating a commitment to life-long learning (Figure 7.4a2-2).

Figure I	Figure P.1-5 – Highest Educational Attainment					
Degree	Shift	Days	Exempt	TOTAL		
Masters		2	15	17		
Bachelor	14	5	18	37		
Associate	46	15	5	66		
Post HS	31	8		39		
High School	61	10	1	72		
TOTAL	152	40	39	231		

PRO-TEC operates with a totally salaried workforce, and our exempt and non-exempt positions are consistent with wage and hour laws. Production is a 24x7 operation, with four teams of 38 Associates each working twelve-hour rotating shifts. There are no bargaining units. Associate feedback is solicited by a variety of means including, but not limited to, surveys, management-by-walking-around (MBWA), open-door policy, team meetings, and quarterly communication meetings. In a limited number of cases, systems, equipment, or skilled trade technical support contract employees are retained for defined projects. Otherwise, all work is performed directly by PRO-TEC Associates. Interns from either Leipsic High School (as recipients of the PRO-TEC College Scholarship Program) or local colleges join us during the summer season and periodically throughout the year.

<u>P.1a(4)</u> – Following are the facility and various technologies/equipment that we use:

- ♦ 1,200 acre (green-field) site
- ♦ 730,000-square-foot building with an area of 13 football fields, nearly ½ mile long, with two 18-story towers
 - Coil handling and storage of up to 3,000 coils, up to 45 tons each
 - Coil (product) tracking
 - Automated coil storage warehouse
 - Two continuous galvanizing lines (CGL)
 - Metallurgical testing



- Slit and side trim line
- Inspection and side trim line
- Automatic data acquisition
- 3 levels of computer systems
- Environmental controls
 - ➤ Selective catalytic reduction (NOx)
 - ➤ Reverse osmosis (recycle process water)

P.1a(5)

- Regulatory:
 - > EPA (Ohio & US)
 - \triangleright EPA NEPT *
 - **➢** OSHA
 - ➤ OSHA VPP (STAR Status)*
 - **➢** GAAP
 - ➤ SOX Act Applying Best Practices**
- Product Requirements:
 - Society or Industry Standards
 - Customer Specifications
- Management Systems:
 - > ISO 9001 (quality management)
 - ➤ ISO/TS 16949 (automotive quality mgmt.)
 - ➤ ISO 14001 (environmental)
 - ➤ Baldrige Criteria*
- * Voluntary Participation
- ** As a 50/50 joint venture partnership, we are not subject to the SOX Act, but we are adopting portions anyway.

These standards and programs are integrated, using the Baldrige criteria as a framework, into a single management system. This provides the architecture by which we conduct every aspect of our business. We operate to a standard that exceeds safety and environmental regulatory compliance of OSHA and the EPA, as well as sets an objective of continually exceeding the regulatory expectations of our customers.

Safety is the first priority of PRO-TEC, which starts with good housekeeping and defined safety requirements. All our Associates are provided with basic personal protective equipment: long-sleeved cotton work uniforms, steel-toed metatarsal work boots, hard hats, safety glasses, and hearing protection. All confined spaces or danger areas are clearly marked and guarded according to the appropriate regulations with the additional safety precautions documented and enforced.

P.1b Organizational Relationships

<u>P.1b(1)</u> – PRO-TEC governance is defined by the joint venture partnership agreement. Support, oversight, and direction are provided to PRO-TEC by a Management Committee (board of directors) composed of three executives from each of the parent companies. Strategic plans and annual business plans are presented to this Committee, and policy, performance, regulatory, and governance results are reported at Management Committee meetings held three times per year.

Policy compliance auditing, in the areas of accounting, safety, and environmental, is performed by the USS Audit Division with audit reports submitted to both of the parent companies. An outside auditing firm performs annual financial audits also, with its audit reports submitted to the parent companies.

<u>P.1b(2)</u> — As shown in Figure P.1-6 the customer requirements are essentially the same within the automotive market segment since we adopt the toughest customer standards as the basis for a common approach to our entire automotive customer base. The appliance segment is accepted only on a limited basis.

Figure P.1-6–Key Customer Groups & Market Segments				
		Fig	gure Nun	nber
Segment	Requirements	7.1a1-x	7.2a1-x	7.2a2-x
	Product Quality	6	1,2,5-8	1-3
Automotive	On-Time Delivery	10,11		
(98%)	Service	1,8		
	Prod. Development	2-5		
Appliance	Product Quality	6	3,4	N/A
Appliance (2%)	On-Time Delivery	10,11		
(2%)	Service	1,8		

P.1b(3) – See Figure P.1-7 for supplier roles.

Figure P.1-7 – Supplier Roles					
Key Commodity	Interface				
Substrate	USS (3 Mills)	Monthly Mtgs.			
Zinc	Suppliers A & B	Qtrly. Reviews			
Others	Qualified Suppliers	Qtrly. Reviews			
Outside Processing	Customer-Specified	EDI			

Substrate and zinc (together) represent 90% of our material costs, with the substrate price dictated by the terms of the joint venture partnership agreement and the zinc price based primarily on annual contracts negotiated by USS Purchasing. Other (key commodity) suppliers are selected and managed by PRO-TEC Purchasing with quarterly supplier performance evaluations of on-time delivery and customer service. Outside processors provide external (after coating) processing of coils to specific customer order requirements.

<u>P.1b(4)</u> – Our most important supplier/partnering relationship (see Figure P.1-8) exists with our USS parent. USS supplies 100% of the sheet steel substrate (substrate) consumed by PRO-TEC under terms of a substrate supply agreement. The way we are legally established is for all product to be marketed by USS under terms of a marketing agreement. A sophisticated supply chain management system tracks substrate supply through customer order fulfillment.

Mutually beneficial partnering relationships with some of our most progressive automotive customers have allowed us to develop advanced high strength steels (AHSS). These



developments have provided us sustainable competitive advantages over our competition.

Figure P.1-8 – Partnering Relationships					
Activity	Partner	Interface			
Sales & Technical	USS	Monthly Meetings,			
Service		EDI, etc.			
USS Automotive Hot-	Great Lakes,	Technical and			
Dip Galvanizing	Midwest,	Innovation Exchange &			
Facilities	Fairless	Benchmarking			
Commercialization of	USS	Monthly Meetings &			
High Strength Steel		Tech. Exchange			
(CHSS)					
AHSS & UHSS	Customers	Periodic Meetings &			
Development	XYZ	Data Exchange			

P.2 Organizational Challenges

P.2a Competitive Environment

P.2a(1) - Competitive position at PRO-TEC is evaluated in terms of competition within our industry and from alternative materials. Within our industry, the competition is primarily from other domestic integrated steel suppliers. Hot-dip galvanized steel for automotive application requires sophisticated steel-making facilities that are currently only found at integrated steel companies. Due to the first-tomarket strategy in the area of AHSS, PRO-TEC enjoys a competitive advantage with a family of AHSS grades developed through a collaborative effort of KOBE, USS, and PRO-TEC. Unlike other non-automotive products, there is minimal threat within our industry from foreign imports. The stringent just-in-time requirements of our automotive customers would make sourcing from overseas very difficult. Figure P.2-1 presents our competitors and their estimated respective market shares.

Figure P.2-1 – Competitive Position				
Company	Key	Market Share		
PRO-TEC		15%		
USS**	P	12%		
Competitor A	С	37%		
Competitor B	С	16%		
Competitor C	С	5%		
All Others	С	15%		
Key: C=Competitor & P=Partner **See Figure P.1-8				

Competition relative to our product, hot-dip galvanized steel for the automotive market, also comes from alternative materials such as plastic and aluminum. With the rapidly growing application of AHSS by automakers, the steel industry now enjoys a significant competitive advantage over alternative materials due to the superior energy absorption characteristics of AHSS resulting in enhanced crash-impact resistance.

PRO-TEC's individual market share is 15% which corresponds to 1.15 million coated tons at full capacity. With current vehicle builds of approximately 16.5 million vehicles in North America, our facility is running fully loaded operating on a 24x7 schedule. We are in the unique position of selling 100% of our output and producing above 100% of capacity. For this reason, strategic initiatives are in the area of increasing the proportion of value-added products, such as AHSS, rather than growing the overall market share.

<u>P.2a(2)</u> – Our success relative to our competitors has resulted from our ability to excel in customer requirements (Figure P.1-6). These factors have been linked with the needs of stakeholders to provide an integrated approach:

Key Success Factors (KSFs):

- Associate Quality of Life
- Customer Service
- Technical Innovation and Product Development
- Systems Reliability (people, process, product)
- Good Citizenship
- Long-Term Viability

P.2a(3) – Within the steel industry, competitive data are available through various industry groups including AISI, Auto Steel Partnership (A/SP), customers, Galvanizers Association, USS internal resources, KOBE internal resources, and Japanese steel industry resources. These data are compiled and shared through various methods including USS/PRO-TEC Sales meetings, USS APEX meetings, and CHSS meetings. These data exclude business results, commercial price, and product information due to legal constraints. The balance of competitive data are obtained from public domain sources such as ASQ, Bureau of National Affairs, business annual reports, EPA, Society for Human Resource Management, Industry Week, OSHA, OPE/MBNQA conference(s), quality sharing day, and/or benchmarking opportunities. Competitors do not share their proprietary performance data.

P.2b Strategic Context

<u>P.2b</u> – The key human resource, operational, and business strategic challenges and advantages are as follows:

• Human Resource Challenges & Advantages:

- ➤ Healthcare cost unpredictable with no clear government policy*
- > Associates practicing ORA*

• Operational Challenges & Advantages:

- > Sustain world-class reliability in a timeconstrained operation
- Changes in product mix going from generic steels to specialty steels (AHSS)
- ➤ Information revolution how to assimilate and leverage technology and information
- Innovative & reliable processes & products*



Business Challenges & Advantages:

- Competition/consolidation of steel industry*
- Shift in automotive manufacturing locations (inventory and transportation cost considerations)
- Market leader in meeting or exceeding customer needs*

P.2c Performance Improvement System

P.2c — The organizational focus on performance improvement is maintained through the use of key performance measures aligned to key success factors within the overall structure of a single integrated management system, using Baldrige criteria-based evaluation. The overall approach to continuous improvement methods is illustrated in Figure P.2-2, with methods contingent on the complexity and scope of an opportunity. Although "I-to-I" is a subset of the process, for simplicity sake the overall approach is referred to henceforth as "I-to-I" throughout the application. Where you see this symbol in the application, we are using this continuous improvement process.

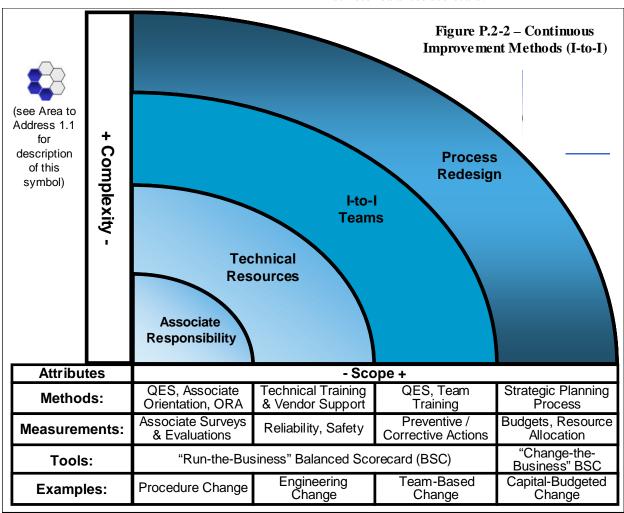
Associate Responsibility is fostered by teaching Associates to fix problems as they are identified and empowering them

to do so. Organizational learning and sharing starts with the initial Associate selection process and continues through orientation, assigned mentors, cross-training, cultural (ORA) training, management system training, and through team interactions that serve to develop Associate responsibility, as shown in Figure 5.1-1.

Technical Resources or subject matter experts have been developed and designated (internally or by vendor support) to support opportunity definition and resolution. These resources are essential to support a 24x7 operation with self-directed work teams to ensure process and product reliability as well as Associate safety.

The Initiation-to-Implementation (I-to-I) team process for continuous improvement of team-based changes provides the means and methods for organizational learning and sharing, with its resource committee meeting twice a month to monitor, allocate resources as required, evaluate, and improve the process.

The Process Redesign corresponds to strategic planning changes requiring capital budget funding and significant project management requirements. The supporting activities are monitored and tracked on the "Change-the-Business" balanced scorecard.



^{*}Potential organizational sustainability issues



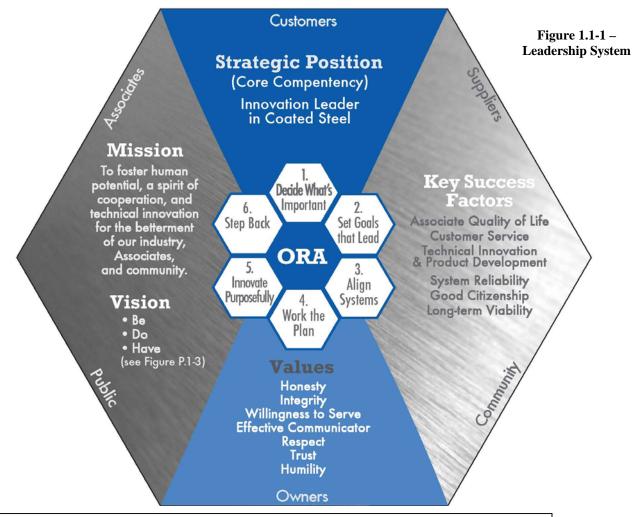
1.1 Senior Leadership

1.1a Vision and Values

<u>1.1a(1)</u> – In our organization, senior leadership is defined as the President and his direct reports. Eight leaders represent this senior Leadership Team. The PRO-TEC Coating Company leadership system (Figure 1.1-1) is used throughout the application as the fundamental model for our ORA-based leadership process. Where you see this symbol it will show how the subject being discussed is aligned and integrated to our leadership system. Leaders use the six disciplines of the leadership model to guide and sustain our organization. This supports strategic planning, alignment of goals and objectives, deployment, measurement, and communication in our culture of self-directed work teams. Mission, vision, values, and strategic position have been set by the Leadership Team as a foundation, and they are reviewed and renewed annually.

Mission, strategic position, and vision. A diverse multidisciplined group created the mission statement in 2002. It has become embedded into our culture. The mission is on our business cards, is displayed prominently throughout the PRO-TEC facility, is included in most printed material, and is very much a part of the character of our company. Our mission statement and strategic position (core competency) are used to cast a very general and long-term view of where our company is headed and what we believe. Our vision statement (Figure P.1-3) is more specific and is used by senior leadership to communicate to all stakeholders a more concrete picture of what the company will look like in ten years in pursuit of the mission and strategic position. Frequently our senior leaders refer to the mission and vision when explaining decisions and direction. When tactical decisions must be made, it is common for a leader to ask, "What do our mission and vision say?"

The Leadership Team has identified as a priority the safety and wellness of our Associates and all stakeholders. This priority is communicated to everyone in our six key success factors under "Associate Quality of Life." Our hierarchy of priorities (Integrated Contingency Plan) lists preservation of human life and safety as our first priority, and our President, through every communication method, identifies safety as a key focus. Two-way safety communication is systematically encouraged, documented, and tracked within



¹This is taken from the book "Six Disciplines for Excellence (Building Small Businesses that Learn, Lead, and Last)" by Gary Harpst ©2004. The associated software is referenced later in this application.



PRO-TEC through communication meetings, Associate satisfaction surveys, safety audits, and anonymous e-mail feedback tools offering direct communication to the President and Human Resources Manager.

In our culture of self-directed work teams, it is essential that every Associate be a leader. Therefore, our core values were created to support defined leadership behaviors. Senior leaders conduct annual workshops within their areas of responsibility to align and integrate goals and renew commitment to mission, vision, values, and strategic position. These workshops conducted in individual areas of responsibility achieve two-way communication and alignment. Senior leaders demonstrate commitment to organizational values through their personal actions by aligning the outcomes of these individual workshops to the annual strategic planning activity.

<u>1.1a(2)</u> – Senior leaders are responsible for fostering PRO-TEC's unique corporate culture that is built on the core values outlined in the leadership system. Open, direct two-way communication is imperative to the success of our self-directed workforce. This is systematically planned, used, and tracked. Also, every Associate has been trained in and has signed the ethics statement which is a core element of our Code.

Senior leaders are to promote a legal and ethical environment through their own individual actions and decisions. They are also responsible for ensuring an atmosphere that encourages all individuals to report any questionable behavior. In addition, PRO-TEC's corporate culture, legal, and ethical environment is validated through tangible audits and investigations to achieve complete transparency (see Figures 1.2-1 and 1.2-2).

<u>1.1a(3)</u> - Our Leadership Team uses the leadership system to create a sustainable organization at all levels. The leadership system identifies mission, strategic position, core values, stakeholders, and the six disciplines leadership cycle.

Our leadership system begins with "Deciding What's Important" so that every Associate understands and connects with our direction. This is accomplished by leaders identifying and supporting projects that are strategic to the success of our company. Leaders revise and recommit to the mission, vision, core values, and strategic position in step 1 of the leadership system. Through performance reviews we ensure that deployment of these initiatives is a part of each Associate's ORA.

"Set Goals That Lead" defines goals and initiatives that lead Associates to take actions that align with "what's important" to our organization. Through annual SWOT activity in step 6 of our leadership system, objectives aligned to our key success factors are evaluated and reset. We then define measures and

targets, build consensus around these objectives, seek input from Associates on direction, and finalize the direction.

"Align Systems" is an effort to have every Associate's work aligned and integrated to meet the goals of the company. We seek to have every Associate understand their role as related to the role of others and demonstrate leadership in a commitment to achieving the To ensure that this alignment is company goals. accomplished, goals are communicated to all Associates through quarterly communication meetings, printed newsletters, and intranet objective and performance updates. All Associates are welcomed and encouraged to attend Leadership Team meetings. These Monday, Wednesday, and Friday meetings (and monthly plant management meetings) focus on communication, alignment, integration, and oversight and are well attended by Associates from throughout the organization. Figure 1.1-2 shows this communication and oversight tool. There is structure to these activities that ensures communication of goals, measurement to the balanced scorecard, corrective action implementation, follow-up, and communication of tactical initiatives. We believe that Associates at every level practicing ORA within the structure of this leadership review process is a very tangible measure of understanding, two-way communication, and effectiveness of our efforts to align systems and resources.

Leaders sustain the organization on a daily basis by "Working the Plan." This simply stated means, "achieve your goals." Our desire is to have every Associate connect what he or she does on a daily basis to the goals of the company. To ensure that we accomplish this, the strategic plan is implemented and tracked and results are communicated on a regular basis. We strive to create an environment that fosters involvement, participation, and ownership of the plan by communicating the goals and identifying the linkage between goals and individual Associate activities. When the scorecard indicates that objectives are not being met, corrective action is implemented that often requires the deployment of additional resources. When impacted by both external and internal conditions, the plan is adapted and realigned.

Senior leaders have established an environment for continuous improvement and Associate learning, "Innovate Purposefully." While working the plan on a daily basis, we attempt to tap every Associate's creative ability to achieve continuous improvement and organizational excellence. We achieve this by creating an atmosphere that encourages continuous improvement and change. We provide information and business knowledge to understand opportunities for improvement. Leaders make the linkage between our agility and innovation in developing new products and processes to the success and long-term viability of our company. Specific job-related training and a strong emphasis and support for formal



continuing education clearly demonstrates leaders' commitment to foster human potential.

Senior leaders personally update the succession plan annually for the highest levels. Leaders throughout the organization support and drive I-to-I, the formal continuous improvement process. Commitment to continuous improvement, personal development, and performance excellence are emphasized and reinforced by performance reviews and the internal job selection processes.

1.1b Communication and Organizational Performance

<u>1.1b(1)</u> – Our culture was established based on a self-directed empowered workforce and ORA. All leaders must be good listeners and communicators. This is pivotal to them aligning and integrating systems (and people) and achieving their goals.

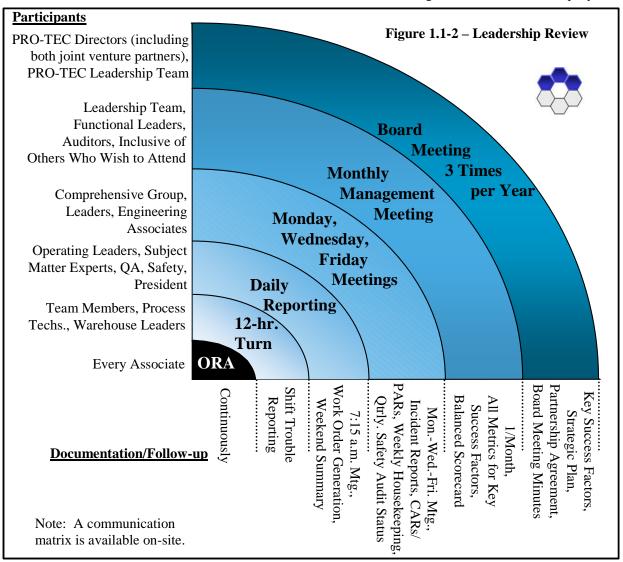
We systematically validate our communication through a communication matrix (available on-site). This helps us verify that all Associates receive the business plan,

performance, and technical information they need. Using this approach we validate the:

- Communication methods,
- Frequency,
- Message,
- One or two-way communication, and
- Method for validating two-way communication.

For example, the 2nd quarter communication meeting, called "Breakfast with Paul," is an informal breakfast meeting that allows opportunity for open dialogue between all Associates and the President. It is two-way communication on topics the Associates are interested in discussing. Also, part of fostering human potential is recognizing achievement, as shown in our Performance Management System (Figure 5.1-2.2).

<u>1.1b(2)</u> – In "Step Back," senior leaders commit to annual reassessment of external and internal factors that are essential for setting direction for the company. They





promote broad involvement from the organization in gathering information and processing this information for the purpose of "Deciding What's Important."

Leaders ensure that these important activities occur by committing to the cycle of improvement strategic planning process (Figure 2.1-1). Leaders conduct annual SWOT analysis in functional areas feeding into a consolidated SWOT analysis for the purpose of annual strategic planning. Leaders encourage the organization to pursue continuous and breakthrough improvement initiatives to enhance the impact of the SWOT analysis effort. Leaders model desired behavior by taking on challenging tasks and committing themselves to continuous improvement. Reasonable risks are taken in setting stretch targets and working toward the achievement of these targets. Leaders benchmark other excellent organizations and "steal" ideas that will improve our organization.

The balanced scorecard (BSC) provides senior leaders a method to review key measures on a regular basis. The performance measures are determined through the strategic planning process, communicated to the workforce and stakeholders, and reviewed monthly using the green, yellow, red designation for compliance (Figure 2.1-3). Atrisk BSC measures require action, and the action is monitored through a formal management review process at the monthly plant management meeting. These same metrics are reported monthly and reviewed three times a year with our parent companies at Management Committee meetings.

Value creation for customers and stakeholders is a component of the consolidated SWOT activity. In "Step Back" of the leadership system, the integration of insights

from the SWOT analysis into the strategic plan are essential for prioritization of the many planning initiatives. This prioritization through consensus building creates a manageable set of objectives that are best aligned with our mission, vision, values, and company goals. Senior leaders personally update the succession plan annually for the highest levels of the organization. This is performed in unison with the joint venture partners.

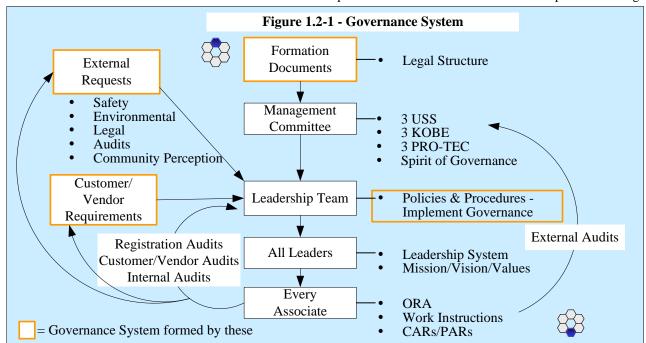
1.2 Governance and Social Responsibilities

1.2a Organizational Governance

1.2a(1) – Organizational governance is uniquely embedded into PRO-TEC's culture based on ORA and the mission, vision, and values. Senior leaders are directly responsible for Associate safety, the company's actions, and the management systems that ensure the sustainability of the company. Figure 1.2-1 outlines the framework of PRO-TEC's organizational governance system, which embraces senior leader and Associate ORA along with open lines of two-way communication and oversight, which penetrates through all levels of the organization.

The governance system has been formed by: 1) External regulatory and community requirements (safety, environmental, legal, financial, etc.), 2) PRO-TEC formation agreements (partnership, substrate supply, and marketing agreements), 3) Customer and vendor requirements, and 4) Internal policies, procedures, and work instructions (Human Resources, departmental, ISO/QES).

Management Accountability: The Leadership Team is responsible for establishing policies and procedures and the direction of the organization through the strategic planning process. Each member of the Leadership Team is assigned





responsibility for maintaining a specific key success factor (KSF) and for the ultimate deployment throughout the organization. At the monthly plant management meeting, each senior leader is responsible for reviewing performance for their assigned KSF and objectives through the balanced scorecard (BSC). The BSC is then presented at the Management Committee meeting held three times per year. Actions are taken at each review.

Fiscal Accountability: Through the BSC objectives and the monthly financial closing process, a detailed review of the financial performance is performed. Monthly detailed statements are prepared and presented to all department heads and both parent companies. The results are also presented as part of the monthly plant management meeting and summarized in the monthly detailed report to the Management Committee.

Woven throughout the framework are the underlying policies and procedures that are continually being reviewed, evaluated, and communicated to address any changes in the regulatory and stakeholder requirements. When change is required, any Associate or stakeholder can initiate change by completing a preventive or corrective action request (PAR or CAR). These requests are monitored and reviewed on a routine basis through the I-to-I processes and at monthly plant management meetings.

Transparency in Operation: In order to validate the governance and all other management systems, independent internal and external auditors are used to routinely review the process requirements (Figure 1.2-1) (compliance and audit resources). Built into PRO-TEC's unique culture is the philosophy that internal and external input and audits are welcomed and necessary to ensure the sustainability of the system and the organization. Two of the three types of audits conducted are fully independent of the Leadership Team. The customer/vendor reports findings to the Leadership Team, and the external audits report findings

directly to the Management Committee. These audits verify all actions are transparent up to the appropriate level.

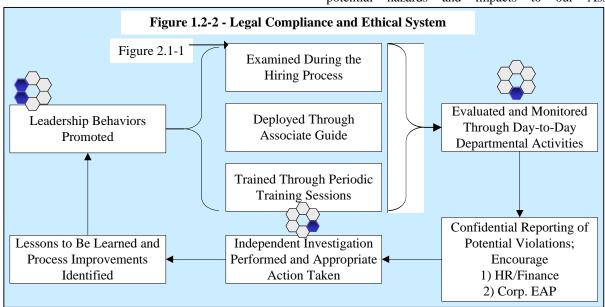
Independence of Audits: To ensure the internal audits are robust and highlight all appropriate issues, the Management Committee initiates external audits on a pre-determined schedule. These independent external auditors can also be requested by the Leadership Team on a more frequent basis.

Protection of Stakeholder Interests: There is a direct focus of protecting stakeholder interests that is performed by linking the KSFs and objectives on the balanced scorecard to the stakeholders. In 2005, an I-to-I team was assembled to enhance PRO-TEC's internal controls by establishing a formal competitive bidding procedure based on a USS audit recommendation. Through the implementation of this procedure, another layer to the internal control structure was added to protect all stakeholder interests.

1.2a(2) - Senior leaders are evaluated on their performance in several manners. First is through open and direct two-way communication with their peers and direct reports; this provides real-time feedback, which is instrumental throughout the organization. Second is through the annual performance reviews, which are conducted as outlined in Category 5. Third is through internal and external environmental scans and Associate surveys.

1.2b Legal and Ethical Behavior

1.2b(1) - Impacts on Society: PRO-TEC has taken a proactive approach to address our current and potential impact on society by encompassing the ISO 14001 standards and National Environmental Performance Track (EPA) voluntary compliance program into our culture and management systems. As part of these standards and programs, a team of PRO-TEC Associates routinely monitors and evaluates the products we use and sell for potential hazards and impacts to our Associates,





community, and society as a whole. Environmental goals and objectives are established on an annual basis and monitored monthly at the plant management meeting (Figure 2.1-3). Independent internal and external USS/KOBE audits and reviews are performed on a periodic basis to ensure compliance with these standards, and at the same time these audits provide a method for sharing and implementing best practices throughout the organization. Semi-annual certification audits are performed by an accredited agency and are used as opportunities to enhance our programs.

PRO-TEC leaders and Associates have a vested interest in the rural agricultural area of northwest Ohio as this is the area where a majority of our Associates live. This, along with a commitment to good citizenship (KSF), has resulted in senior leaders and Associates taking a very active role in the surrounding communities.

PRO-TEC's joint venture status also provides us the ability to use additional external resources from the parent companies, which are utilized routinely to provide expertise in the area of product and operations risks assessment. In addition, PRO-TEC has established long-standing relationships with other local independent agencies to protect all stakeholder interests.

<u>1.2b(2)</u> – *Promoting Ethical Behavior* - Embedded in the values and leadership behaviors are honesty, trust, and integrity which are the core elements of the Code of Ethical Business Conduct. This promotes a commitment to conduct all transactions in accordance with the laws and the highest standards of business ethics and conduct.

As shown in Figure 1.2-2, these leadership/ethical behaviors are verified starting with the pre-employment process. Pre-employment interviews are conducted by a group of peers and the Human Resource department at which time these values and behaviors are examined. This is followed by a criminal background check to validate the team's assessment.

Behaviors are evaluated and monitored on a routine basis through the day-to-day departmental activities and open two-way communication. This is also part of how each leader, at every level, is evaluated. Company-wide training on the Code of Ethical Business Conduct is also performed on a periodic basis. All Associates are encouraged to report to their leader/designated auditor or Human Resources any violations of the Code or suspected illegal acts or unethical conduct. A confidential investigation would be performed and appropriate action taken. PRO-TEC also has contracted with a Corporate Employee Assistance Program (EAP) where individuals can report violations.

1.2c Support of Key Communities

<u>1.2c</u> - The community is one of PRO-TEC's key stakeholders on our BSC. The primary communities in which our Associates work and live include Leipsic, Putnam County, and Findlay. This is where the company outreach is focused. During our strategic planning meeting (Figure 1.2-3 ♠), we review opportunities or changes in our support criteria. The main areas of emphasis are students; learning, safety, sports, and music; community projects to improve quality of life; and local and national organizations impacting the people in our key communities.

PRO-TEC is committed to good citizenship providing financial and professional support to our key communities in a variety of methods. Figure 1.2-32,3 reflect our listening posts to develop future PRO-TEC Associates and create a positive environment for our Associates' families. This systematically supports our KSFs of good citizenship and long-term viability.

PRO-TEC has defined our outreach support and commitments into three different categories. The first category (Figure 1.2-32) includes requests from many of the known local/national organizations such as the Boy Scouts, American Cancer Society-Relay for Life, YMCA, United Way, Putnam County Fair and 4-H, Leipsic, Ottawa, and Findlay Chambers of Commerce, and local hospitals. There are also many programs and events through the Leipsic and other Putnam County schools that directly impact the local youth either through learning, athletics, music, arts, or safety that meet our criteria for considering donations. Examples of these include supporting the athletic and music boosters and Right-to-Read. There are also youth in the community that achieve individual goals and represent schools or local organizations in programs such as People-to-People or state competitions that we consider.

The **second** category (Figure 1.2-36), participation in community service by individual Associates, is also encouraged and celebrated, which enhances contribution to the community. Associate outreach continues on a state, regional, and local basis with participation on numerous advisory boards which provides PRO-TEC with proactive listening posts in the community. Examples include participation of approximately twenty PRO-TEC Associates in the "School HOST/Mentors Programs," the Putnam County United Way Board, Eric Franks served as a council member and examiner for the Ohio Partnership for Excellence and is now a Baldrige examiner, and Rick Rupert on the Local Emergency Planning Committee. Shannon Shartell is on the Brookhill Industries Board and Putnam County Workforce Investment Act Board. Shaun Spainhower is a member of the West Central Ohio Safety Alliance. President Paul Worstell has volunteer, non-profit organization involvement focused on workforce development and youth in the following areas:



- ➤ Baldrige Outreach (MBNQA QFE, Ohio Partnership for Excellence, Quality New Mexico);
- Trustee for the Black Swamp Area Council Boy Scouts of America;
- ➤ Guest speaker on Leadership at the University of Findlay and Ohio Northern University;
- ➤ Board member, Ohio Manufacturer's Association;
- > Executive Committee, Ohio Partnership for Excellence;
- Executive Committee, Greater Findlay Inc.; and
- > Trustee, Blanchard Valley Regional Health Center.

All of the senior leaders are involved in community service organizations, associations, or events. Time allocated to community service by senior leaders is determined based on impact in the community, scope and impact of the project, senior leader availability, and interest of the leader. Senior leader time is directed to community service that requires their expertise and professional guidance. For example, the President is a trustee and an executive board member in many organizations in the community as listed above. Previous obligations on boards were transferred to other senior leaders in the organization so his time could be better utilized in the community.

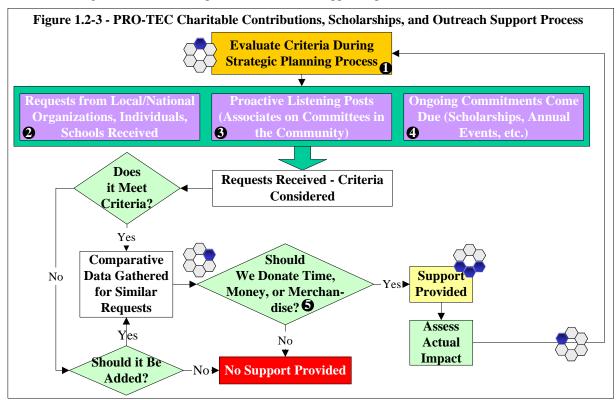
The **third** category is ongoing commitments. Since our inception, PRO-TEC has annually presented a four-year, \$20,000 scholarship (the highest of any local company, to the best of our knowledge) to a graduating Leipsic student (Figure 1.2-3•). The recipient's only obligation is to return annually to their high school to share with younger students their college experiences and their perceptions of the need and value of a college education. Recipients are also

offered internships along with other area engineering, technical, and business students. PRO-TEC also regularly participates with Ohio Northern University Accounting majors and the University of Findlay Environmental and Safety and Occupational Health majors in a win-win situation. The success of these programs is seen by the level of quality work PRO-TEC receives and the quality of the jobs the students receive after graduation.

PRO-TEC is also committed to offering employment to physical or mentally challenged individuals through Brookhill Industries. This offers the challenged individuals an opportunity for better quality of life. PRO-TEC currently has one person working part-time and four contracted for janitorial services (Figure 1.2-34). These are Associates we are exceedingly proud of.

Requests and commitments (Figure 1.2-3**②**,**⑤**,**⑤**) are considered, based on PRO-TEC's criteria, and then comparative data are gathered from similar requests. The basic question asked is, "Should we donate time, money, or merchandise?" If so, we determine whom, how much, or what we will donate (Figure 1.2-3**⑤**). PRO-TEC is able to assess if the actual impact is what the company envisioned through many active listening posts throughout the community. This information, along with external information such as business needs and local or state economic concerns, is then evaluated at the strategic planning meeting or whenever needed (Figure 1.2-3)**①**.

If the information considered does not meet the criteria, it is considered whether it should be added, and if not, no support is provided.





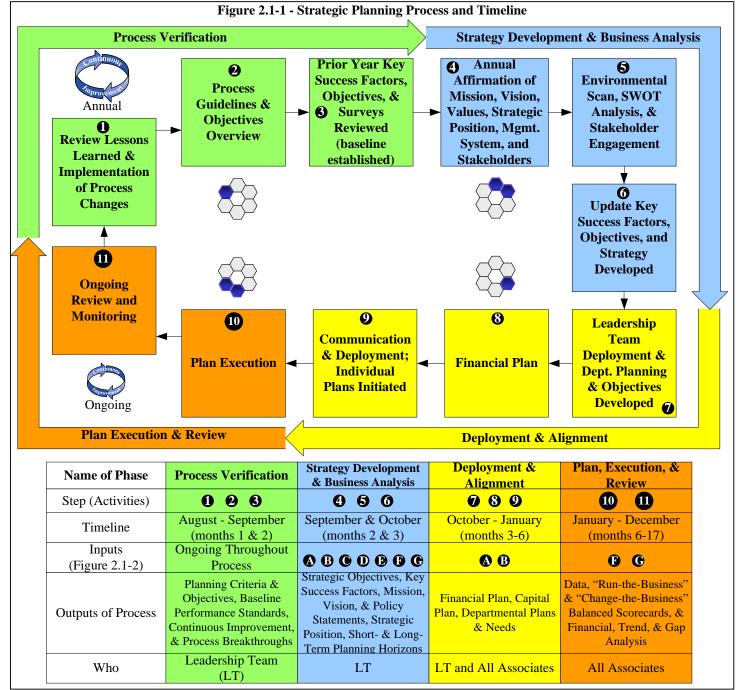
2.1 Strategy Development

2.1a Strategy Development Process

2.1a(1) – PRO-TEC's Leadership Team (LT) is responsible for conducting the company's annual strategic planning process. Since inception, the strategic planning process has been expanded and undergone numerous cycles of improvement (Figure 7.6a1-1) to enhance, yet clarify this critical strategy development process, which defines the long- and short-term direction of PRO-TEC Coating Company and aligns them down to individual goals. The latest improvement was the implementation and deployment of the Six Disciplines methodology and

software for the 2006 and 2007 cycles. The introduction of the Six Disciplines methodology resulted in a strategic planning process that is more agile and better controlled via technological enhancements. Utilizing the Six Disciplines methodology, the LT reaffirms the strategic challenges and advantages of the organization (what Baldrige calls "strategic advantages") and how they relate to the target customer and the product offerings of the business. For 2007, a list of "strategic themes" has been systematically generated as:

- A. Innovative and reliable processes and products; advanced high strength steels.
- B. Market leader, meeting and exceeding the needs of the customer.





C. Associates practicing Ownership, Responsibility, and Accountability (ORA).

This list was further refined to establish a strategic position statement (core competency). PRO-TEC's strategic position as an "Innovation Leader in Coated Steel" is what sets the company apart from other suppliers.

The annual strategic plan, along with the corresponding short- and long-term action plans, are the core elements that are used to align our organization to ensure that this core competency is fostered and sustained. PRO-TEC's strategic planning process is summarized in Figure 2.1-1. The annual process begins with a LT meeting held in the third quarter of the year. The annual strategic planning process is conducted over a seventeen-month period in four distinct phases:

Phase 1 – Process Verification

Phase 2 – Strategy Development & Business Analysis

Phase 3 – Deployment & Alignment

Phase 4 – Plan Execution & Review

Phase 1 – Process Verification: During this phase, the LT steps back, evaluates, and discusses any necessary process improvements (Figure 2.1-1 ●) that have been made or are to be considered for the upcoming planning cycle. An accelerated process of forming consensus and implementing ideas/change is unique to our planning process and is critical to our success, due to our size and limited number of resources. The process guidelines and objectives are reviewed to ensure all areas of the strategic planning process are complete and outlined accordingly ●. A look back at the prior year's key success factors (KSFs), objectives, and surveys is then performed to establish internal and external inputs for the upcoming planning cycle ●.

Phase 2 – Strategy Development & Business Analysis: In this phase of the strategic planning process, the LT begins by re-affirming PRO-TEC's mission, vision, strategic position statement, and values 4. These core outcomes of the annual process are used to clearly map and communicate PRO-TEC's short- and long-term direction and objectives to all stakeholders. The common linkage throughout the strategic planning process is the six key success factors that are also reviewed and affirmed during this phase (listed in P.2.a(2)). This annual validation process is instrumental to the strategic planning process, as each new decision and activity is routinely evaluated against these key success factors and statements before it is made or deployed. Currently, our long-term horizon is three years, and our short-term is one year or less. These horizons were established to link the long-term horizon to the time required to change technologies and increase capacity in our industry and the short-term to our parent's budget and allocation cycle. This step is then followed by an environmental scan to ensure the planning process is complete and robust **5**. During the environmental scan, we

ensure our stakeholder interests are identified, addressed, and evaluated in our strategic planning cycle. Due to our joint venture status and the use of common processes shared with our parent organizations, we are able to effectively and efficiently gather valuable domestic and global market inputs into our strategic planning process (Figure 3.1-1). With this we gain "first-to-market" insight into upcoming changes in our industry and customer expectations. From the results of these environmental scans we collect the essential internal and external inputs that are used to develop our global strategy. Next, a consolidated SWOT (strengths, weaknesses, opportunities, and threats) analysis is performed to ensure no blind spots exist throughout our organization and in the planning process. The completed SWOT analyses are reviewed to determine our key strategic challenges and advantages that are represented on Figure 2.1-3.

The final step of the strategy development and business analysis phase is the development of a global strategy 6. During the 2007 planning process, by utilizing the Six Disciplines methodology, the LT created communicated a strategic position statement, which was a breakthrough process improvement, as this key statement focuses and aligns our company on the key elements that provide PRO-TEC with a competitive advantage in our The LT, through the highly competitive industry. development of the global strategy, provides direction by identifying the key long-term "Change-the-Business" and short-term "Run-the-Business" action plans and high-level objectives for the upcoming year.

<u>2.1a(2)</u> – The coordination of internal and external inputs into the strategic planning process is very critical, due to PRO-TEC's joint venture status and key organizational agreements, which have been in existence since PRO-TEC's inception. The internal inputs are derived on a continual basis by the LT, through various communication methods identified on the communication matrix (available on-site). Inputs are also obtained from departmental SWOT activities and meetings as outlined in the strategic planning process, while the external inputs are gathered through various partnering activities with our stakeholders.

Figure 2.1-2, "Inputs to Plan," summarizes how information is collected and analyzed for key inputs into our strategic planning process. These key factors, along with all other inputs, are considered and evaluated in the SWOT analysis described in Phase 2 of the strategic planning process (Figure 2.1-1).

Long-term organizational sustainability is the underlying foundation from which all key success factors are derived and roll up into our balanced scorecard (BSC). The key success factor that we use to monitor and ensure the long-term sustainability of our company is long-term viability. During the initial stages of our strategic planning process, we recognized the importance and linkages of each key



Figure 2.1-2 - Inputs to Plan					
	Who	Collection Process	Analysis		
SWOT Analysis - Key Success Factors - People Capabilities	Leadership Team (LT)	Stakeholder Surveys & Direct Communication, Industry, Scans, Figure 1.2-1, "Governance System"	Trend Analysis, Detailed Operational Reviews, Six Disciplines Systems Blind Spots		
B Technology	Partners, LT, Customers, Vendors	Figure 3.1-1, "Customer & Market Knowledge"	Various, Technology Blind Spots		
	IS Department	Area to Address 4.2a(4)	Various, IS Blind Spots		
C Markets	Partners, LT, Customers	Figure 3.1-1, "Customer & Market Knowledge"	Various, Marketplace Blind Spots		
D Competition	Partners, LT, Customers	Figure 3.1-1, "Customer & Market Knowledge"	Various, Competitive Blind Spots		
E Regulatory	Partners, LT, All Associates, Vendors	Figure 1.2-1, "Governance System"	Gap Analysis, Statistical Sampling, Detailed Audits and Reviews, Regulatory Blind Spots		
F Sustainability	All Stakeholders	See "Sustainability" in Area to Address 2.1a(2)	Balanced Scorecard Approach, Trend Analysis, Sustainability Blind Spots		
G Ability to Execute the Plan	All Associates	Figure 1.2-1, "Governance System," Figure 4.2-4, "Knowledge Management Systems"	Statistical Sampling, Detailed Process Review, Balanced Scorecard Approach, Operational Blind Spots		

success factor. Business continuity is systematically evaluated across the sustainability factors shown in Figure 6.1-4. By aligning these sustainability factors to our key success factors, we ensure that the strategic planning process has substance as it is deployed throughout our organization. Once deployed, we routinely monitor, communicate, test, and plan for expected and unexpected obstacles throughout our implementation as shown in Figure 2.2-1.

Back-up procedures and contingency plans are in place as outlined in Areas to Address 4.2a(3) and 6.1c. In addition, we conduct preventive maintenance practices on a strict predetermined schedule and maintain an inventory of critical equipment spares. We perform periodic audits as outlined in our governance system (Figure 1.2-1) to validate that these processes and procedures are in place, deployed, and are being applied on a continual basis. In addition, PRO-TEC, through access to both parent companies and the key formation agreements (partnership, substrate supply, and marketing), enjoys many additional benefits and resources that help ensure its long-term organizational sustainability and business continuity in the event of an emergency.

2.1b Strategic Objectives

<u>2.1b(1)</u> – Figure 2.1-3 identifies the key strategic objectives/KSFs, including short- and long-term targets along with the corresponding short- and long-term action plans.

<u>2.1b(2)</u> – Figure 2.1-3 shows how the objectives in 2.1b(1) are linked to the strategic challenges and advantages identified in our planning process. The strategic planning process is performed to enhance the strategic position of

PRO-TEC, which is to be an "Innovation Leader in Coated Steel." To capitalize on PRO-TEC's strategic position and opportunities for innovation in all aspects of our business, the "Run-the-Business" and "Change-the-Business" action plans (Figure 2.1-3) have been linked to our KSFs and vision. Through the use of a balanced scorecard approach, we ensure that our strategic objectives balance our short-and long-term challenges and opportunities and the needs of our stakeholders. On Figure 2.1-3, we show how each objective is linked to our stakeholders.

2.2 Strategy Deployment

2.2a Action Plan Development and Deployment

2.2a(1&2&3&4) — **Phase 3 Deployment & Alignment:**This phase of the strategic planning process is linked to "Align Systems." In developing the strategic plan and performing the SWOT analysis, PRO-TEC links each action plan to a specific KSF. This ensures alignment between the individual action plans with the strategic objectives that have been developed in Area to Address 2.1. The action plans are then deployed and monitored as outlined in the deployment and alignment phase (Figure 2.1-1, steps •• and the plan execution and review phase (Figure 2.1-1, •• and the plan execution and review phase (Figure 2.1-1, •• and the plan execution and strategies and goals are deployed, aligned, and integrated throughout our organization.

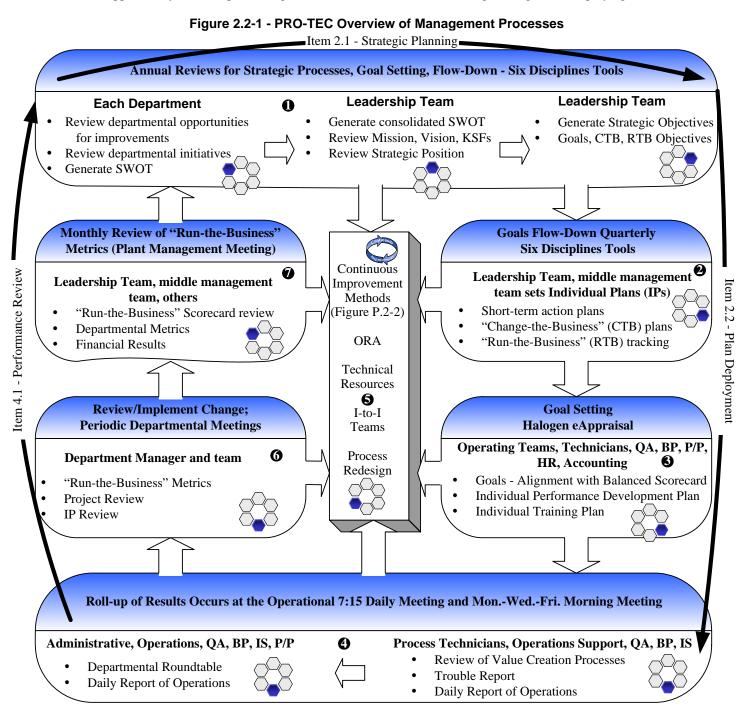
In the deployment and alignment phase of the strategic planning process, each member of the LT is responsible for deploying the global strategy throughout their departments (aligned) and in the entire organization (integrated). Each manager uses the performance management system and



various methods of direct two-way communication to deploy the key long-term "Change-the-Business" and short-term "Run-the-Business" action plans throughout the organization (Figure 2.2-1 ②). Throughout the strategic planning process and during the initial phases of deployment, each LT member gathers internal and external inputs (Figure 2.1-2) to create individual and departmental action plans and projects that support the global strategy. Once these individual and departmental action plans are established, short- and long-term targets and objectives are set (plans aligned). These departmental action plans and the corresponding short- and long-term targets are then reviewed and approved by the LT (plans integrated). The

short-term objectives are used in the creation of the annual financial plan, which is referred to as the business plan (Figure 2.1-13). The business plan is used to evaluate our performance during the upcoming year. Long-term objectives are set to ensure all resources are focused on the long-term viability and sustainability. "Best-in-class" benchmarks are established where appropriate to ensure continuous improvement is a core element of the strategic planning process.

Alignment is built into the process, with LT members participating in the strategic planning process and being accountable for gathering and deploying the overall





strategic plan and the departmental objectives throughout their team of Associates. With completion of the annual business plan, the results of the strategic planning process are communicated to both parents at the Management Committee (MC) meeting ①. The President and each LT member reviews in summary his or her departmental action plans and objectives followed by a detailed financial and operational review of the business plan for the upcoming year. MC approval is requested to ensure our strategic planning process is aligned with the vision and expectations of our parent companies.

Once MC approval is obtained, additional methods of internal communication are held to ensure deployment and alignment throughout our organization. The results of the strategic planning process and the annual short-term business plan are communicated to all Associates during quarterly communication meetings. Further reinforcement and deployment occurs at periodic departmental meetings, in addition to the annual performance review process where individual performance and departmental metrics are discussed. These meetings provide additional listening and learning opportunities to ensure the strategic planning process was complete.

Each manager, along with Human Resources, uses various methods of analysis, Associate surveys, and direct two-way communication to ensure that adequate resources are available and that key changes can be sustained. Financial analysis, return-on-investment calculations, and short-term and periodic long-term financial plans are also created to ensure that the impact of the action plans and the costs to implement are justified and considered in the strategic planning process. Our flat organizational structure along with our deeply embedded communication system allows action plans to be modified on a real-time basis with LT consensus, which is critical to our success in a highly innovative and competitive industry.

Phase 4 – Plan execution and review: During the plan execution and review phase, each Associate and department is focused on implementing and executing the action plans to ensure full integration of the strategic plan into the day-to-day operations of the facility. To validate the performance objectives and that full implementation of the action plans has occurred, monthly plant management meetings are held • Each LT member is responsible for reporting actual performance on a stoplight color-coded balanced scorecard, which measures actual performance against the short-term "Run-the-Business" targets. In addition, the LT meets on a quarterly basis with a Six Disciplines facilitator to review the interim strategic planning activities and to ensure that resources have been properly deployed to sustain the organization over the long-term planning horizons.

A balanced scorecard approach was the design objective for the 2003 strategic planning cycle. Six key success factors (KSFs) (Figure 1.1-1) were developed to provide the necessary alignment of the PRO-TEC stakeholders with our mission, vision, and strategic position statements, values, the quality, safety, and environmental policies, company policy manuals, Associate Guide, and procedure and work instruction manuals for our integrated Quality and Environmental System (QES).

Figure 2.1-3 summarizes a subset of our key short-term ("Run-the-Business") long-term ("Change-theand Business") action plans and shows how they are linked to our KSFs (strategic objectives) and vision. In addition, shown on Figure 2.1-3 are the corresponding short- and long-term targets for these action plans. Each action plan has a defined owner, performance measure, frequency, short- and long-term performance objective, and (when available) a comparison. Key changes in customer base and products are related to commercial initiatives to increase participation with the shift in customer market shares (Figure 7.3a2-1) and to further expand our dominant firstto-market advanced high strength steel (AHSS) position (Figure 7.1a1-5).

<u>2.2a(5)</u> – The key human resource plans that are derived from the strategic objectives and action plans are related to the KSF of Associate quality of life and are represented in Figure 2.1-3, which is limited here (for sake of space).

<u>2.2a(6)</u> – The key performance measures for our action plans are listed in Figure 2.1-3 and include a brief description of the measurement and short- and long-term objectives. Organizational alignment of the action plan measurement system is ensured by the linkage of each action plan to a specific KSF. The six KSFs, shown in Figure 2.1-3, represent a balanced scorecard approach with the further correlation back to stakeholders.

2.2b Performance Projection

<u>2.2b</u> – Past-to-future performance objectives are listed in Figure 2.1-3 for each action plan, and a comparison or benchmark is provided on the corresponding result. "Best-in-class" benchmarks are established where appropriate, to ensure continuous improvement is a core element of the strategic planning process. Within the domestic steel industry, financial, operating, and quality performance are typically considered confidential and not shared. However, since our quest is to be the unquestioned industry leader, we seek appropriate best practices, comparisons, and benchmarks from the parent companies, industry data, Baldrige recipients, Baldrige/OPE conferences, OPE recipients, and other industries to achieve breakthrough improvement which, if applicable or available, are shown on the results charts in Category 7.



Figure 2.1-3 - Subset of Key Strategic Objectives, Action Plans, and Goals

Figur	e 2.1-3 - Subset of Key Strategic Objective		
Ke	y Success Factor (KSF) Tied to Vision	Strategic Challenges (P.2b) & Advantages	Action Plans ("Run-the-Business" Short-Term [RST]
	Statement	(6.1a(1))	& "Change-the-Business" Long-Term [CLT])
	Vision:	Human Resource	RST: Improve recordable injury frequency
	a) Be - Totally committed to personal	Challenge: Healthcare cost	(Figure 7.4a3-1)
	safety and wellness	Strategic Advantage:	CLT: Achieve zero recordable injuries in year
le	, and the second	Associates practicing ORA	(10-year target)
Ä		rissociates practicing of a r	RST: Improve Wellness Program outreach
of			improve weimess frogram outcom
lity			RST/CLT: Implement Disease and Lifestyle
ua]			
Ö			Management Programs; in addition,
ate			continue to design and implement
oci			programs to control medical costs
SS			
KSF = Associate Quality of Life	b) Have - A highly skilled, engaged		RST: Improve Associate satisfaction survey
N.	workforce committed to ongoing		results (Figure 7.4a1-1)
×	performance excellence		RST: Conduct and support focused elective
			training for Associates
			CLT: Become a Malcolm Baldrige National
			Quality Award recipient (Figure 7.5a1.1)
۲.	Vision:	Business Challenge: Shift	RST: Manage supply chain mgmt. coated target
Cust.	a) Do - Provide on-time delivery with	in auto. mfg. locations	inventory (Figure 7.1a1-10)
SF = Cu Service	world-class quality	Strategic Advantage:	RST/CLT: Achieve and maintain Automotive Group
KSF Se		Market leader in meeting/	claim performance (Figure 7.2a1-5)
M		exceeding customer needs	
it ii	Vision:	Operational Challenge:	RST: Maintain overall internal diversion yield
ıtio	a) Be - Recognized as industry technology	Changes in product mix	percentage (Figure 7.1a1-6)
ovs pn	leader in both product and process	Strategic Advantage:	CLT: Increase value-added product
nn 7elo	reader in both product and process	Innovative and reliable	development (Figures 7.1a1-2 & 7.1a1-3)
n.]		process and products	CLT:
KSF = Techn. Innovation & Product Development		process and products	
= T			Confidential
KSF:			CLT:
X &			
	Vision:	Operational Challenge:	RST: Maintain operating ratio, CGL 1 & 2
System billity	a) Do - Develop/maintain world-class	1) Sustaining world-class	(Figure 7.5a2-2)
yst	facility and business systems	reliability	RST: Maintain internal finishing process
SF = Syste Reliability	b) Have - Optimal utilization of production	2) Information revolution	efficiency (Figure 7.1a1-9)
F. Seli	capacity and capability	Strategic Advantage:	
KSF Re		Innovative and reliable	CLT: Installation of continuous shear capable of
		process and products	cutting AHSS
	Vision:	·	RST: Utilize water recycling programs to
Good	a) Do - Maintain high standard for		maintain city water usage levels
G Is	community citizenship and service		(Figure 7.5a1-8)
F = ize	1		CLT: Analyze, review, and if appropriate, make
KSF = Good Citizenship			project recommendations to utilize raw
			water consumption
-6 -5: X:	Vision:	Business Challenge:	RST: Commit to repair and maintenance
Long- iability	a) Be - Consistently profitable	Competition/consolidation	spending to ensure latest technology and
= Long- Viability	b) Have - Valuable vendors/supplier	of steel industry	reliability of facility (Figure 7.5a1-5)
	relationship	_	RST/CLT: Sustain return-on-assets ratio (ROA)
KSF Term	- -		(Figure 7.3a1-2)
		l	(1 1guil (1.3a1-2)



Measure	Measure Owner	Actual Perfomance FY 2006 YTD	Target FY 2007	Target FY 2009	Stakeholder
Recordable injuries / 200k man-hours	S. Shartell	1.62	1.5	1.5	1,2,3,4,5,6
Health Risk Appraisal participation %	S. Shartell	50%	>=60%	> = 75%	1,2,3,4
Programs implemented Average healthcare claim cost per Associate per month	B. Rosebrook/ S. Shartell B. Rosebrook/ S. Shartell	Selected vendor	complete	ongoing	1,2,3 1,2,3
Composite score	S. Shartell	3.15	3.05	3.20	1,2,3,4
Training man-hours	S. Shartell	2,069	1,840	2,320	1,2,3
Number of awards won	E. Franks	Site visit	1	1	1,2,3,4,5,6
% of inventory available on time	T. Smith	82%	>=90%	> = 95%	1,2,3
Claims incurred (PPM parts/million)	E. Franks	Confidential			1,2,3
Internal diversion yield %	E. Franks				1,2,3,4
Cumulative number of products developed	E. Franks	9	10	11	1,2,3,5
Equipment installation timeline	J. Stechschulte	C	Confident	ial	1,2,3
Project status	Project team		I	,	1,2,3,4,5,6
Operation ratio %	J. Stechschulte	97.9% & 97.7%	97.5% & 97.5%	97.5% & 97.5%	1,2,3
Number of days to complete	P. Nuveman	5.2	< = 4.5	< = 4.5	1,2,3
Equipment installation timeline	J. Stechschulte	Project approved	Complete	Ongoing review and monitoring	1,2,3
Gallons of water/ton of steel	R. Rupert	64.73 gal./ton	< = 65 gal./ton	< = 65 gal./ton	1,2,3,4,5,6
Project status	R. Rupert/ B. Rosebrook	Project identified	Planning study	Project complete	1,2,3,4,5,6
PP&S spending \$/ton	B. Rosebrook	C	 onfidenti	l al	1,2,3,4,5,6
Return-on-asset ratio %	B. Rosebrook		Ī		1,2,3,4,5,6

STAKEHOLDER KEY: 1 = Customer, 2 = Owners, 3 = Associates, 4 = Suppliers, 5 = Community, 6 = Public



3.1 Customer and Market Knowledge

3.1a Customer and Market Knowledge

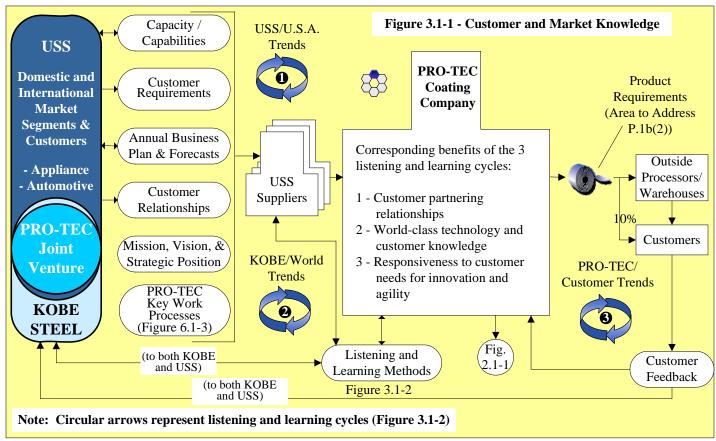
3.1a(1) - PRO-TEC is the role model for a successful business in the automotive industry. We were established by steel industry leaders to lead in our niche. Our customer and market knowledge differentiates us as a company and as a competitor in our industry. The knowledge that USS and KOBE possess about their current and potential customer requirements is an attribute that PRO-TEC has taken advantage of to make us a world-class leader in the automotive industry. Based upon the terms and conditions of the Sales and Marketing Agreement between USS and KOBE, USS distributes 100% of PRO-TEC's overall capacity of sheet products. Most automotive market sheet product customers are handled with one- or two-year contracts, with a smaller portion handled on a spot-buy basis (no ongoing contract). At the time the contracts are up for renewal, USS determines how aggressively it will pursue retaining its customers, as well as obtaining its competitors' customers. This determination is driven by factors such as capacity, price, product mix, and future potential markets.

One of USS's recent strategic plans affecting PRO-TEC was the 2003 acquisition of National Steel. This acquisition provides USS with a greater amount of flexibility in loading PRO-TEC and its three other automotive quality hot-dip coating lines (Figure P.1-8), as well as synergies in the form

of the allocation of steel substrate supply and key market segments. As such, PRO-TEC does not <u>directly</u> determine or target customers, customer groups, or market segments. Our past performance and success with producing advanced high strength steel products have proven to be a significant factor in determining how our customers and customer groups are targeted. We target customers who have the highest requirements for the toughest products to manufacture and, while doing so, continue to sell 100% of our capacity.

With PRO-TEC's unique affiliation with USS and KOBE, there exists three distinct listening and learning cycles: Figure 3.1-1 • the USS/United States trends providing PRO-TEC with its customer partnering relationships, Figure 3.1-1 • the KOBE/world trends providing PRO-TEC with world-class technology and customer knowledge, particularly with the fast-growing demand of advanced high strength steels, and Figure 3.1-1 • PRO-TEC/customer trends, allowing responsiveness to customer needs for innovation and agility. These three listening and learning cycles are correlated to the listening and learning methods as outlined in Figure 3.1-2.

Annually, we re-evaluate our mission, vision, and strategic position statements as part of our Strategic Plan Development Process and Business Analysis (Figure 2.1-1) to ensure our customer groups/market segment focus is aligned with that of our parent companies. Additionally, we re-evaluate capacity, product capabilities,





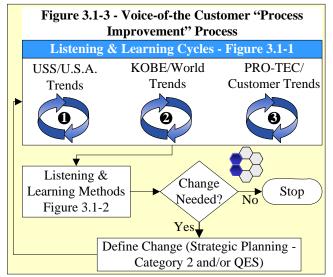
and our supporting roles to support current and future marketing initiatives. Performance against these is reviewed on a monthly basis during the plant management meetings. As potential new products are introduced to PRO-TEC, they are reviewed for feasibility by the Business Planning and Quality Assurance departments. All products are subject to PRO-TEC's approval based on its Authorized Products Manual (APM). Products that meet the criteria outlined in the APM, but pose concerns to any aspect of the overall production process, are reviewed at Monday-Wednesday-Friday morning meetings before being accepted or rejected. The data gathered through the various listening and learning methods and from customer feedback continuously provide information about our capabilities in the changing markets. Based on this overall process.

PRO-TEC <u>indirectly</u> influences USS's determination of PRO-TEC's target customers, customer groups, and market segments.

PRO-TEC was created as a joint venture to respond to the increased demand from the automotive industry for high quality hot-dip galvanized sheet products. We are the beneficiary of the current and potential customers of USS and KOBE, as well as our parent companies' customer relationships and leading world-class technology (see Figure 3.1-1). USS and KOBE have chosen this direction based on the overall financial attractiveness and fit with our technical capabilities.

he changing markets. Based on this overall process,							
Figure 3.1-2 - Listening and Learning Met							
USS/KOBE LISTENING & LEARNING MET	USS/KOBE LISTENING & LEARNING METHODS						
	Automotive/						
	Appliance/						
Method/Activity	Both	Char.	L&L				
Commercial Purchasing	Both	T,S	1				
Research & Development	Auto	Q,D	1,2,3				
Strategic Transplant Task Force	Auto	Q,D	1,2,3				
Commercialization of High Strength Steel (CHSS) Task Force	Auto	Q,D	1,2,3				
Auto Steel Partnership	Auto	Q,D	1				
APEX Meetings (Figure 3.2-4)	Both	Q,T,S,D	1,2,3				
Advanced Products Quality Planning	Auto	Q,D	1				
Quality & Service Meetings	Both	Q,T,S,D	1,3				
Annual Supplier Quality Meetings	Auto	Q,T,S,D	1,2,3				
Benchmarking Data	Auto	Q,T,S	1,3				
Supply Chain Management	Both	T,S	1,3				
USS Customer Surveys	Auto	Q,T,S,D	1				
Complaint Management (Figure 3.2-2)	Both	Q,T,S	1,3				
Customer Technical Service (CTS) Representatives On-site Service	Both	Q,T,S,D	1				
CTS Communication Meetings	Both	Q,T,S,D	1				
Outside Processor Oversight/Meetings	Both	Q,T,S	1,3				
Situational Customer Phone Conferences	Both	Q,T,S,D	1				
Customer Satisfaction Team	Both	Q,T,S,D	1,3				
Internet Team	Auto	Q,T,S,D	1				
Training Team	Both	Q,T,S,D	1				
Information from the above activities is exchanged/shared with PRO-TEC (gray shaded area below) via PRO-TEC's							
Business System, the internet, joint meetings, USS's meeting minutes, phone conv							
PRO-TEC COATING COMPANY LISTENING & LEAF							
Business System Order Entry / Supply Chain Management	Both	T,S	1,3				
CHSS/APEX/Quality Meetings Minutes	Both	Q,T,S,D	1,3				
USS Claim System Interface (Figure 3.2-2)	Both	Q,T,S	1,3				
USS Automotive Sales Meetings	Auto	T,S	1,3				
USS Substrate Supplier Meetings	Both	Q,D	1,3				
Situational Phone Conferences/E-mail Notifications	Both	Q,T,S,D	1,2,3				
PRO-TEC Management Committee Meetings	Both	Q,T,S,D	1,2,3				
Outside Processor Oversight/Meetings	Both	Q,T,S	1,3				
PRO-TEC Customer Surveys (Figure 3.2-3)	Both	Q,T,S,D	1,3				
AISI & Galvanizers Association Participation	Auto	Q,D	1,3				
On-the-job/Accredited Training Requirements	Both	Q,T,S,D	3				





Our key customer segments are automotive (98%) and appliance (2%). Our participation in the appliance business is accepted only as part of a key-supporting role for USS's overall appliance market segment strategy (Figure P.1-6). Annually, USS supplies approximately 975,000 tons to the appliance market, with PRO-TEC's participation limited to approximately 12,000 tons. PRO-TEC's limited volume plays a vital role to USS's overall business participation with a key customer. Our involvement with this valued customer is solely due to our demonstrated ability to produce a high-quality surface-critical product (smooth and embossed refrigerator doors) with the highest quality attributes on a consistent basis among USS's other coating facilities.

PRO-TEC's heavy concentration in the automotive industry market does not pose a significant threat (of having "all our eggs in one basket"). PRO-TEC's participation in the demand for advanced high strength steels (AHSS) - which continues to grow at a rapid pace (see Figure 7.1a1-5) - lessens this risk. Furthermore, PRO-TEC is able to quickly adapt to the non-automotive market segments since we adopt the toughest customer standards as the basis for a common approach to our entire customer base.

Because 90% of our product is shipped to an outside processor or warehouse for further value-added processing or just-in-time delivery to the customer, we maintain a high level of control over the selection of and continued use of these outside vendors. Under USS's APEX procedures, processors/warehouses may only be contracted for business with USS/PRO-TEC after an approved evaluation from a USS Customer Technical Service representative. These processors/warehouses must also hold a current quality management system certification. Ongoing evaluations of approved processors/warehouses include external customer claims activity, on-time delivery performance, and internal quality performance. PRO-TEC monitors the key customer requirements at these outside vendors and outsources its processing and storage needs based on these service and quality results.

<u>3.1a(2)</u> – Because USS is the exclusive agent for our customer interface, USS provides voice-of-the-customer information and feedback from listening and learning methods based upon closely developed direct customer relationships. USS's Automotive Group organizes its Customer Technical Service and Sales organization into four customer-specific teams: Customer A, Customer B, Customer C, and Customer D. USS focuses on varied requirements and expectations among its customers based upon functional activities. Further, due to our participation in the development of AHSS with the transplants and their first-to-market approach/differentiation strategies, we are well positioned to provide innovative leadership for the domestic steel industry.

USS, and indirectly PRO-TEC in a set of supporting roles, maintains continuous customer intelligence gathering with parallel customer organizational functions. These functions include:

- Research for AHSS development.
- Early Vendor Involvement (EVI) for new product development.
- Commercial purchasing based on customer-specific teams to maximize customer knowledge expertise.
- Stamping Engineering to aid in process development.
- Operations testing for product performance.
- Quality Assurance/CTS to track and to understand quality requirements and trends.

Each of these activities affects customers' purchasing decisions. We receive the data for the automotive and appliance market segments in ways described by Figure 3.1-2, based on our supporting roles in the activities. The information is communicated to us through the USS customer-specific teams that represent customer needs or, where the information has a wider application, through broader channels. PRO-TEC then uses this information in the strategic planning process to enhance our processing capabilities and capacity to meet new business needs, product development and planning, process improvements, and business development.

For example, in 1997 we installed an in-process roll-coater (an industry first) to support customer product development. In 1998, to support planned transplant business growth, we increased our capacity by adding a second 400,000-ton capacity coating line, bringing total designed capacity to 1,000,000 tons. This makes PRO-TEC the largest (automotive quality) hot-dip galvanizing plant in North America.

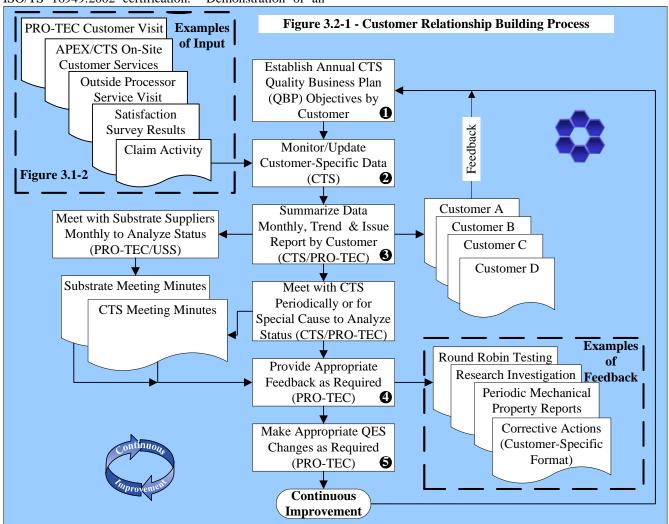


As the listening and learning methods table in Figure 3.1-2 shows, the methods and activities conducted by USS and KOBE are made available to us in a number of ways. Our existence as a small business, reflecting our limited resources, prevents us from attending every customerfocused meeting conducted by USS. However, the process of collaboration to exchange/share information affecting PRO-TEC, whether directly or indirectly, is very effective (Figure 3.1-3). From our daily business system interfaces and ongoing USS Sales office service representatives communications, to the APEX and various other customerfocused team meetings, we work cooperatively with USS to ensure all customer interfaces are appropriately covered. The methods of communication between PRO-TEC and USS have demonstrated that we have successfully acquired strong customer relationships and satisfaction as discussed further in Area to Address 3.2. Proof of this is obtained when certain customers not only request USS-supplied material, but specifically request (or even require) PRO-TEC-supplied material. One such customer is Customer XYZ who is the AHSS industry leader and is one of our most demanding customers.

In August 2004, PRO-TEC received ISO 9001:2000 and ISO/TS 16949:2002 certification. Demonstration of an

effective quality management system shows our commitment to our customers and promotes enhancing customer satisfaction by meeting our customers' requirements. The process approach focuses on the linkage and interaction between individual processes. Special attention is given to identifying customer-oriented processes that have an impact on our customers.

One of USS's efforts to address the possible changes in customer use of non-steel alternatives has been the development of an "Internet Team" whose mission is to "increase profitable sales by promoting USS Corporation as the company of choice and steel as the material of choice for the automobile by providing information about USS's automotive products, technologies, events, and services." A more significant effort, however, has been the development of AHSS grades. AHSS offers the ability to provide steel that improves crashworthiness (through strength) and fuel economy (through vehicle weight reduction) (Figure 7.1a1-7). Based on our manufacturing process capabilities and information-sharing practices with our parents, we enjoy North American leadership in high tensile strength coated sheet steel development (Figure 7.1a1-2).





We differentiate ourselves from our competitors by the product and service characteristics of superior product quality, on-time delivery performance, customer and technical service (USS), and a commitment to new product development. Product quality has become an assumed attribute by our customers. While each customer places slightly different importance on individual characteristics, PRO-TEC adopts the toughest customer standards as the basis for a common approach to our entire customer base.

<u>3.1a(3)</u> - Voice-of-the-customer information and feedback collected through the numerous listening and learning methods (Figure 3.1-2) and activities are communicated throughout the organization in many ways. The most frequent means of communicating this information is through daily interdepartmental meetings, Monday-Wednesday-Friday morning meetings, cross-functional team meetings, and monthly plant management meetings. Customer feedback requiring product or process changes or improvements are handled through the controlled requirements of our Quality and Environmental System (QES) and would be considered during our strategic planning process (Figure 3.1-3).

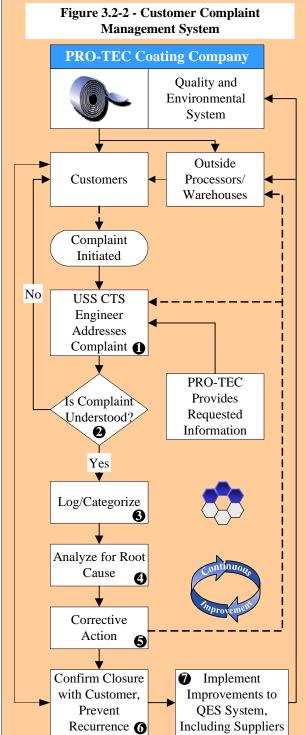
3.1a(4) - PRO-TEC evaluates methods to utilize and communicate voice-of-the-customer information feedback during annual OES reviews performed by the Leadership Team and other management. Methods are reviewed for content, completeness, validity, and opportunities to better anticipate and respond to emerging customer needs. In 2006, we identified some additional listening and learning activities conducted by the USS Automotive Sales Group which we evaluated in order to determine our desired extent of direct participation. The Team also promotes and encourages Leadership participation in the ongoing QES review process from Associates at all levels within the organization. example, the methodology to log and track informal customer complaints (Figure 3.2-2) was not only reviewed by management Associates but was also documented in the quarterly Galvanews mailed to every Associate.

3.2 Customer Relationships and Satisfaction

3.2a Customer Relationship Building

<u>3.2a(1)</u> – Due to the terms of the joint venture, all direct customer contact (starting with the initial order placement) is with USS acting as the exclusive agent and intermediary on behalf of PRO-TEC. Accordingly, PRO-TEC maintains a supporting role and, similar to the USS Automotive Sales Group organization, is organized by customer-specific teams and backups to ensure that all necessary activities and information are readily available to the USS customer contacts.

As illustrated in Figure 3.2-1, each year, USS establishes Customer Technical Service (CTS) business plan quality



objectives by customer, some of which are established directly by the customer (such as the acceptable number of parts-per-million quality defects) ①. These objectives are monitored as the data are updated throughout the year. Data updates are provided through various means such as customer visits, APEX meetings (Figure 3.2-4), outside processor visits, satisfaction survey results, and claim activity ②. The data are summarized by customer and analyzed with our substrate steel suppliers and CTS engineers ③. We provide feedback to our suppliers, CTS

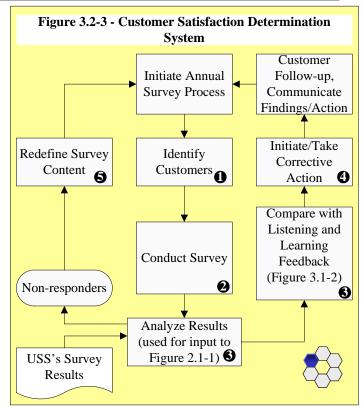


engineers, and customers in the forms of round robin testing and research investigation results, periodic mechanical property reports, and corrective action reports. The outcome of the USS meetings and various types of feedback provides an effective means to make appropriate changes to the QES leading to continuous improvement in our customer relationship building process.

In this way we assist USS in building customer relationships by meeting or exceeding expectations of current customers and USS. With a reputation of good product, cooperation, and responsiveness, we assist in acquiring new business and positive referrals.

3.2a(2) - Based on our joint venture status under the partnership agreement, our customers' first point of contact is a USS Sales or CTS liaison. USS Sales and CTS engineers can access us via e-mail, telephone, fax, and through cellular phones. USS can also access customer order status and inventory information via an internet-based SteelTrack application. This SteelTrack application also contains certain specific product information that our customers can access directly. Key customer contact requirements for each mode of customer access are determined by USS using a systematic approach through their documented ISO/TS 16949 Quality Management System. For example, when information about our product was put on the internet, USS requested and received permission to discontinue faxing this information to customers. In keeping with prescribed organizational roles, we established key customer functional "window" contacts for each customer location, with the appropriate training and resources to deal with customer inquiries. These contacts extend into the corresponding PRO-TEC supporting role activities as part of a seamless communication network.

3.2a(3) – The customer complaint process in Figure 3.2-2 is an integral part of our Quality and Environmental System (QES). Our products are shipped directly to our customers, or in most cases, material is shipped to our customers from our outside processors and warehouses which provide value-added services. USS's CTS acts as first responders, with PRO-TEC providing supporting role activities **①**. The CTS engineer ensures that the complaint is understood before the complaint and/or claim is logged 2. The process logs complaints and claims, and all claims are tracked through the USS claim management system and provides the means to provide timely feedback to all parties in a customer-specified format 3. Claims and complaints are analyzed by the Associates in the Quality Assurance department (in conjunction with USS, as needed) and the Associates in the Processed Products department, where applicable, to determine the course of action to take 4. Depending on the severity of the customer complaint, a face-to-face meeting may be initiated by either USS or PRO-TEC to ensure that complaint(s) have been addressed to the customer's satisfaction. Any customer claims or



complaints that involve an outside processor/warehouse are handled by PRO-TEC's Processed Products department. Where deemed appropriate, a formal corrective action is requested from the outside processor/warehouse, and this corrective action is incorporated into the overall corrective action taken by PRO-TEC. Any metallurgical customer claim exceeding 5 tons results in a written internal corrective action report (CAR) 6. According to the QES, key senior leaders review each CAR to ensure that remedial activity prevents recurrence, there is appropriate root cause closure, and that other applications with similar problems were considered for inclusion within the scope of the CAR**6**. Information pertaining to corrective or preventive actions is aggregated and analyzed monthly during the plant management meetings. Each CAR is verified thirty days after it is closed by an internal auditor/designee with functional responsibility for the area in question. Further, annually the entire QES is reviewed for ongoing suitability and effectiveness **2**.

The customer satisfaction determination methods are the same for both market segments. Because of the closed-loop aspects of our process (see Figure 3.2-26), we verify that the customer is satisfied with the resolution and that the actions taken will ensure future business and gain positive referrals.

<u>3.2a(4)</u> – To keep approaches to building relationships and providing customer access current with business needs and direction, we conduct annual QES reviews of our processes and the inputs from the various listening and learning activities are incorporated into the strategic planning

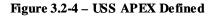


process. Additionally, we learned that in order to best maintain an understanding of transplant customer requirements, our Japanese Associates leverage our integration with the customer as they act as liaisons with our transplant customers. These Japanese PRO-TEC Associates stay with us for about four years at a time. They furnish a cultural bridge-aiding, relationship-building condition contributing to a significant market advantage. Without their involvement, it would be more difficult to develop a strategic sustainable relationship with customers.

3.2b Customer Satisfaction Determination

3.2b(1) – Although customer satisfaction determination is among the direct responsibilities of the USS Marketing and Sales group, PRO-TEC elects to conduct its own customer satisfaction surveys as well (Figures 7.2a1-1&2). Figure 3.2-3 illustrates, this annual survey process identifies the major customers accounting for over 90% of our customer base **1**. Surveys are conducted shortly after the close of the prior calendar year 2. Survey results from USS and PRO-TEC are analyzed by comparing customer responses to data collected through our listening and learning methods to identify new concerns 3. Based on the status of the concern, a formal corrective action may be initiated following the process described in Figure 3.2-24. The surveys' comments (or lack thereof) and the response rates are used as a means to determine whether the survey content should be redefined in order to enhance the value of the customer satisfaction survey process **6**.

Other measures of customer satisfaction are customer awards (Figure 7.2a2-3). We include the criteria for customer awards as part of the customer expectation investigations we perform. We also revalidate customer requirements along with the appropriate activities to support the initiatives, which response formats they would like to see, and special understanding of customer contacts at specific key customer locations. Through the use of the aforementioned customer-specific teams, appropriate customer interfaces are maintained and developed to ensure continual improvement regarding customer satisfaction. Actionable information is gathered and shared through





All People EXcellence **All Process EXcellence** All Product EXcellence

APEX is USS's quality logo which stands for All People, All Process, and All Product Excellence. References to APEX meetings, in which PRO-TEC is a participant, deal with customer-specific discussions on product quality, on-time delivery, customer service, and product development (P.1-6). PRO-TEC is a benefactor of USS's APEX quality system in other areas of our business as well (e.g., authorization and approval of new outside processors/warehouses).

various channels including: monthly customer-specific (APEX) meetings (Figure 3.2-4), monthly PRO-TEC/USS Sales meetings, monthly PRO-TEC plant management meetings, and as inputs in the annual strategic planning process.

3.2b(2) - All customers have an assigned USS CTS representative. The USS CTS personnel are assigned to customer facilities on a full-time basis and follow up on our customer-driven quality and delivery service issues (see Figure 3.2-1). CTS and Sales representatives follow up with customers on products, services, and transactions to provide us with actionable feedback which communicated at our monthly plant management meetings. Whenever an issue or opportunity is identified and corresponding actions taken, the feedback aids us in completing the plan, do, check, and act cycle.

3.2b(3) – With the automotive industry, our product is considered to be a raw material. Competitive comparison information obtained from one customer is applicable to the others in most cases. The transplant automakers provide excellent feedback with competitive information either on a monthly or quarterly basis. Despite the impact on relative competitive comparison information that PRO-TEC's unique product mix has, similar satisfaction/benchmarking information is available at a more global level from domestic automakers and other industry organizations such as Auto Steel Partnership (A/SP), American Iron and Steel Institute (AISI), and Galvanizers Association. We use these information sources to continue to drive aggressively toward improvements. The Galvanizers Association, for example, is a forum where we can share success stories on common problems and obtain recommendations on equipment, materials, and operating practices as well as vendor capabilities, trends, and break-through ideas. This exchange of information with our competitors has proven to be an invaluable resource.

3.2b(4) – Through the use of listening and learning methods (Figure 3.1-2), new opportunities to anticipate customer needs and determine satisfaction are continually examined. During the final quarter, the customer-specific Quality Business Plan (QBP) objectives are established for the following year (see Figure 3.2-11). Internally within PRO-TEC, the methods to communicate and utilize the customer intelligence that is provided by USS are evaluated during the annual Quality and Environmental System (QES) review and as an input to the strategic planning process. Examples of opportunities that systematically have been identified and are implemented are paperless invoicing, internet-based order status, and steel properties test reports.



4.1 Measurement, Analysis, and Improvement of Organizational Performance

4.1a Performance Measurement

4.1a(1) – PRO-TEC selects data based on what we are required to collect to support customer service, government regulators, and other stakeholders. Data are also collected if the data are actionable, that is, if the results of analysis of data may provide a measure for guidance of company strategic objectives or may provide insight into processes that may lead to breakthrough innovation. Figure 4.1-1 refers to the tools used at PRO-TEC to flow-down goals to individuals and how performance results are rolled up. How these reviews link to goal flow-down is illustrated in Figure 2.2-1.

PRO-TEC collects, aligns, and integrates data for tracking daily operations, organizational performance, and progress towards strategic objectives by utilizing the Information Systems (IS) resources of one of its parent companies, USS, and databases located at PRO-TEC. The data are integrated into reports that give managers daily tracking of material to be processed, in-process material, finished product, product shipments, and day's supply of product in our customers' inventories. The IS group, in addition to standardized reports, has data mining tools for creating ad hoc queries to drill down into specific data to support current action plans and technical innovation. Our organizational performance measures as well as key short-term and longer term financial measures are shown in our "Run-the-Business" balanced scorecard (BSC).

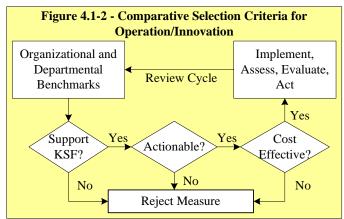


Figure 4.1-1 shows a matrix by which organizational decision-making and innovation are achieved at PRO-TEC. Decisions regarding breakthrough innovations are decided at meetings with "Change-the-Business" (CTB) aspects to them (Monday-Wednesday-Friday [M-W-F] morning meeting, Departmental, and Management Committee and Leadership meetings outlined in Figure 4.1-12,3,5). At the lower levels of the organization, PRO-TEC expects individual Associates and workgroups to provide most of the ideas for continuous improvement, taking place primarily at meetings outlined in Figure 4.1-10,2.

4.1a(2) – PRO-TEC selects and ensures effective use of key comparative data by using the criteria outlined in Figure 4.1-2. Data are used in three distinct ways: 1) to improve products, processes, and performance, 2) to set new targets and objectives, and 3) to help shape strategic direction. The effectiveness of using this comparative data is evaluated during monthly and annual planning sessions at

Figure 4.1-1 – Organizational Decision-Making Matrix					
	Operational 0	MonWedFri.	Departmental 3	Monthly •	Others 6
Who	Value creation personnel	Value creation personnel, support processes	Each department personnel	Leadership Team and stakeholders	PRO-TEC Mgmt. Committee, Leadership Team (strategic planning), Departmental planning
When	Daily	3 times weekly	1-2 per month	Monthly	3 times a year, annual
What	Run Balanced Scorecard (BSC) – quality, volume, uptime	Run BSC - Inter- departmental cooperative efforts, corrective actions; Change BSC - current issues driving change	support of tactical and	departmental performance, action items	Run BSC – review company performance; Change BSC – develop change strategy for long-term viability (update Change BSC)
Analysis	Trending, process logs	Review of operations, pareto, correlation, statistical	Statistical, uptime metrics, correlation, pareto	Statistical, uptime metrics, correlation, pareto	Roll-up of measures done at lower levels
Decisions made	Production, operational, equipment	Safety, business direction, operational		Resourcing	Strategic planning, Change BSC items
Improvement methodology	See Figure P.2-2	See Figure P.2-2	See Figure P.2-2	See Figure P.2-2	Roll-up of processes done at lower levels



both the departmental and company-wide levels. Figure 2.2-1 **0**, **6** shows where in the management process these benchmarks are used and evaluated. Figure 4.1-1 **2**, **3**, **4**, **5** shows what types of analyses and types of decisions are made in our decision-making matrix.

4.1a(3) — To keep performance measures current with business needs, we review key measures monthly during the plant management meetings (Figure 4.1-1 ♠). As conditions change internally or externally, new measures are developed and old measures are dropped. This frequency of company-wide review combined with departmental meetings (Figure 4.1-1 ♠) allows PRO-TEC to be sensitive to rapid or unexpected changes generated both internally and externally.

4.1b Performance Analysis, Review, & Improvement

4.1b(1) – Our systems for review of both performance and capabilities are highly integrated into our model shown for "PRO-TEC Overview of Management Processes" and "Organizational Decision-Making Matrix" shown in Figures 2.2-1 and 4.1-1. Organizational performance is reviewed in the management process described in Figures 2.2-1 and 4.1-1 ●. The plant management meeting compares each department's results to the goals set in the "Run-the-Business" (RTB) balanced scorecard. Organizational capabilities are reviewed at meetings described in Figures 2.2-1 and 4.1-1 ②, ③, ④, ⑤.

Analysis done to validate the results of decisions made at each level are both business (as measured by our Accounting, Processed Products, and Business Planning departments) and technical (as done by the Operations, QA, and IS departments). Accounting and Business Planning primarily analyze inventories, order book, and proceeds against the strategic objectives and the "Run-the-Business" BSC metrics. The Processed Products department analyzes inventory levels to determine acceptable modes of transportation (rail versus truck) for shipments to outside processors/warehouses and evaluates the usage of these outside vendors to optimize best quality/lowest cost vendor services. Operations analyzes data collected by process sensors for the purpose of verifying expected results as well as to support or track the impact of innovations. The OA department, in addition to tracking standard quality assurance measures for steel, also supports innovation by analyzing what process conditions support optimal conditions and minimal variation for product quality. The IS department looks at process data and does statistical analysis in support of updating process models and tables (Figure 7.5a2-6). The results of these analyses are used to drive departmental and organizational decision-making.

We measure our organizational success and competitive performance relative to our strategic objectives by the use of our "Run-the-Business" BSC and by use of benchmarks against competitors when available. Our ability to adapt to rapid changes in organizational needs and challenges is facilitated by the structure of our organization, which supports appropriate decision-making at all levels.

4.1b(2) — PRO-TEC has a systematic methodology (Figure 2.2-1) with different avenues to set priorities for continuous and breakthrough improvements and opportunities for innovation (Figure P.2-2). Because the Leadership Team (LT) assembles three times a week for the M-W-F morning meetings, monthly for formal RTB review, quarterly for PRO-TEC's review of previous quarter's goals as well as setting goals for the following quarter, and lastly annually to review mission, vision, goals, and KSFs, we are in a position in any of these venues to translate results via statistical, correlation, or pareto analysis into priorities for the organization.

Through the use of the Six Disciplines and Halogen tools, we deploy improvement/innovation to the appropriate Associates. PRO-TEC management also has ample opportunity to relay information at the Operational 7:15 meeting and M-W-F morning meeting, since these are meetings that have representatives from the LT as well as engineers, technicians, and other Associates.

As priorities and opportunities that affect suppliers or customers are identified, PRO-TEC utilizes the agenda of the monthly sales meetings or periodic substrate supplier meetings to communicate this information. PRO-TEC also has weekly conference calls on substrate issues if the timeliness of an opportunity dictates earlier action.

4.1b(3) - Organizational performance review results are incorporated into the evaluation and improvement of key processes utilizing Six Disciplines management software and ideology, using steps 6, 1, and 2. (Figure 1.1-1). This process facilitates review of performance measures through its "Step Back" stage, which requires the Leadership Team to review company metrics, develop a SWOT analysis using SWOT information from each department, and finally review progress on current goals. Step 1 of the Six Disciplines methodology requires the Leadership Team to "Decide What's Important." This step utilizes the Six Disciplines software tool which allows the team to systematically determine what is important to them using the "100-point tool." The Leadership Team can then "Set Goals That Lead" based on the outcomes of the previous steps and deploy the goals in a fully aligned and integrated fashion using the Six Disciplines software. These goals are based on and reflect our key processes.

4.2 Management of Information, Information Technology, and Knowledge

4.2a Management of Information Resources

<u>4.2a(1)</u> – PRO-TEC uses multiple mechanisms to make data and information available to our stakeholders. User



needs for data and data presentation methods are determined through surveys or meetings with specific user groups. Figure 4.2-1 details the major communication channels and systems in place.

Figure 4.2-1 – Major Communication Channels				
Method	Type of Information	Stakeholders		
	Business Results;			
	General Information;			
Intranet	Procedures;	Associates		
	Customer/Supplier			
	Links to Other Sites			
Galvavision	General; Customer	Associates		
E-mail	A 11 T	Associates/Owners/		
E-IIIaII	All Types	Suppliers		
EDI	Product Info./Status	Customers/Suppliers		
Internet	Order Status;	Associates/		
Internet	Investment Status	Customers/Suppliers		
Bulletin Boards	General	Associates		
Mass Mailings	General	Associates		

4.2a(2) – System reliability is addressed at all three computing levels (Embedded and PLC controller, Supervisory process control, and Mainframe and business systems) utilizing scheduled outages as shown in Figure 4.2-2, with warm hardware backups for critical systems (Figure 7.5a1-4). System security is controlled using login IDs and passwords for authorized users. Userfriendliness is addressed using a design review process where users are systematically involved for all software changes that involve a change to the user interface. These reviews involve both users and IS personnel.

Figure 4.2-2 – Planned System Outages					
System	Planned Outages				
Mainframe Business Systems, (Level	Twice a Month				
III)					
Plant Process Control, (Level II)	Every Third Week				
Production Line Control, (Level I)	Every Third Week				

4.2a(3) - PRO-TEC ensures that its organizational knowledge systems are available in the event of an emergency by doing regularly scheduled backups and by preparing and testing disaster recovery plans, by using systems protection such as firewalls and anti-virus software, by architecturally segregating business/office networked systems from plant production networked systems, and electrically by using uninterruptible power source (UPS). Additionally, our computer rooms are protected from fire using FM-200 fire suppression systems which extinguish fire without causing collateral damage to electronic equipment. Finally, all data, operating systems, configurations, and software programs are stored on magnetic media both on-site and at an off-site facility to prevent data and intellectual asset loss in the event of a catastrophe.

4.2a(4) – The PRO-TEC IS group monitors technology changes through trade journals and training seminars, as well as using the USS-IS resources. The IS group's annual planning and strategy meeting provides the method for reviewing technology and discussing future direction. The IS group utilizes the Six Disciplines 100-point tool to provide a methodology for decision-making and rankings of projects. In addition, the IS group meets monthly to discuss status of current projects, new projects, new technology, and the direction that PRO-TEC is taking with respect to both hardware and software systems to make decisions or take action.

4.2b Data, Information, and Knowledge Management

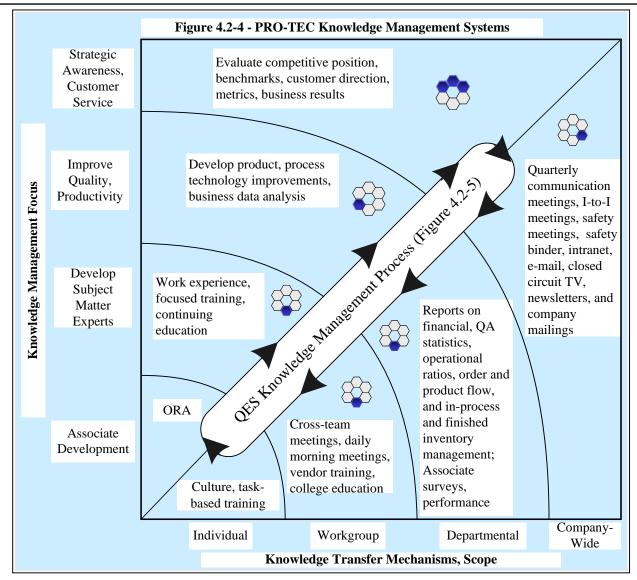
<u>4.2b(1)</u> – Figure 4.2-3 shows a table which describes how PRO-TEC ensures the accuracy, integrity, reliability, timeliness, security, and confidentiality of our data, information, and organizational knowledge. For the purposes of this table, "Data" are considered raw data from either production data collection systems or business systems. "Information" is what is being sent to databases. "Organizational Knowledge" is information that has been evaluated by the criteria of Figure 4.2-5, "QES Knowledge Management Process."

Figure 4.2-3 - Data Quality Matrix					
	Data	Information	Organizational Knowledge		
Accuracy	Audit, 2nd method of verification	Process experts evaluate	QES audits/review		
Integrity	Computer Systems protocols	Evaluation actual vs. expected results-range checking	Computer Systems protocols		
Reliability	Redundancy on critical systems	Disaster recovery plans, backups, uninterruptible power supplies, generators	Same as "Information"		
Timeliness	Real-time processing on most data	Real-time processing, batch processing	Scheduled updates		
Security	Login ID, password	Login ID, password	Login ID, password		
Confiden- tiality	Application access rights	Application access rights	All Associates have access		

<u>4.2b(2)</u> – Figure 4.2-4 illustrates both our knowledge management focus as well as knowledge transfer mechanisms within the organization. Central to Figure 4.2-4 is the QES process (Figure 4.2-5) for data management. These processes allow for rapid identification, sharing, and implementation of best practices.

Transfer of relevant knowledge to and from outside suppliers and customers is handled through reports that

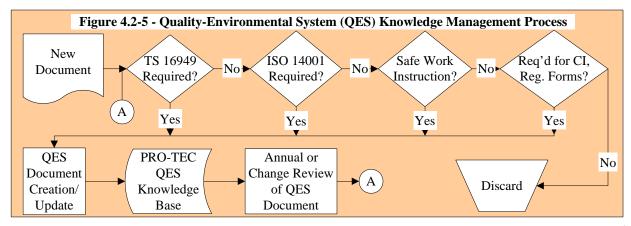




PRO-TEC generates and sends to the outside, as well as reports from the outside that we receive daily. In addition, there are scheduled meetings where information is transferred.

The assembly and transfer of relevant knowledge starts with each department compiling required monthly metric data

and presenting it at our monthly review of "Run-the Business" metrics (Figures 2.2-1 and 4.1-1). This information, as well as other outside knowledge on the business, is assembled and used in meetings outlined in Figure 2.2-1 , which are all related to the strategic planning process.





5.1 Workforce Engagement

5.1a Workforce Enrichment

<u>5.1a(1)</u> – The PRO-TEC Culture Process (Figure 5.1-1) ensures our Associates will succeed. Associates perform meaningful work with ORA. Our culture was created based on industry experience and best practices.

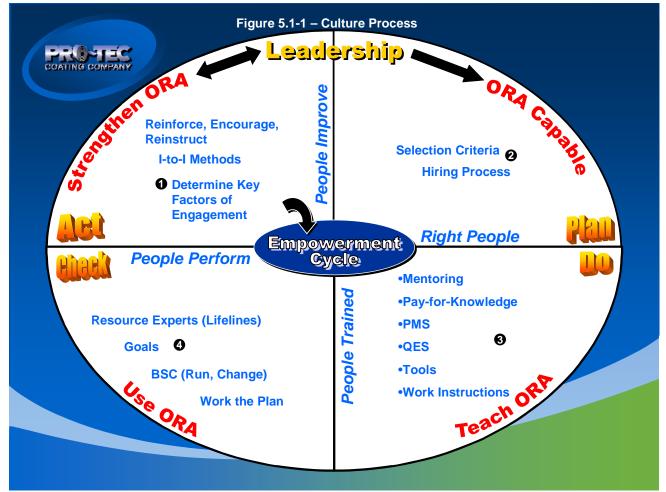
Our Associate survey process validates this culture internally. We closely monitor our Associate engagement and satisfaction relative to key business results. The Associate satisfaction survey results are reviewed by a group of managers once the results are tabulated. The items are reviewed using a structured process at an off-site, half-day meeting. The same data are then reviewed by an Associate focus group. Action items from both groups are combined, prioritized, and assigned to specific managers or continuous improvement (CI) teams. The results of the survey, the summary of action items that resulted, and the status of the action items are communicated to the Associates during 3rd quarter communication meetings. (see 5.1c(2)).

We determine key factors that engage our workforce (Figure 5.1-11). As mentioned above, the annual Associate survey process is one method. The results of the survey

help us determine what is important to our Associates to keep them engaged and to strengthen our ORA culture. Every year our survey questions are reviewed to ensure we are gathering data that is meaningful. Other indicators that we monitor to determine workforce engagement are safety statistics, leading/lagging safety indicators, our retention rate, and the Associate referral program.

We recognize that there are different engagement factors for the different work groups. The survey data are analyzed with this in mind. It also helps us determine key factors that affect workforce satisfaction (survey results are available on-site). Other methods of determining satisfaction are participation in safety and wellness initiatives, CI teams, personal development, and flexible work schedule options.

5.1a(2) — Workforce engagement starts prior to employment at PRO-TEC. To foster our organizational culture, it starts with our employment process (we establish hiring criteria and screen people against it and hire people that are ORA-capable — Figure 5.1-1 ②). We train people in ORA ③ to give them the right knowledge. Associates start using ORA immediately, and it is strengthened through our continuous improvement process ④ (see Figure P.2-2). These are not stand-alone processes; they are systematically embedded throughout our people processes.

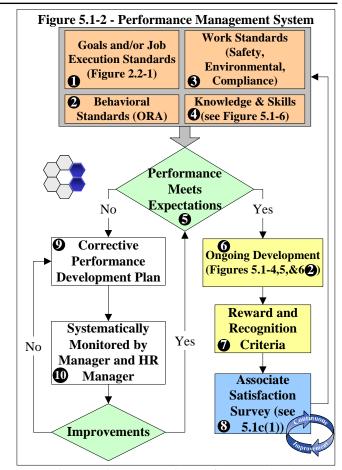




<u>5.1a(3)</u> – Our Performance Management System (PMS) (Figure 5.1-2) supports high performance and workforce engagement for every Associate. Everyone gets an incentive based on organizational performance. To support high performance work, everyone has goals specific to their position, which are linked with the balanced scorecard goals. Goals are reviewed as part of the PMS. High performers have an opportunity for ongoing development and improvement that is discussed during the PMS. PMS aligns individual goals and performance to organizational goals and performance leading to rewards and recognition.

Individually, all Associates receive a written performance evaluation based upon selected measurements and goals. This influences their annual merit increase or salary progression increase. The salary progression system is designed to review performance in three areas to ensure expectations are understood (Figure 5.1-2): job execution standards **1**, behavioral standards **2**, and work standards **3**. Thirty-one non-exempt positions have defined job execution standards for their position, which include specific expectations for that job. Goals are included with specific alignment to balanced scorecard measurables. The behavioral standards are the same for all jobs and include teamwork, communication, problem-solving, leadership (ORA). The work standards include meeting expectations for safety, environmental, and attendance and following our policies and procedures (including QES requirements).

The salary progression system is designed to reward performance that meets expectations (Figure 5.1-3). Expectations are set high, so meeting expectations should not be construed as "just average" performance (Figure 5.1-26). The PMS process also provides the opportunity for discussion; high performing Associates can receive verbal recognition along with better promotional opportunities (Figure 5.1-26). Associates not meeting



expectations receive a corrective performance development plan (Figure 5.1-29). This is typically a three- or six-month development plan with specific measurables. The HR Manager and the appropriate department manager monitor this plan (Figure 5.1-20). Personal development, career development, and training opportunities are discussed as part of the PMS.

Figure 5.1-3 – Supporting High Performance					
Criteria	PRO-TEC	Figure 5.1-1 9	Figure 5.1-1 3	Figure 5.1-1	Figure 5.1-1
Requirements	Approach	Pre-Hire	Post-Hire	Ongoing	Improve
Cooperation,	Team player	Screening, interview	Orientation,	Goals/objectives/	Figure P.2-2
communication,		questions	expectations shared	rewards/	
skill-sharing				recognition	
Information	Effective	Team interview	Orientation of	Utilize	Figure P.2-2
flow/2-way	communication		communication tools,	communication	
			mentor binder	tools	
Individual	Achiever	Background includes	Clear performance goals	PMS,	Figure P.2-2
goals		accomplishment,	and expectations reviewed	promotional	
		education		opportunities	
Innovation	Improve	Experience participating	Encourage ORA,	I-to-I	Figure P.2-2
		in continuous	involvement in continuous		
		improvement	improvement		
Diverse ideas,	Do they listen?	Examples of past team	Encourage ideas (SWOT,	Involved in PAR,	Figure P.2-2
thinking	Respect others?	successes	PAR)	safety	
				opportunities	
End Result		Select ORA-capable	Teach ORA	Use ORA	Strengthen
		people			ORA



	Figure 5.1-4 – Workforce Development and Learning System						
	Workforce Develop.	Plan	Do	Check	Act		
1	Needs and desires for	Training plan	Job-specific and	Performance Mgmt.	Review requests through		
	learning		personal development	System	strategic planning process		
			training				
2	Core competencies, short-	Job Qualification	OJT, OJE, CI teams	Performance Mgmt.	Review BSC monthly – assign		
	term, long-term action	Record	training	System,	action plan, training plan		
	plans			review BSC			
3	Organizational	I-to-I training,	OJT, OJE, CI teams,	I-to-I meetings,	Review organizational		
	performance improvement	mentoring	I-to-I use/teams	HR reviews	performance during strategic		
		training,		summary; perform.	planning process		
				development plan			
4	Workforce development	Performance	Tuition reimbursement	Performance Mgmt.	Performance improvement		
	opportunities (individual	Mgmt. System		System	plans,		
	& team)				training plan		
5	Transfer of knowledge	Job design,	Overlap retirees with	Performance Mgmt.	Review backups and policies		
		policies	replacement, trained	System			
			backups				
6	Reinforcement of new	QES	Training on new work	Performance Mgmt.	Training plan		
	knowledge & skills	train mentors	instructions	System			

A customer focus is systematically emphasized by all customer requirements being fully flowed-down to individual and team goals.

Team performance is recognized formally, with participation in a company profit-sharing plan. All Associates participate on an equal percentage basis (Figure 7.5a1-3). Individual and team achievements are recognized informally in a variety of ways including offsite celebrations with spouses/guests, verbal recognition, special catered meals, recognition in company publications, and helmet stickers. Educational achievements are recognized in the quarterly newsletter, "The Galvanews," and "Galvavision." Safety recognition is defined in a company policy. For every 500,000 m/h without a lost-time accident, everyone in the plant receives some form of incentive/recognition (Figure 5.1-2 2).

The Associate satisfaction survey is designed to collect feedback in all areas of our business (Figure 5.1-28). One area is the PMS. Feedback from the survey is reviewed, and actions are assigned. If changes to the plan are needed, they are implemented during the next annual review process.

5.1b Workforce and Leader Development

<u>5.1b(1)</u> – Our workforce development and learning systems are shown in Figure 5.1-4.

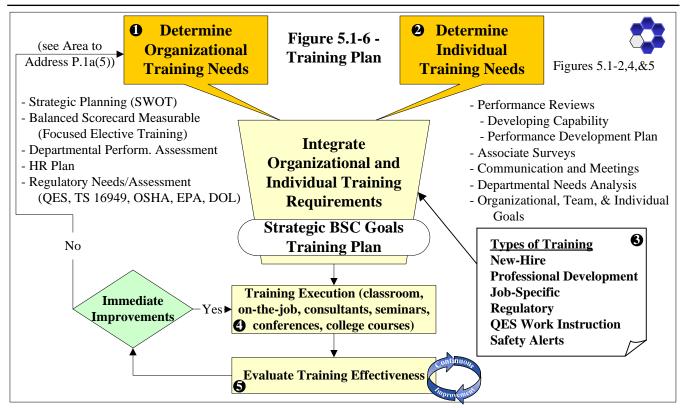
<u>5.1b(2)</u> – Our leader development and learning systems are shown in Figure 5.1-5. The Leadership Team and all exempt-level Associates are trained in using the Six Disciplines model, tools, and use of the software. The Leadership Team holds quarterly meetings to discuss the goals and individual plans using the Six Disciplines process. This helps us to systematically evaluate our status, make course corrections (showing agility), and systematically align and integrate the changes.

Leaders are challenged to improve their leadership abilities. Each leader has personal development goals and attends annual training for leadership, communication, and related topics. This focused elective training is tracked, and results are measured on the balanced scorecard.

<u>5.1b(3)</u> – We systematically evaluate the effectiveness of our workforce and leader development and learning systems through feedback from the Associate survey, the PMS, and evaluation forms following training. Training that requires testing or re-certification uses evaluation as a proof of effectiveness.

	Figure 5.1-5 – Leadership Development					
	Leadership Development	Plan	Do	Check	Act 💛	
1	Personal leadership attributes	Training plan	USS MAP training,	PMS	Professional	
			recognition, Six Disciplines		development training	
2	Development of	Six Disciplines	Six Disciplines	PMS	Strategic planning	
	organizational knowledge		Cross functional meetings		process	
3	Ethical business practices	Ethics statement &	Training/Signature	Track violations	Re-train	
		policy				
4,5,6	Development and learning	See Figure 5.1-4, Rows 2, 3, 4				
	for entire workforce					
6	Other leadership	Tailored to the individual's needs				
	development opportunities					





<u>5.1b(4)</u> – To help ensure effective career progression for the entire workforce, open jobs are posted in a fair and transparent process. Job descriptions are available to describe the skills and education required for the position that is open. Associates are able to use this information to close the gap on their own skill set versus the skill set needed in a particular job.

To help motivate Associates to develop and use their full potential (Figure 5.1-6) and to achieve life-long learning and career advancement, we provide a predictable and clear process on advancement opportunities. PRO-TEC actively supports continuing education with on-site learning opportunities and with the tuition reimbursement program. PRO-TEC even allows Associates working on a 12-hour shift to take a few hours off at the beginning or the end of their shift to attend classes. All tuition costs and books are covered under the reimbursement program. Since 1995, 39 Associates have accomplished an associate, bachelor, or masters degree (see Figure 7.4a2-2).

The team interviewing process is documented, and the HR Manager facilitates all of the final decisions with the teams for fairness and consistency. The team interviewing process has systematically identified from which positions Associates will be selected to participate on specific interview teams (see Vacant Position Notification Procedure on-site). Having the internal process in place creates an environment where Associates can be motivated to succeed.

Succession planning is also completed for eight key management positions. This includes three officers of the

company, which are designated by our two parent organizations under the terms of the joint venture partnership agreement. Both parent organizations have sophisticated succession-planning systems, which are the basis for the three officer selections. Succession-planning for the remaining five management positions takes place with the President, HR Manager, and each department manager. As verification of the effectiveness of this process, four of the five positions have been promoted from within the organization, as well as one of the officers.

5.1c Assessment of Workforce Engagement

<u>5.1c(1)</u> – As mentioned in 5.1a(1), we use the Associate survey to assess workforce engagement and satisfaction. We are able to review the data by workforce groups and track year-to-year results by question. This includes performing a regression analysis to systematically understand which factors drive Associate engagement, satisfaction, and loyalty. This analysis is segmented by our Associate segments. By identifying needs in different work groups, we have been able to make improvements. For example, we have a reduced-hours policy specific to the day shift schedule and shift-trade days specific to the shift schedule, which has increased satisfaction and engagement by Associates.

Other leading indicators to assess workforce engagement are our high retention rate, low absenteeism, our dedication to safety, low recordable incident rate, extremely low lost work time rate, Associate referral program, and recordbreaking production goals year after year. All of this is



possible through an engaged workforce that demonstrates ORA

<u>5.1c(2)</u> – The process we use to identify opportunities for improvement in both workforce engagement and business results is our annual Associate satisfaction survey process. Actions that are a result of the survey and the quantitative analysis are discussed during the quarterly/annual strategic planning process. The questions cover all areas of our business such as safety, communication, and support to do a job. The survey is segmented into groups by shift, line, days, departments, exempt status, and then years of service to define where the concerns are concentrated. Further segmentation in our small business typically would not ensure confidentiality of every Associate. The information is measured against the previous year's results as well as benchmarking questions against Baldrige surveys.

Another strong indicator is PRO-TEC's position as a premier employer in the geographical area. When openings occur, word-of-mouth alone generates many unsolicited resumes from people already employed by other companies who are from friends of Associates. When asked why they are seeking work at PRO-TEC, the most common response is that PRO-TEC Associates recommended the company.

Other assessments also include review of safety incidents, both injury and non-injury, which drives continuous improvement and remedial safety training. Reasons for turnover are evaluated, and needs and opportunities to strengthen programs are identified.

5.2 Workforce Environment

5.2a Workforce Capability and Capacity

5.2a(1) – We assess our workforce capability needs differently in the office versus the plant. In the office, many departments are staffed based on "workload versus people." Staffing in the office increases during the summer to help with projects related to college students' fields of study. This is a win-win situation for both parties. In the plant it is staffed based on the "location of activities on the line versus people." The strategic objective is to staff one more person on each of the four teams in the plant to allow for cross-training, special project work, continuous improvement team involvement, and vacation coverage. Absenteeism is so low that it does not drive staffing levels.

The process for reviewing workforce capacity is as follows. When a position becomes vacant, the department manager and the HR Manager review it to determine if the position should be replaced, changed, or even eliminated. New positions are reviewed to create a job description specifying skills, knowledge, and competencies for the job. Positions are posted (with few exceptions), and a job description is available for review. (Please refer to the QES document on our hiring process available on-site.)

<u>5.2a(2)</u> – PRO-TEC recruits in the local area for entry-level positions. Several layers of screening narrow down the pool of applicants to those that meet our hiring needs. With few exceptions, most Associates are hired in as a Warehouse Operator and work their way up to other positions. We are fortunate to have a very skilled and educated workforce that enables us to successfully promote from within for most skilled positions. In the last five years we have promoted 44 people from within. This includes advancement of levels within their current job based on knowledge, skills, and abilities. In this same time period, there have only been 7 external hires (all exempt positions), other than entry-level positions (Figure 7.4a2-1).

In our hiring processes - Internal, External, Consultants, and Students (available on-site), we recruit and employ people from the communities from which our workforce lives. We also have Associates in our workforce from both of the parent organizations, USS and KOBE. Our production systems are greatly influenced by our Japanese parent company and the Associates sent by KOBE. They provide expertise in the functional areas of the business from metallurgist to accountants. Thus, our work systems capitalize on diverse ideas, cultures, and Associate thinking through our many work teams.

To sustain our diverse culture, we look first for people with the desired requisites, technical skills, knowledge, and formal education. With the exception of an outreach to individuals with learning disabilities, the minimum education required is a high school diploma. Preferred candidates for operator and skilled positions have at least a two-year associate degree in a technical area (Figure 5.1-1).

The PRO-TEC Leadership Team was trained on the criticality of diversity among themselves and learning the different personality styles and how they compare to the other leaders. The diverse personalities balance the Leadership Team and the decisions made during the strategic planning processes.

We believe post-secondary educational attainment is a valuable indicator of probable success at PRO-TEC. We believe it demonstrates the self-initiative, commitment, and follow-through necessary to achieve personal goals. The peer interview teams identify applicants with positive self-image and work attitudes, good verbal and written communication skills, and the ability to demonstrate interpersonal skills and attitudes consistent with requirements of a team environment. Currently, 52% of our Associates have obtained one or more college degrees.

All indicators suggest we are an employer of choice; therefore, recruiting, hiring, and retaining Associates have been successful. Over the first ten years, including our initial startup period, turnover has been very low. This is a good position to be in because it allows management to analyze the process and really define what type of



candidates work the best in PRO-TEC's culture. Prior to recruiting, Human Resources and department representatives analyze the past hires and terminations. This allows for a change in hiring questions to receive more detailed answers on criteria such as work habits, attendance, and values. This adds value to the decision-making process for the next group of new-hires.

<u>5.2a(3)</u> – We organize our workforce to accomplish our business needs (Figure P.1-1) and support our key work processes. The work processes are documented in detailed QES work instructions, job descriptions, and job-specific performance appraisals. Management has been trained to use the Six Disciplines approach. Administrative and shift Associates review goals and expectations in an annual performance appraisal (Figure 5.1-2).

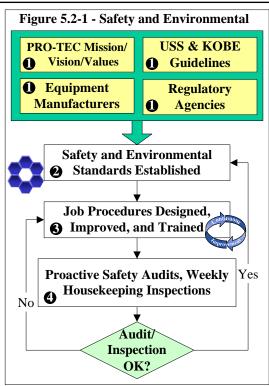
Once the standards are outlined in the Quality and Environmental System (QES), on-the-job-training (OJT) is used to help the Associate understand the expectations. In order to match knowledge, skills, and abilities to the job, the job description is used during the hiring process. Through the PMS, we encourage Associates to perform to their knowledge and comfort level. How we systematically link core competencies, customer focus, business focus, strategic challenges, actions, and agility are discussed in Area to Address 5.1a(3).

<u>5.2a(4)</u> — The minimum lead-time on making changes to operations to drastically impact staffing is 4 to 6 months. This time can be used to plan and develop training. The capacity is a fixed number determined by the change being made. Again, there would be sufficient lead-time to increase staffing if necessary.

The capability of our workforce is a strength, and if PRO-TEC ever needs to reduce the workforce capacity, the cross training that is embedded into many of the positions will allow the workforce to transition to a different capacity. However, PRO-TEC has never had a layoff and is currently at 100% capacity with additional orders waiting. Most of the positions in the plant have a primary backup, and some have a secondary backup.

5.2b Workforce Climate

<u>5.2b(1)</u> The workplace was designed with safety, environmental conditions, health, and security in mind. Goals and performance measures in these areas are reviewed during designated meetings. For example, the balanced scorecard, which is reviewed at the monthly plant management meeting, includes metrics for safety (incident frequency) and health (participation in HRA). The safety leading/lagging indicators report is reviewed on Mondays during the Monday-Wednesday-Friday morning meeting. This includes metrics on completion of housekeeping and quarterly safety audit items, mobile equipment inspections, and the weekly safety binder sign-off. This information is



also posted on the intranet. The security of the plant including emergency evacuation procedures is outlined in the comprehensive Integrated Contingency Plan (ICP). The ICP is under document control and is reviewed on a regular basis. Training on the ICP is completed annually.

Figure 5.2-1, outlines the process we use to maintain the integrity of our Safety and Environmental standards. There are four main contributors to the standards. All four contributors have a vested interest in PRO-TEC and its Associates and provide guidance and expertise 1. This support gives credibility to our standards. Standards are reviewed and created through our safety committee, Safety Engineer, Environmental Engineer, and Leadership Team. Since startup, Associates in each category of our workforce (shift, days, exempt) participate in an ongoing joint safety committee. The committee establishes cardinal and basic safety rules and procedures, work procedures, personal protective equipment requirements, and emergency response equipment selection and safety training. safety committee addresses numerous PARs and CARs linked directly to our ISO 9001:2000, TS 16949:2002, ISO 14001:2004, EPA NEPT, and OSHA VPP2.

Performance measures on safety, environmental, and Associate wellness are also tracked as part of our annual reporting to OSHA as part of the VPP Star Site recognition and as a member of the U.S. EPA NEPT. Goals are reviewed annually. Members of these organizations are leading the industry with their health, safety, and environmental management practices.

Safety statistics are reviewed at monthly meetings and quarterly communication meetings. Incidents/accidents are



reviewed at all monthly and weekly safety meetings. Our processes for tracking our quarterly safety audits and housekeeping on the intranet have been instrumental in our continuous improvement efforts. Audit and inspection results are reviewed weekly for completion. When opportunities for improvement arise, job procedures are reviewed and improvements are made if necessary.

Job procedures are impacted in several ways. Safety leaders meet off-site once a year to brainstorm what is working and what can be improved. Job procedures are reviewed after incidents or near misses. Improvements or changes are made when current practices fail. QES work instructions are reviewed annually, or more frequently if incidents occur, to keep procedures current.

Proactive safety audits, including feedback from OSHA VPP, USS and KOBE, along with housekeeping inspections and weekly safety conversations help PRO-TEC maintain the high standards in safety that have become part of our culture. Results are reviewed with all parties who have a stake in them; action items are taken and then reviewed to see if they are effective on Mondays at the Monday-Wednesday-Friday morning meetings.

In 2004, we completed an in-depth application followed by an on-site audit from OSHA. We received feedback on our performance and were recognized with a VPP Star Site award in December 2004.

To ensure business continuity for our Associates and customers, PRO-TEC has a documented ICP. The intent of the ICP is to provide PRO-TEC with comprehensive procedures to prepare for and respond to emergencies such as fires, explosions, natural disasters, and the release of hazardous materials that present threats to human health, the environment, and our business. For example, the "Evacuation and Shelter-in-Place" QES documents were revised and tested through an evacuation walk-through on each team and for day Associates in 2005. Improvements were made, and all Associates were trained on the changes.

The hierarchy of priorities for the implementation of our ICP is 1) to preserve human life and the safety of Associates, responders, and the public, 2) to minimize the environmental impact, and 3) to minimize property damage and disruption of operations. Our senior leaders support this approach by providing the necessary resources. In addition, all of our Leadership Team and leaders that have involvement in the ICP have been trained on incident command and are re-trained annually (Figure 5.1-68).

<u>5.2b(2)</u> – The PRO-TEC culture by design provides a safe and supportive work environment for our workforce. We are able to diversify the benefits depending on the needs of the individual job. For example, flexibility of work hours on days is different than on shift. There are different policies depending on the needs of the specific jobs. The

safety training and communication are also diverse depending on job. Associates on shift receive more training and have a greater frequency of meetings and team huddles based on the hazards in their jobs. Many factors are used to determine whether benefit changes are needed, including the Associate survey and external wage and benefits data.

Our safety and environmental management programs are benchmarks in our industry, by not only meeting standards, but also exceeding standards and expectations of our industry. This is only possible in an environment where processes involve input from all Associates and provide a clear path to make improvements. Our safety conversation program, implemented in 2006, is one example of this in action. This program is an informal but structured process in which Associates, at all levels, regularly visit work areas and discuss the safety of the job or task. The framework for this conversation helps people resolve safety issues and concerns, recognize and acknowledge safe work practices, and gain Associate commitment to correct unsafe practices in a non-threatening, collaborative manner.

All Associates are salaried. This is unheard of in either the steel or the automotive industries. PRO-TEC provides one of the most generous compensation packages in our geographic region. A formal assessment is analyzed each year to measure and understand pay and benefit trends geographically as well as industry-wide. Our compensation strategy is to lead our geographic area and maintain an above-average position within the steel industry, even though our cost of living is lower than many steel industry locations. This reflects the value placed on attracting and retaining a highly educated, motivated workforce.

In 2004, the compensation program was reviewed and changed to a salary progression system for the shift and day Associates. Opportunities were brought up in the Associate satisfaction survey and reviewed with the help of a consultant. Improvements were implemented January 1, 2005.

The cafeteria-style benefits package allows the workforce diversity depending on individual needs of all Associates and their families. The design of our 401K plan will allow each Associate to have the opportunity to retire with significant cash assets. All Associates also participate in a profit-sharing plan that has averaged a pay-out of approximately XX% of annual base pay (Figure 7.5a1-3). Additionally, there is a long list of other miscellaneous perks. There is no difference between management and non-management Associates in terms of eligibility or participation. All are treated equally.



6.1 Work Systems Design

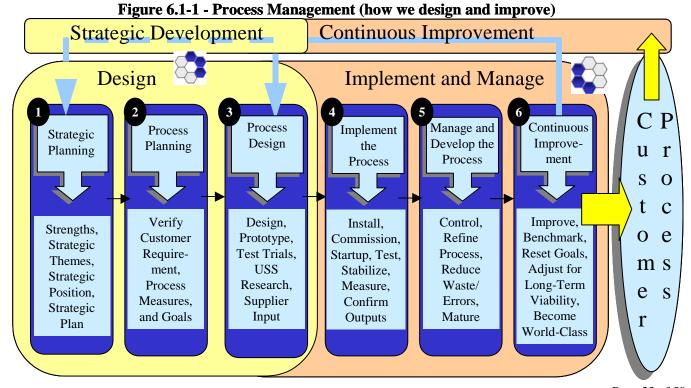
6.1a Core Competencies

<u>6.1a(1)</u> – PRO-TEC has an annual planning cycle that is outlined in Figure 2.1-1 (Strategic Planning Process and Timeline). A strategic position statement has been systematically defined during this process. Utilizing the Six Disciplines methodology, the Leadership Team reaffirms the strengths and weaknesses of the organization and how they relate to the target customer and the product offerings of the business. The "Strategic Themes" (strategic advantages from P.2b) are listed in 2.1a(1).

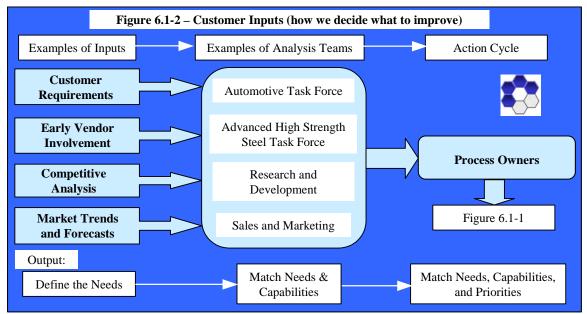
This list is further refined to establish a strategic position PRO-TEC's strategic statement (core competency). position as an "Innovation Leader in Coated Steel" is what sets the company apart from others in our industry. *Mission:* At the core of these themes are people, processes, and advanced products. PRO-TEC encourages and capitalizes on the innovativeness, knowledge, and flexibility of USS and KOBE (Figure 3.1-1), but our greatest advantage is the capabilities and dedication of our Associates. PRO-TEC Associates work in self-directed work teams, practice ORA, and utilize I-to-I continuous improvement teams to improve processes and products. Competitive Environment: In addition, PRO-TEC along with its parent companies are market leaders in the supply of advanced high strength steels (AHSS) in the industry. This leadership in the market has given the joint venture a favorable position with its customers and a competitive advantage in the industry. During the annual planning cycle, a business plan is developed which includes clearly defined financial goals and objectives. The business plan also includes a detailed list of capital projects and other significant expenditures to support the strategic position. Action Plans: These defined projects support improvements for processing new products including AHSS, quality improvements, and system improvements along with productivity and reliability improvements. Other action items from the strategic planning process include goals and objectives as outlined in the balanced scorecard. A list of corporate goals is compiled during the annual strategic planning process. These goals are disseminated to the Leadership Team where action items are included in their individual plans (IP) to support and accomplish these goals. Further action items may be developed and included in additional staff IPs to further support these goals.

<u>6.1a(2)</u> - PRO-TEC was designed from the ground up for a single purpose. The way the joint venture was legally established (Figure P.1-1) also established the key work systems and the responsibility for each of those systems. This included what systems would be managed by PRO-TEC, USS, and KOBE. Innovation in these systems has been driven by the listening and learning posts (Figure 3.1-2) as they integrated into the customer and market knowledge system (Figure 3.1-1).

The work systems (and lower-level processes) which are legally under PRO-TEC's control have been systematically evaluated for their contribution to the PRO-TEC core competency. If they are not critical, they have been a candidate for using external resources. The candidates are evaluated against economical benefit. If the level of performance can be maintained and there is economic benefit, then they are outsourced (i.e., janitorial services).







6.1b Work Process Design

6.1b(1) – The key work processes are shown in the joint venture (JV) model in (Figure P.1-1). The JV agreement defined the business arrangement with respect to sales, marketing, substrate supply, and technical and research support along with computer systems and logistics support for the new business. The "work processes" were defined by a technical team that was assembled to define, build, and start up the new business. This technical team consisted of representatives from both of the parent companies. The business currently has an annual strategic planning process (Figure 2.1-1). During this process, a SWOT analysis along with an environmental scan is completed. The information generated from this process is fundamental in the strategy development and in setting objectives for the business. These objectives are inputs to establishing a deployment plan and setting individual departmental objectives. Work systems are either established or refined to support the strategic plan and to achieve the stated objectives. Potentially large or significant changes or additions to our work systems are weighted against the joint venture model where smaller, less significant changes are integrated into or added to the existing work processes. Work processes are internal if they are currently part of the original joint venture model, are required to be completed internally to support the business objectives, and can be supported by PRO-TEC's mission, vision, and strategic position. The business objectives are inputs into the process management process (Figure 6.1-10). The Leadership Team establishes the direction that the business will pursue. Information is obtained by collaboration with several entities (Figure 6.1-2) throughout the organization and the parent companies. These entities are driven by facts, data, market analysis, market trends, and customer feedback through a variety of sources. This information drives the annual strategy and the deployment plans. The strategy is typically in the form of what market will be pursued or products that will be developed for the market that the business is serving. This direction or strategy is translated into a tactical plan during the process management cycle.

The JV agreement and the leadership system have established that the core business is galvanizing steel that meets or exceeds customers' expectations. The work processes are fundamental to the business and support our mission, vision, and strategy statements. By capitalizing on our core competency and innovativeness of our Associates, we are able to perform these internal work processes with quality, accuracy, and efficiency while supporting the overall strategy of being an innovation leader in supplying coated steel to the customer. The work processes and their measurements are outlined in Figure 6.1-3.

Functions and processes that fall outside of these key work processes are external processes that are provided by parent organizations or contractors depending on the JV agreement and strategy deployment.

<u>6.1b(2)</u> – The planning phase of process management utilizes the data and information collected from the market, customers, and competitors (Figure 6.1-12). PRO-TEC and its parent companies are closely engaged with customers through programs such as Early Vendor Involvement, Automotive Task Force, and the Automotive Technical Center for the development of new products (Figure 6.1-2). To support new product launches, the translated product requirements are to process requirements. Combining the customer and product requirements along with knowledge and technical experience gained from equipment suppliers, raw material suppliers, and engineering and technical resources from the parent company organizations, the necessary resources are summarized in a requirements document.

<u>6.1b(3)</u> – Requirements documents are utilized when purchasing new equipment or implementing a new process (Figure 6.1-1 ③). The requirements documents are used as a



			Figure 6.1-3	- Key Work Proc	eesses		
				Measure /	Cost Minimization	Improvement	
	Process	Requirements	Implementation	Indicator	(Inspection & Test)	Activities	Results
	6.1b(1)	6.1b(2)	6.1b(3)	6.2a(1)	6.2a(2)	6.2b	Figures
		Steel Design	Manufacturing Order	Order Review Days	Inspection & Test	Monitor Reports / Effectiveness	7.1a1-8
sesses	Order Review	Substrate Ordering	Business Planning Specialists	Substrate Ordered in Correct Week	Substrate Inventory Optimized for Coating Cycles	Develop Reports, Monitor Mill Delivery Perf.	AOS
Proc		Scheduling	CGL Schedules	Leader Strip	Schedule Audit	Monitor Reports / Effectiveness	AOS
Key Work Processes	Continuous Galvanizing		Maintenance	Operation Ratio	Planning / Scheduling	Continuous Improvement Processes	7.5a2-2
Y	Line	Productivity	Operations	Effective Ratio	Real-Time Process Control	Process / Procedure Review	7.5a2-3
		Material Available to Ship	Packaging	Finishing Process Analysis	Reduce Repackaging	I-to-I Process	7.1a1-9
	Finishing	Processed Products	Processor Audit	Processor Claims	Competitive Bidding	Processor Meetings	AOS
		SST/IST	SST / IST Lines	Days to Process	Optimize Coil Flow	I-to-I Process	AOS
		Shipping Bulletin Creation	Customer Inventory Quantities	Rail vs. Truck	Shipping Efficiency	Load Optimization	AOS
		EDI Communications	Facility Audit	EDI Error Rate	System Audits	Corrective Actions	AOS
ses	Customer Service	Claim Management	CTS, Sales, APEX (Figure 3.2-4) Meetings	Claim \$/Ton, Diversions, Claim Performance	Automated Inspection, Risk Management	I-to-I Process, USS/CTS Meetings, Substrate Supplier Meetings, Facility Yields	7.2a1-6 7.2a1-5
ernal Support Processes		Technically Advanced Products	Technical Management Committee	Product Capabilities and Time to Market	Accurate Technical and Market Information	Communication	AOS
oddn		Finished Inventory	Safety Stock	% at Desired Inventory	Correct Inventory Level	Yield Comp., Subs. Order Cycles	7.1a1-10 7.1a1-11
rnal S	Chain Mgmt.	Line Position	Loading by Sales Office	Days Ahead / Carryover	Maximize Line Production	Sales Meetings	AOS
Inte		Solvency Ratio	Working Capital Availability	Debt-to-Equity Ratio	Weekly Cash Management Review	Weekly Review & Communication	7.3a1-3
	Financial	Purchasing	Competitive Bidding Process	Purchased Products & Service Spending \$/Ton	Ongoing Review &	Monthly Plant Management Mtg.	7.5a1-5
		Information Systems Reliability	Preventative Mtce., Disaster Recovery Plans	Information Systems Uptime Data	Associate, Business Productivity	Hardware, Software Upgrades	7.5a1-4

AOS = Available On-Site

baseline for the design stages of a process. These requirements outline the process and equipment requirements to meet the end customer needs. These requirements also describe items such as capacities, speeds, cycle times, performance requirements, control and accuracy requirements, and reliability requirements for the process and equipment. The capacities and productivity of the process are crucial to reducing cycle times and minimizing costs. Efforts are stressed to eliminate non-value-added steps and minimize introducing additional

consumables into the process to reduce costs. Functional specifications along with engineering drawings, prototype testing, and trials may be completed to confirm design parameters. Current processes and equipment are constantly being monitored for their reliability, maintainability, and capability to meet the process requirements. New technology is constantly being considered, added, or updated into the process to enhance productivity, reliability, or to reduce costs. New technology information is obtained from trade shows and



organizations, parent companies, suppliers, customers, and competitive analysis. The latest technology is incorporated where feasible to ensure the maximum life cycle along with industry-leading quality, reliability, and productivity. Control plans, process FMEAs, and work instructions are generated and maintained to provide a consistent method for operating and troubleshooting a process.

6.1c Emergency Readiness

<u>6.1c</u> – PRO-TEC's emergency preparedness begins by understanding and implementing regulatory agencies' requirements and industry standards for protecting our Associates, our equipment, and our facility. We build upon these basic requirements through utilizing "Best Management Practices and Plans" that manage and provide "checks and balances" for our emergency management system. An Integrated Contingency Plan has been developed to address many situations in the unlikely event that some form of disaster or emergency is encountered. The ICP defines responsible individuals and their roles and the procedures for responding to various situations. Specific situations that are included are:

- Evacuation and In-place Sheltering,
- Natural Disasters,
- Fire / Explosion,
- Medical Emergencies,
- Hazardous Material Releases and Spills,
- Workplace Violence, and
- Loss of Fire Protection Systems.

Hazard prevention, countermeasures, and containment systems are designed into the equipment and processes. Training and conducting practice drills are fundamental in preventing, detecting, containment, and response to an emergency. Evacuation and in-place sheltering drawings are posted throughout the facility. Monitors and alarms are installed throughout the facility for prompt detection and recognition of emergency incidents. Systems are periodically inspected and tested to ensure their functionality. PRO-TEC has a staff of trained Emergency Medical Technicians on-site to initiate emergency response to our Associates. Furthermore, we participate with local government agencies including the Putnam County

Emergency Planning Commission along with emergency medical responders in planning and coordinating emergency events affecting our facility (Figure 7.5a1-7). PRO-TEC stocks numerous critical spare parts to ensure reliable operations and efficient recovery in the event of a failure. Preventive and predictive maintenance programs ensure continuous and reliable operation of our equipment. A disaster recovery plan is in place to ensure information systems reliability and recovery (Figure 6.1-4).

The customer is protected by balancing requirements throughout several facilities within the parent organizations by utilizing the Supply Chain Management (SCM) and Order Process Excellence (OPEX) systems. In addition, due to our joint venture status and integration into our parent companies' global strategy, we enjoy a global infrastructure of assets and resources to assist us in the event of a full-scale disaster at our facility. As is the case in all full-scale disasters, the customer is impacted although the extent of the impact can be severely limited due to these embedded benefits within our structure. Insurance coverage also plays a key role in our emergency preparedness plan. Not only do these policies provide for financial resources in the event of a disaster, they often require semi-annual or annual independent compliance audits or reviews, which provide insight into best practice prevention measures, impact minimization controls, and other specific opportunities to help improve our overall preparation for such an event. General liability including auto, property, business interruption, and employment practices liability are all forms of insurance that are used to safeguard our facility (Figure 6.1-4.)

6.2 Work Process Management & Improvement

6.2a Work Process Management

<u>6.2a(1)</u> – The design phase of process management defines the process requirements along with inputs and outputs of the process. Proper implementation, installation, and startup rely on an accurate definition of the process. Key process measurements and indicators are constantly measured and adjusted to ensure they meet process and design requirements along with minimizing overall

	\mathcal{C}	Figure	6.1-4 - Emer	gency Prepai	redness and	Contingencies					
		Sustainability Factors									
		Financial	Systems	Associates	Facilities		Legal &				
		Resources	& Data	& Skills	& Equip.	Environmental	Ethical	Customers			
¥	Involvement	VP Finance	Info. Sys.	HR	Oper.	Env. Eng.	President	Bus. Plng.			
Risk	involvement	Category 1	Category 4	Category 5	Cat. 1&6	Category 1	Category 1	Category 3			
of F	Health & Safety			EPI	ICP	ICP	EPI				
Nature o	Environmental	GLI		EPI	ICP	ICP	BII				
Nat	Plant, Property, & Equipment	GLI/PI	DRP	EPI	ICP/PI		BII	OPEX & SCM			

BII = Business Interruption Ins.

DRP = Disaster Recovery Plan EPI = Employment Practices Ins. GLI = General Liability Ins.

ICP = Integrated Contingency Plan OPEX = Order Process Excellence PI = Property Insurance

SCM = Supply Chain Management



variability (Figure 6.1-14). Performance measures and results are compared to performance goals and tracked to ensure that they meet the process requirements. Numerous types of monitoring including automation, line sensors, programmable logic controllers, and automated data collection are utilized to maintain and collect key work process data. All measurement devices including load cells, thermocouples, transducers, and others are calibrated on a defined schedule. Statistical techniques including control charts, capability studies, and pivot tables are then used on the collected data to ensure performance guarantees and quick response to reduce process variability. Statistical practices are used to drive process control in addition to process enhancements and improvements (Figure 7.5a2-7). Customers receive certified test results of product properties after material is shipped. Material suppliers also provide PRO-TEC with certificates of compliance to ensure and provide proof that their material meets all of the necessary performance and quality requirements (see Figure 4.2-3). Day-to-day opportunities use in-process measures to ensure the processes meet process requirements. The key performance measures and indicators are shown in Figure 6.1-3 for end-of-process (measure/indicator) and in-process (cost minimization [inspection and test]).

6.2a(2) - To minimize overall costs associated with inspections, tests, and process performance audits, we ensure that our processes remain in control (Figure 6.1-16). The in-process measures are shown in Figure 6.1-3). PRO-TEC is "process-driven" and uses this approach to ensure that products and outcomes are consistent and repeatable. Processes and certifications include Quality and Environmental System (QES), ISO/TS 16949, ISO 9001, Voluntary Protection Program (VPP), Environmental Performance Track, Ohio Award for Excellence, Malcolm Baldrige National Quality Award, and others. PRO-TEC utilizes feedback from these professional entities to refine and improve its processes. Process automation utilizes the best technology in the industry to control and monitor over 400 process variables on a continuous basis. These process variables are controlled to specified set-points to guarantee that the process and product meet the order and customer requirements. Operators constantly monitor the equipment and perform equipment audits and reviews to prevent out-ofspecification products.

Preventative measures are an essential part of each process. There are checks and balances to ensure that the processes are operated and maintained within defined parameters to optimize the process and product. Associates perform tasks using "best practices" as outlined in "work instructions" to reduce the potential for defects or errors. In the event that an out-of-specification condition is discovered or a customer issue is raised, the first order of business is containment of any questionable product and then to establish an interim corrective action. These first response

activities ensure that any exposure is minimized and that any additional defective material in the supply chain is prevented from reaching the customer. PRO-TEC relies on supplier inspections and certified test analysis for incoming raw materials such as steel, zinc, process oils, and other chemicals. A key commodities list is maintained of which nearly all of the suppliers of these materials are certified to ISO.

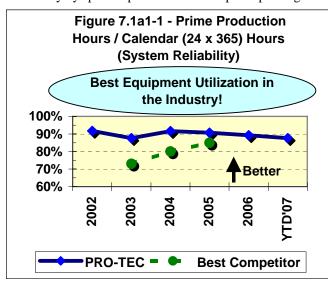
6.2b Work Process Improvement

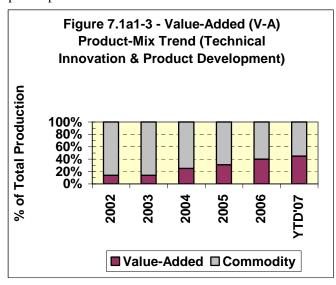
6.2b - Customer input and feedback are obtained through a variety of sources including parent company organizations along with direct customer contacts to provide valuable input into the change mechanisms (Figure 6.1-16). The main mechanism for change at PRO-TEC utilizes the improvement approaches shown in Figure P.2-2. Process improvements can be initiated at the Associate level through ORA and procedure changes, technical issues by engineering changes, team-based by the I-to-I process, and strategic changes through the business plan and capital budgeting. An I-to-I process can be initiated by anything that prompts an opportunity. For example, PRO-TEC utilizes a planned maintenance program including preventative and predictive maintenance to enhance equipment accuracy and reliability. Leadership processes continuously monitor, audit, and provide suggestions for process improvements and recommendations for best practices. PRO-TEC takes a proactive approach to meeting the needs and demands of its customers. Partnering with suppliers and customers to develop processes and products to meet these demands is a practice that establishes PRO-TEC as a market leader. The innovative tendencies of our Associates and company enable us to be leaders in the marketplace. PRO-TEC has demonstrated its ability to innovate with chemical suppliers and equipment manufacturers to provide the first in-line phosphate products in America.

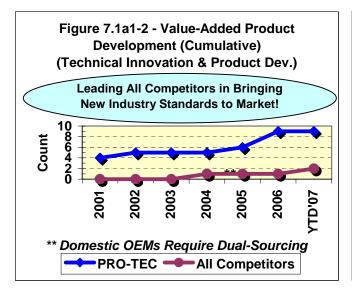
As a company, many Associates are integral parts of trade organizations and governing bodies where decisions for the industry are made. Best practices are shared throughout the company to establish a uniform product, reduce variability, and eliminate errors and cost avoidance through standardization of equipment and practices. "Operations Leadership Meeting" assembles six times a year where the team leaders from each shift and each line share opportunities, best practices, and current issues. Project Engineers, Managers, Technicians, and Associates in all positions cross facility boundaries by design to provide economies of scale and a transfer of knowledge and skills throughout the organization. PRO-TEC Associates participate in technology transfer meetings with both parent companies. The parent companies of PRO-TEC also have established agreements for sharing best practices from product development to equipment and process design.

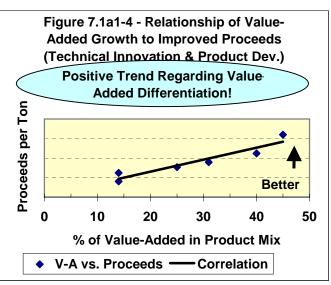


7.1 - Product & Service Outcomes - Note: The common format for all results is our Key Success Factor linkage displayed in parentheses just below the chart or table title. Figure 7.1a1-1 - "Prime Productions Hours / Calendar (24 x 365) Hours" illustrates the effectiveness of continual activities to address the Strategic Operational Challenge of: "Sustain world-class reliability in a time of constrained operation." Figures 7.1a1-2, -3, -4, and -5 relate to the Key Customer (Automotive Segment) Requirement of <u>Product Development</u> and correspond to our Strategic Position (core competency) as the "Innovation Leader in Coated Steel." This first-to-market strategy of advanced high strength steel (AHSS) has provided us with a sustainable competitive advantage over our competition. Figure 7.1a1-6 - "Internal Diversion Approach to Ensure Appropriate Customer Performance" relates to the Key Customer Requirement of Product Quality and shows the effectiveness of continual internal diversion activity to isolate the customer from product/process variability. With the cooperative technical development and continual application of best practices, at all points along our supply chain, we are consistently achieving customer quality expectations of less than 0.12% or 1,200 parts per million (ppm). At this level of quality performance, we are well into the range of diminishing (or no perceived) benefit on prevention of defect activity; hence our final approach for finished product is the inspection and internal diversion of nonconforming product. Figure 7.1a1-7 - "Impact of Value-Added Product on Fleet Life-Cycle Fuel Savings" illustrates the social responsibility / economic benefit that the avoidance of additional weight relative to traditional materials (to achieve the improved vehicle energy absorption and crash-impact resistance) has on relative fuel economy over the service life for these innovative first-to-market vehicles in their first model year! Figures 7.1a1-8 and -9 relate to the Key Customer Requirement of Service and our metrics associated to our key work processes of Order Review and Finishing. Figures 7.1a1-10 and -11 relate to the Key Customer Requirement of On-Time Delivery, and these supply chain metrics are managed to support order-fulfillment lead-time cycles of ten or more weeks and provide either an available finished inventory by specific part number or ship complete against a specific purchase order.

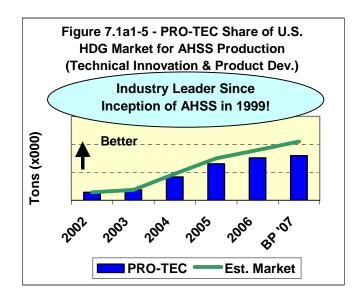












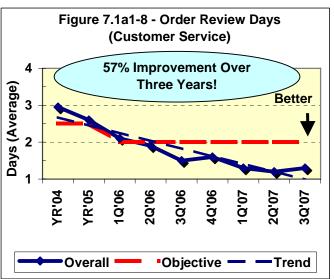
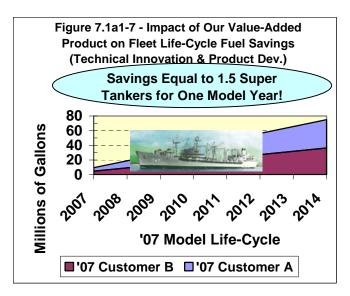
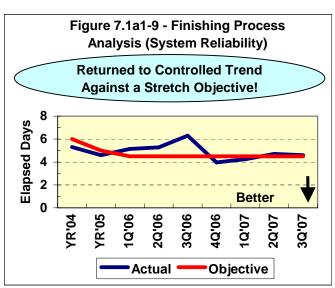


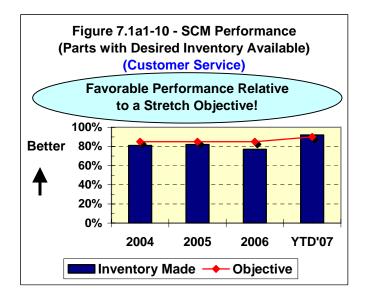
Figure 7.1a1-6 - Internal Diversion Approach to Ensure Appropriate Customer Performance (Customer Service)

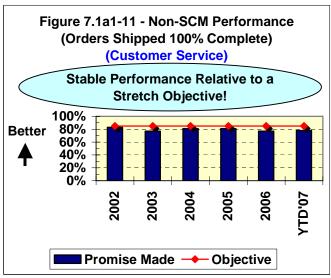
Stoplight:	INTER	NAL DIV	ERSION	YIELD%	BY SEC	MENT &	RELATI	ED INSPE	CTION L	EVELS	Effectiv	/eness				
GREEN	VAL	UE-ADDE	D SEGI	MENT	CO	MMODIT	Y SEGM	ENT	COM	BINED	Measure:					
YELLOW RED	_	TICAL OSED	AH	ISS	SEMI-E	XPOSED	UNEXPOSED		UNEXPOSED		UNEXPOSED		OVERALL		Custo Claims	
Period	Actual	>Model	Actual	>Model	Actual	>Model	Actual	>Model	Actual	>Model	Actual	< Goal				
2004																
2005																
1Q'06								_								
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3Q'06						IUCI	Illa	' <i>I</i>								
4Q'06																
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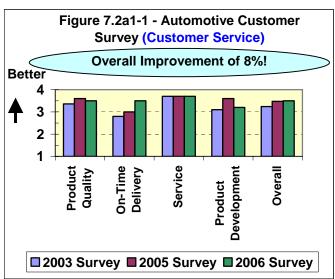


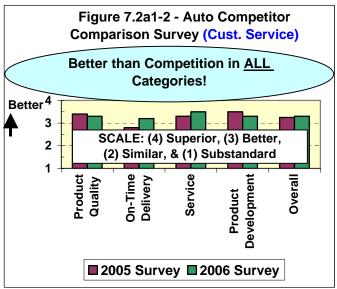


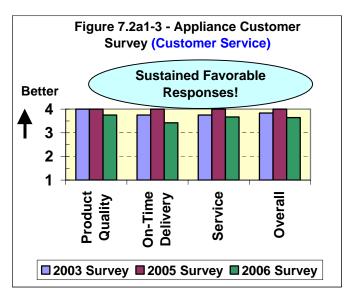




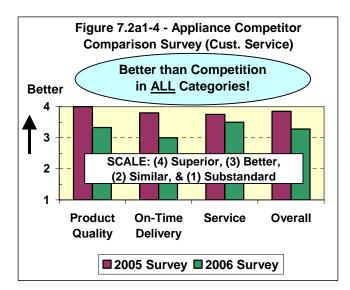
7.2 - Customer-Focused Outcomes - Figures 7.2a1-1, -2, -3, and -4 relate to our Market Segments of Automotive and Figure 7.2a1-5 - "Automotive Claim Appliance. Performance" is a measure of Product Quality with the best performance in any given period. Figure 7.2a1-6 -"Customer Claim (Warranty) Performance" shows consistent performance while demonstrating "technical innovation for the betterment of our industry, Associates, and community." Figures 7.2a1.7 and -8 relate to consistent results from our largest customer for the respective key customer requirements of Product Quality and On-Time Delivery. Figure 7.2a2-1 - "Automotive Original Equipment Customers" demonstrates Manufacturer long-term relationships, and Figure 7.2a2-2 - "Growth of Customer XYZ" shows the positive outcome of our customer-driven excellence by making more of the difficult products (valueadded) for the most demanding customers.

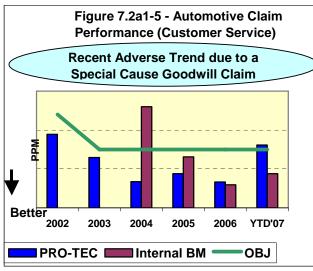


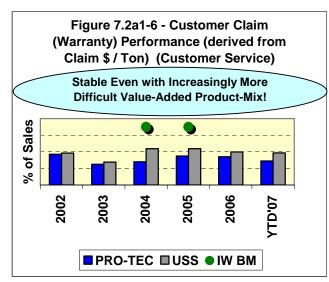


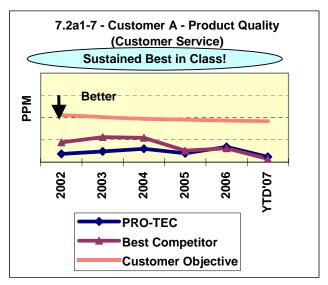


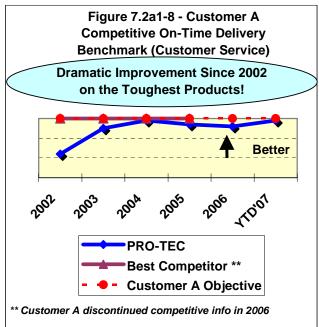


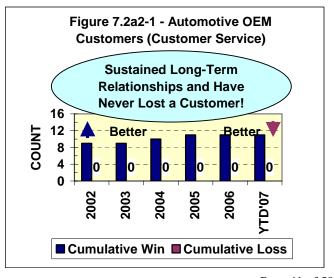














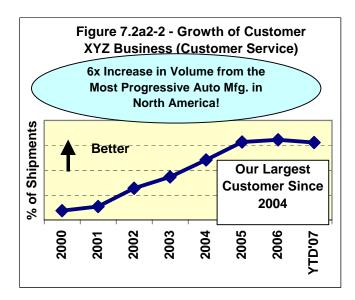
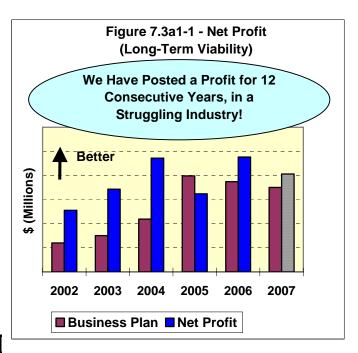


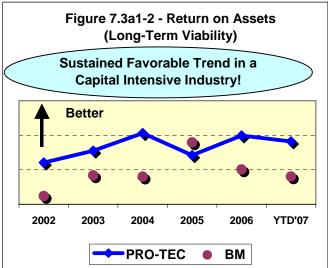
Figure 7.2a2-3 - Customer Milestones Matrix (Customer Service)

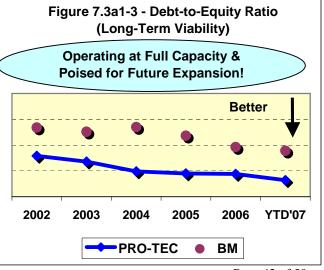
DATE	DESCRIPTION
11-Jan-96	ISO 9002 Certification
1996~1999	Toyota Motors - Certificate of Achievement**
1996~2003	Subaru-Isuzu Motors - Presidential Award**
18-Apr-97	QS 9000 Certification
1998	Ford Motor Co Supplier of the Year**
1999	Ford Motor CoGold World Excell. Award**
4-Dec-00	ISO 14001 Certification
2000~2001	Mitsubishi Mo Supplier of the Year**
2000~2003	Toyota Motors - Certificate of Accomplishment for Quality**
2001~2004	KTH (Honda Stamper) Steel Supplier Excellence Award**
2002	General Motors - Supplier of the Year**
09-May-03	Tenth Anniversary Celebration - PRO-TEC
12-Aug-04	TS 16949 Certification
2004	Subaru of Indiana Motors - SIA-00X Launch Special Supplier Award**
2005~2006	KTH Steel Supplier of the Year Award**

**USS/PRO-TEC

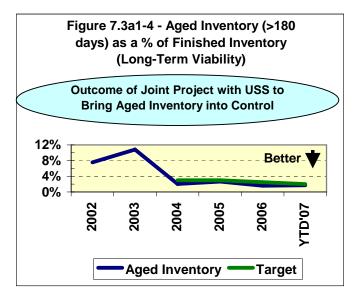
7.3 – **Financial and Market Outcomes** – The steel industry has gone through widespread bankruptcies and consolidations in the last decade. We believe we are unique in having posted a profit for twelve consecutive years. The "XX BM," which is a publicly traded company, was suggested by our parent company as an appropriate benchmark. The reason is a normal direct comparison would be an embedded unit at an integrated mill or if a stand-alone facility (such as ours), the traditional business model is that of a toll-coater (customer-supplied product) whereas we own the coils. As stated in P.2a(1): "in a unique position of selling 100% of our output and producing above 100% of capacity.

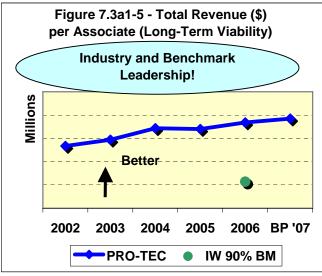


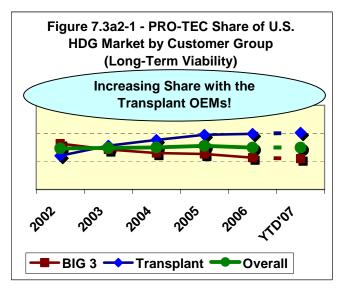


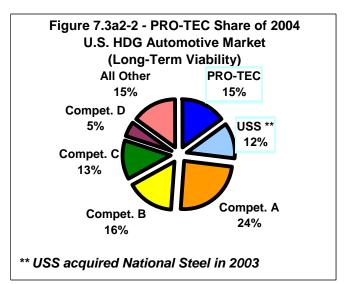


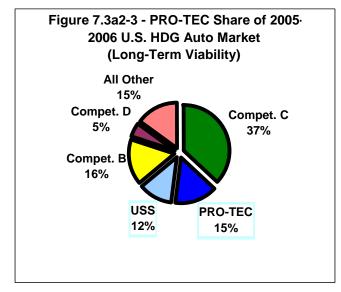










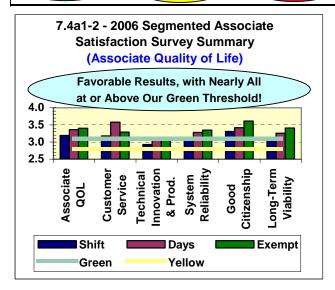


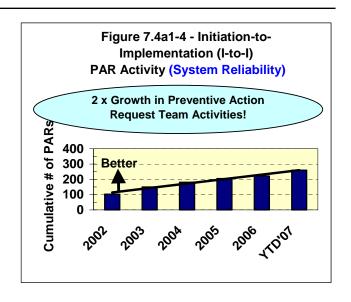
7.4 - Workforce-Focused Outcomes - The Associate Satisfaction Survey results in Figures 7.4a1-1, -2, -3, and Figure 7.6a2-1 are on a 4-point scale (4=Strongly Agree, 3= Agree, 2=Disagree, 1=Strongly Disagree). The stoplight ranges were established from the 2002 results normal distribution. The "Top Box %" of the Summary of Results was 36.6% for 2006 and 31.9% for 2005. Figure 7.4a1-4 -"Initiation-to-Implementation PAR Activity" is a subset of the overall preventive action activity as illustrated in Figure P.2-2. Figure 7.4a1-5 – "Shift (24x7) Absence Rate" has a benchmark from the Industry Week Best Plants 90%. Although we compare favorably, it may not be an equivalent comparison to our 24x7, weekends, and holiday continuous schedule operation. Other than our entry-level positions, all "Days" and "Shift" promotions have been internal for the last five years, with the relative few external "Exempt" promotions to fill specialized or technical positions. Associate Referral Program for entry-level (external) hiring was 74 in 2007 and 77 in 2006 for four open positions each year.



Figure 7.4a1-1 - Associate Satisfaction Survey
Summary of Results

Summary of Results								
	2002	2003	2004	2005	2006			
Key Success	KSF	KSF	KSF	KSF	KSF			
Factor	AVG	AVG	AVG	AVG	AVG			
Associate QOL	3.10	3.14	3.10	3.23	3.22			
Customer Service	3.35	3.30	3.04	3.26	3.27			
Technical Innovation & Product Dev.	2.70	2.60	2.48	3.02	2.99			
System Reliability	2.96	3.00	2.92	3.11	3.15			
Good Citizenship	3.30	3.30	3.24	3.35	3.36			
Long-Term Viability	2.94	2.88	2.91	3.05	3.08			
SURVEY AVERAGE	3.05	3.07	3.01	3.15	3.18			
High = 3.10								





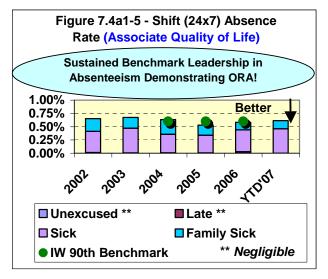
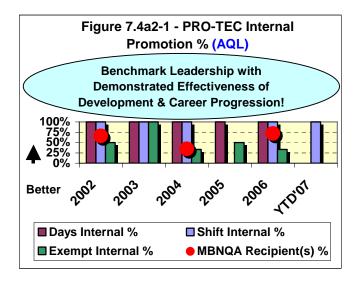
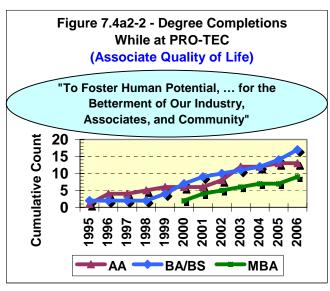


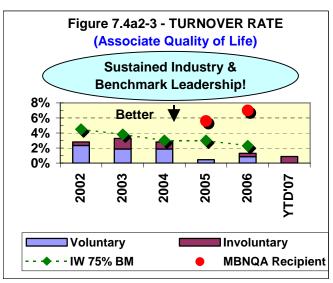
Figure 7.4a1-3 - Employee Engagement Index (derived from Associate Survey)

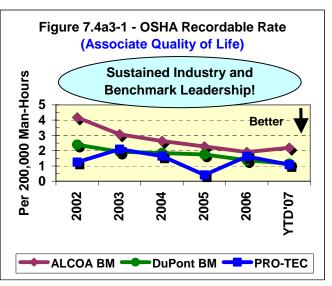
KSF	Question	2002	2003	2004	2005	2006	Trend	MBNQA Survey*
Associate Quality of Life	The people I work with cooperate and work as a team.	3.00	3.10	2.90	3.18	3.17	+	3.20
	I know what is expected of me at work.	3.40	3.40	3.40	3.33	3.24	0	3.15
Customer Service	I am supported when responding to customers' questions or problems.	3.20	3.20	2.90	3.27	3.29	+	3.28
Long-Term Viability	I am satisfied with my job.				3.17	3.07	1	3.21
	Mgr. asks for my opinion	2.60	2.50	2.80	2.69	2.73	-	2.75
** Similar Questions from the MBNQA "Are We Making Progress" Survey	Overall	3.05	3.05	3.00	3.13	3.10	0	3.12

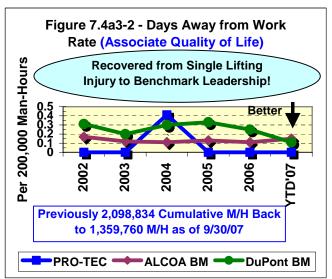






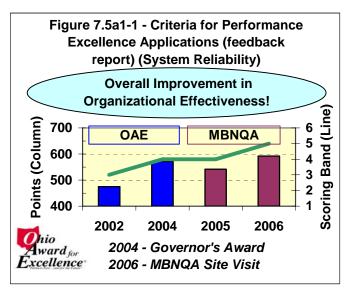


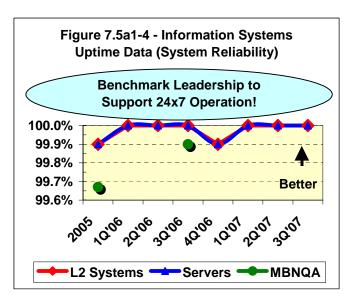


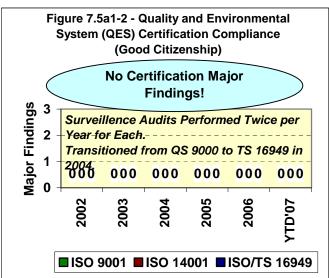


7.5 - Process Effectiveness Outcomes - Our strategic position statement (core competency) as the "Innovation Leader in Coated Steel" is verified at the organizational level by Figures 7.5a1-1, -2, and -3; at the work system level by Figures 7.5a1-4, -5, -6, -7, and -8; and at key work processes by 7.5a2-1, -2 -3, -4, and -5. The "world-class" benchmark in Figure 7.5a2-2 is the performance of the best Japanese (automotive quality) HDG in any given year (this is a blind result provided by our KOBE parent). American Iron and Steel (AISI) benchmarks on Figures 7.5a2-4 and -5 are for the best performing USA (automotive quality) HDG facilities, which are also our top value-added competitors. Figures 7.5a2-6 and -7 present two major (internally developed) breakthrough innovations associated with AHSS product development. Each started as a pilot program that has since expanded to include all possible applications of the respective techniques. two are a sample from the more than 150 "Innovations, Initiatives, and Wows" (pivot table) prepared for the MBNQA site visit.

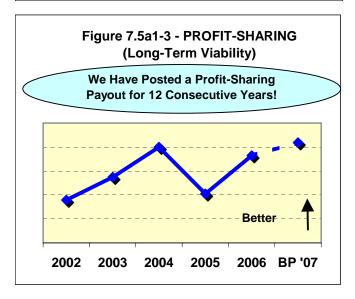


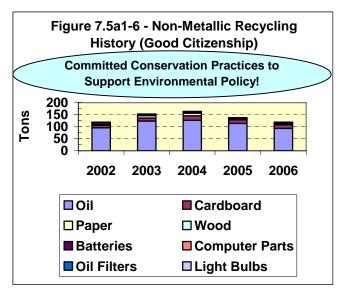






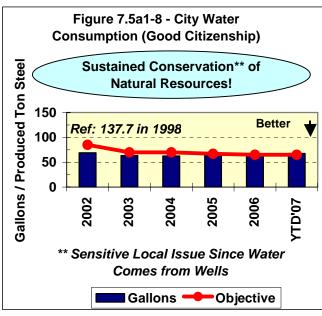


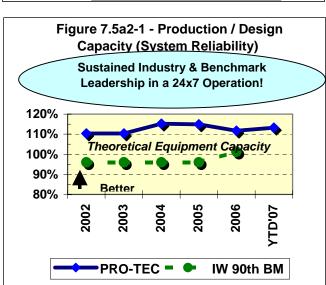


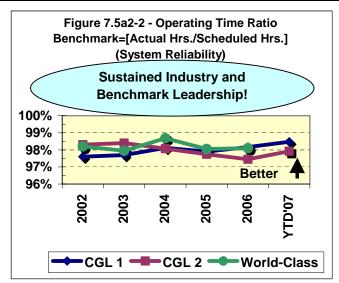


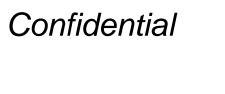


7.5a1-7 – Work	xplace Emerg	gency Prepar	edness Activ	ities (Good	Citizenship)	
	2002	2003	2004	2005	2006	Participation
Evacuation & Shelter-in-Place	Evacuation	Evacuation	Evacuation	Shelter-in-	Evacuation	All Associates
Drills	Drill	Drill	Drill	Place	Drill	
Putnam County Emergency	NA	NA	August	NA	NA	16 Assoc. (plus
Management Organization Mock						wide community
Disaster Exercise						participation)
Integrated Contingency Plan and	March /	March /	March /	March /	March /	36
Incident Command Training	April	April	April	April	April	
Site Visit & Training Mtgs. with	Annually	Annually	Annually	Annually	Annually	6
Local Fire Departments & EMS						
Internal Emergency Medical Squad	Monthly	Monthly	Monthly	Monthly	Monthly	32
Meetings						
Internal & 3rd-Party	Quarterly /	Quarterly /	Quarterly /	Quarterly /	Quarterly /	12
Environmental & Safety Mgmt.	Semi-	Semi-	Semi-	Semi-	Semi-	
Systems Audits	Annually	Annually	Annually	Annually	Annually	
Property and Business Risk	Semi-	Semi-	Semi-	Semi-	Semi-	10
Insurance Surveys	Annually	Annually	Annually	Annually	Annually	

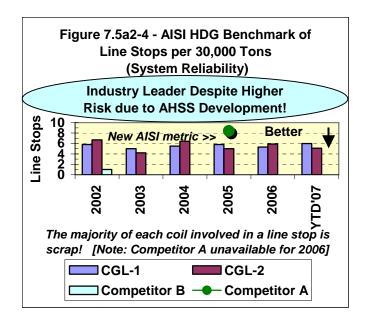


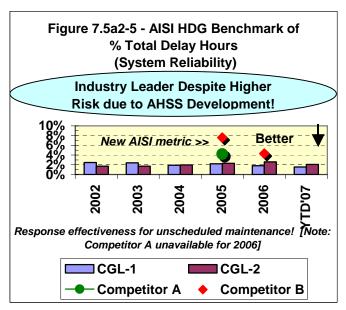












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7.6 – **Leadership Outcomes** – The most recent evolution of the integration of our management systems: ISO 9001, TS 16949, ISO 14001, EPA NEPT, OSHA VPP, and the MBNQA criteria into our QES system is presented in Figure 7.6a1-1. The "Compliance Audit Outcomes" table is a representative sample of the governance and systematic management controls in place, with zero violations or findings always being the expectation. Figure 7.6a1-2 - "Summary of Organizational Strategy and Action Plans" is a sub-set of our "Run-the-Business" and "Change-the-Business" balanced scorecards. Finally, Figures 7.6a5-1 and -2 are a sampling of how we support our Mission: "... for the betterment of our Associates, and community."

Figure 7.6a2/3/4-2 - Compliance Audit Outcomes

(Good Citizenship) Violations or Findings						
TYPE	2002	2003	2004	2005	2006	YTD'07
Ethical & Legal Business Conduct Compliance (KOBE, USS, & KPMG)	0	0	0	0	0	0
Governance Compliance (Accountability, Transparency, & Fair Treatment)	0	0	0	0	0	0
OSHA Regulatory Compliance [2004 VPP STAR Recognition]	0	0	0	0	0	0
EPA Regulatory Compliance (Air Solid Waste & Water) [2003 EPA-NEPT Recognition]	0	1 **	0	0	1 **	0

^{**} Each of the EPA Findings Were Administrative Issues Only

Figure 7.6a1-1 - Strategic Planning Milestones Matrix (Long-Term Viability)

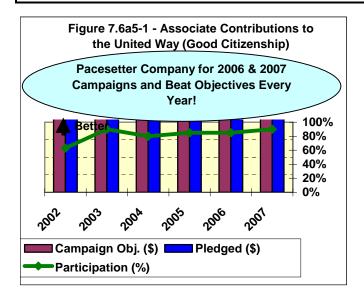
EVENT	SYSTEM INTEGRATION OUTCOMES
2002 - OAE (Tier 3 Award)	Addressing Feedback Report: Established "true" strategic planning, Mission redefined, key success factors, Associate Surveys, Customer Surveys, Balanced Scorecard, and interpreted the criteria regarding the "how" and "what" questions
2003	Continued deployment from 2002, also accepted into EPA - National Environmental Performance Track, and enhanced financial management controls with Procurement Policies & Procedures Manual with associated MP-2 electronic PO tracking/approvals
	Addressing Feedback Report: Extended same attention to support processes as already given to product/process, also accepted into OSHA - Voluntary Protection Program (STAR Site), and upgraded from QS 9000 to TS 16949 with emphasis on systems approach
2005 - MBNQA (Consensus)	Addressing Feedback Report: Defined, measured, stabilized and improved 28 key critical systems (including Leadership & Customer Relationship Systems), initiated Six Disciplines Methodology, and deployed Salary Progression System (for shift & day)
2006 - MBNQA (Site Visit)	Addressing Feedback Report: Developed Strategic Position (core competency), created Vision, defined Values, mapped culture, deployed Halogen and Six Disciplines (software) to cascade IPs & align expectations, & continued integration of MBNQA criteria into QES

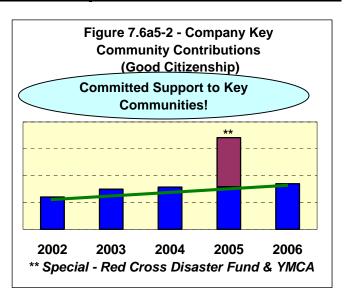


Figure 7	Figure 7.6a1-2 - Summary of Organizational Strategy and Action Plans								
BSC	Key Success Factor	Metric	Figure	Trend					
"Run-the-Business"	Associate Quality of Life	Recordable Injury Frequency	7.4a3-1	+					
		Associate Survey Results	7.4a1-1	+					
	Customer Service	SCM Performance	7.1a1-10	+					
		Auto Group Performance (PPM)	7.2a1-5	-					
	Technical Innovation &	Overall Internal Diversion Yield%	7.1a1-6	-					
	Product Development	AHSS Internal Diversion Yield%	7.1a1-6	+					
	System Reliability	Operating Ratio	7.5a2-2	+					
		Finishing Process Analysis	7.1a1-9	-					
	Good Citizenship	City Water Usage	7.5a1-9	-					
	Long-Term Viability	Achieve Business Plan Profit	7.3a1-1	+					
"Change-the-Business"	Technical Innovation &	Critical Exposed Yield	7.1a1-6	-					
	Product Development	V-A Product Development	7.1a1-2	+					
	System Reliability	MBNQA Criteria Feedback	7.5a1-1	+					
	Long-Term Viability	Maintain ROA	7.3a1-2	+					
KEY: GREEN = Objective Met, YELLOW = Not Met to 5% Unfavorable, RED = > 5% Unfavorable									
	As noted elsewhere,	others available on-site.							

Figure 7.6a2-1 - Leadership Effectiveness Index (derived from Associate Survey)

KSF	Question	2002	2003	2004	2005	2006	Trend
Associate Quality of Life	My manager/team leader treats me fairly and with respect.	2.90	2.90	3.20	3.10	3.07	-
	My manager/team leader treats others fairly and with respect.	2.80	2.90	3.00	3.00	3.02	0
Good Citizenship	PRO-TEC is adequately involved in the community.	3.40	3.40	3.40	3.40	3.38	0
Good Citizensinp	Associate participation is adequate in the community.	3.20	3.20	3.20	3.20	3.27	+
Long-Term	Are we doing the right things to position ourselves for the future?	3.30	3.20	3.20	3.30	3.29	0
Viability	Do you feel responsible and accountable for continuous improvement?	3.30	3.30	3.20	3.40	3.26	1
	OVERALL	3.15	3.15	3.20	3.23	3.22	0







Α

AHSS – Acronym for advanced high strength steel.

AISI – Acronym for American Iron and Steel Institute.

APEX – Acronym for All (Product/Process/People) Excellence.

APM – Acronym for Authorized Product Manual

ASN – Acronym for Advanced Shipping Notice.

ASQ – Acronym for American Society for Quality.

A/SP – Acronym for Auto Steel Partnership.

AST – Acronym for Automotive Strategy Team.

В

BSC – Acronym for balanced scorecard.

BM – Abbreviation for Benchmark.

Business (Level III) Computer System – The mainframe computer system for business planning, accounting, steel design, record keeping, and other tasks.

C

CAR – Acronym for corrective action report (QES).

CGL – Acronym for continuous galvanizing line (also CGL 1 or CGL 2).

CHSS – Acronym for Commercialization of High Strength Steel Task Force.

Coating – A metallic coating which provides barrier protection by excluding air, water, and other corrosion promoters from contact with sheet and sacrificial protection by galvanic action zinc actually sacrificing itself to protect and maintain the structural integrity of the steel.

Cold-Rolled Steel Products – Flat-rolled carbon steel for which the required final thickness has been obtained by rolling at room temperature.

CTS - Acronym for Customer Technical Service.

Customer Technical Services (CTS) – The external organization (parent company) providing customer service and interface for PRO-TEC Coating Company products.

ח

Diversions – Internal rejections taken to exercise control over product characteristics and quality to ensure meeting or exceeding customer expectations.

DOE – Acronym for Design of Experiments.

DOL - Acronym for Department of Labor.

DRO - Acronym for Daily Report of Operations.

Ē

EAP – Acronym for Employee Assistance Plan.

Edge Trimming – The process of shearing the edge of a coated coil along the length so that the coil meets the customer-specified width.

EDI – Acronym for electronic data interchange.

EVI – Acronym for early vendor involvement.

F

FIFO – Acronym for first-in/first-out (inventory management).

Fifty-Foot Records – The summary of processing data in fifty-foot increments along the length of a coil recorded in the Production Facility Computer System.

FMEA – Acronym for failure mode and effect analysis (ISO/TS 16949).

G

GAAP – Acronym for General Accepted Accounting Principles.

GA – Abbreviation for Galvanneal.

Galvanews – Quarterly publication that communicates information to PRO-TEC Associates.

Galvavision – Closed circuit television that communicates information to PRO-TEC Associates.

Galvanized Sheet – The carbon-steel sheet is coated with zinc on two sides by the continuous hot-dip process. The process results in a layer of zinc tightly adhering to the base steel through an iron-zinc bonding layer.

Galvanizers Association – Group that provides authoritative information and advice on hot-dip galvanizing.

Galvannealed Sheet – The carbon-steel sheet is coated with zinc on both sides by the continuous hot-dip process. Immediately as the strip exits the coating bath, the zinc coating is subjected to an in-line heat treatment that converts the entire coating to a zinc-iron alloy.

GARY – Gary Works-USS (substrate supplier).

GI – Abbreviation for Galvanize.

GLW -Great Lakes Works-USS (substrate supplier).

Н

HDG – Acronym for hot-dip galvanizing.

Hot-Dip – The process of galvanizing by the immersion of sheet steel into a bath of molten zinc.

U

ICP – Acronym for Integrated Contingency Plan.

ILSRO – Acronym for International Lead Zinc Research Organization.

IS – Acronym for Information Systems.

ISO – Acronym for the International Organization for Standardization and used as a prefix for standards.

ISO 9001 – An international standard that provides guidance in the development and implementation of an effective quality management system.

ISO 14001 – An international standard that guides companies in managing their risks and potential impacts to the environment along with assessing environmental opportunities and legal requirements.

ISO / TS 16949 – A technical specification based on ISO 9000:2001 that provides guidance in the development and implementation of an effective quality management system specifically for the automotive industry and related service part companies.

IST – Acronym for inspection-side-trim batch processing line adjacent to CGL 2.

IW – Abbreviation for Industry Week.

I-to-I – Acronym for initiation-to-implementation continuous improvement process.

J.I

JIT – Acronym for just-in-time.

JV – Acronym for joint venture.

ΙK

KOBE - KOBE Steel of Japan (parent company).

KSF – Acronym for key success factor.



Т

Leaderstrip – Reference to coils used to bridge between incompatible strip sizes or grades scheduled consecutively or a line startup or shutdown.

LSL – Lower specification limit.

LT – Acronym for Leadership Team.

М

MONV - Mon Valley Works-USS (substrate supplier).

MP – Acronym for mechanical properties.

MP2 – Computerized maintenance management system utilized at PRO-TEC.

Ν

NEPT – Acronym for National Environmental Performance Track (EPA).

NOx – Acronym for nitrogen oxide.

C

OAE – (also known as OPE) Acronym for Ohio Award for Excellence.

OEM – Acronym for original equipment manufacturer.

OFI – Acronym for opportunity for improvement.

OJT – Acronym for on-the-job training.

OPE – Acronym for Ohio Partnership for Excellence.

OPEX – Acronym for order process excellence (USS order entry system).

ORA – Acronym for ownership, responsibility, and accountability.

Outside Processing (O/P) – Established independent processing businesses which have been approved for post-process operations.

<u>۲</u>

PAR – Acronym for preventive action report (QES).

PLC – Acronym for programmable logic controllers.

PML - Acronym for USS's Pack, Mark, and Load Manual.

PPM – Acronym for parts per million.

PMS – Acronym for performance management system.

PP&S – Acronym for purchased products and services.

Production Facility (Level II) Computer System – The production facility computer system used for inventory control, process control, production recording, and other tasks.

Q

QA - Acronym for Quality Assurance.

QBP – Acronym for quality business plan.

QES – Acronym for Quality and Environmental (Management) System (ISO 9001, ISO 14001, and ISO/TS 16949 combined).

QFE - Quest for Excellence Conference.

QOL - Acronym for Quality of Life.

R

ROA – Acronym for return on assets.

Roll Coating – The process of applying (post-zinc coating) surface treatments to product produced on CGL 1.

S

SCM – Acronym for supply chain management.

SCR – Acronym for selective catalytic reduction which is the process to significantly reduce nitrogen oxide air emissions from the annealing furnaces. Six Disciplines for Excellence – Trademark of Leadership Center.

Slitting – The process of dividing a coated coil along the length into customer-specified multiple widths (mults) forming multiple coils.

SOX - Acronym for Sarbanes Oxley Act.

SST – Acronym for slit-side-trim batch processing line adjacent to CGL 1.

Star Status – The top level of OSHA VPP.

SteelTrack – USS Extranet website accessible by certain customers and outside processors to view test reports, work orders, packaging requirements, etc.

Substrate – Cold-rolled sheet steel in coil form ordered to customer requirements as source coils for coating.

Surface Treatments – Chemical treatment and oiling are the methods used to protect finished coils from humid storage staining.

Т

Transplant – Reference to automakers having domestic production facilities with overseas parentage.

TTTF - Acronym for Tactical Transplant Task Force (team).

U

UHSS – Acronym for ultra high strength steel.

ULSAB - Acronym for ultra-light steel auto body.

UPS – Acronym for uninterruptible power source.

USL – Upper specification limit.

USS – Acronym for United States Steel Corporation (parent company).

V

Value-Added Product – Leading-edge (difficult) products including critical exposed, advanced high strength steel (AHSS), and ultra high strength steel (UHSS).

Voice of Customer – Reference to any and all methods to collect direct customer intelligence.

VPP – Acronym for Voluntary Protection Program (OSHA).

W

WAN/LAN – Acronym for Wide Area Network/Local Area Network.

Warehouse Services – The outside storage of finished coils situated geographically to provide easy access to customers.

X

XST – Acronym in the Level 3 Business System used to identify both the SST line adjacent to CGL 1 and IST line adjacent to CGL 2.

Y

Yield – The prime portion (ratio) of a coil (=100% - diversion %).