MESA PRODUCTS, INC. PROFILE

Highlights

- MESA leads its competitors in customer satisfaction according to a third-party quarterly satisfaction survey. In 2005, MESA led its best competitor in 17 of 17 attributes evaluated in the survey process.

- MESA focuses on the development of ongoing, profitable relationships. From 2000 to 2005, key customer retention increased from 93% to 100%.

- MESA leads the cathodic protection industry in its focus on quality and performance improvement. It is the only full-line North American cathodic protection company to be ISO 9001 certified. During its five year Baldrige quest, MESA implemented ISO and LEAN improvement processes.

- MESA employees are rewarded for financial performance, with 35% of annual net pre-tax profits distributed through a profit-sharing program. Since 2000, this payment ranged from 5% to 15% of annual salary. In its annual 2006 Employee Satisfaction Survey, 69% of employees classify themselves as “highly satisfied” compared to an industry norm of 44%. Voluntary turnover rate decreased from 14% in 2001 to 5% in 2005.

- While the cathodic protection industry in the United States is a relatively mature market, MESA’s sales have increased 100% percent since 1999, growing total revenues from $12 million to over $25 million.

Company History

MESA Corrosion Control, Inc. (MCC) was incorporated in 1979 as a one-man company focused on technical services. In 1980, the company was relocated to Tulsa, Oklahoma and began offering installation services. In 1985, a branch office was opened in Tallahassee, Florida.

MESA Products, Inc. was incorporated in Tulsa, Oklahoma in 1984 to market corrosion instrumentation, meters, tools and supplies. This focus was expanded to include a complete line of corrosion control products including sacrificial anodes, impressed current anodes and accessories. MESA Products opened a Houston branch office in 1997 to service the Gulf Coast region of the United States. This office also manages MESA’s international business. The two MESA companies were merged in 1999 to create the current entity of MESA Products, Inc. The activities of MESA Corrosion Control continue as divisions of MESA Products. Currently, MESA Products supplies materials to over 750 customers and services to over 80 customers.

P.1a(1) Products, Services, and Delivery Mechanisms

MESA Products, Inc. provides technical services, installation and materials for cathodic protection systems. Cathodic protection (CP) is an electrochemical form of corrosion control typically applied to underground or submerged structures such as pipelines and tanks. The primary target markets for MESA services and products are energy related companies with underground or submerged steel assets. The customer base includes gas distribution companies, pipeline transmission companies, petroleum terminal operators, production companies, contractors, and equipment distributors. Additional markets include storage tank, underground propane tank, power generation, offshore structures, refineries and petrochemical.

Products and materials are sold nationally to a variety of contractors, end-users, and resellers across the United States. Technical and installation services are primarily offered to the mid-continent, southwest, and southeast United States. This market is reached by direct sales of products and services to end-users or by providing materials to contractors and resellers serving end-users.

MESA has entered regional markets in the midwest, northeast, and northwest United States for material sales by establishing supplier relationships with regional contractors and distributors. Additional delivery mechanisms include strategic alliances and on-line purchasing.

<table>
<thead>
<tr>
<th>VISION 20-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leading the CP industry with world-class performance and integrity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>We conduct our business with the highest integrity at all times.</td>
</tr>
<tr>
<td>We provide cathodic protection products and services accurately, continuously improving, and timely.</td>
</tr>
<tr>
<td>We communicate with our customers in an effective, friendly and personal manner.</td>
</tr>
<tr>
<td>We encourage participation at all levels, foster continuous improvement in all areas, and demand individual responsibility.</td>
</tr>
<tr>
<td>We strive to be highly trained, capable and motivated.</td>
</tr>
<tr>
<td>We provide a safe, stable, and enjoyable work environment through long-term profitability and managed growth.</td>
</tr>
<tr>
<td>We recognize that people are our most important asset and actively protect and invest in our employees’ future.</td>
</tr>
<tr>
<td>We promote and support employee participation in community activities.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MISSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide superior value through our people, processes, and products</td>
</tr>
</tbody>
</table>

P.1a(2) Culture

Figure P.1-1 MESA’s Vision, Values, and Mission result in a culture of continuous improvement and empowerment.

Since inception, MESA’s philosophy has been to provide customers a quality product at a fair price. To achieve this goal, the internal focus has been one of teamwork and
shared goals. Initially, the team effort was focused on business survival. Now, the effort is focused on continuous improvement, continued growth and long-term success. The work environment is characterized by the words “friendly”, “personal”, “fair”, “enjoyable”, “safe”, and “stable”. These words describe MESA’s culture, defined in the Vision, Values, and Mission (Figure P.1-1).

P.1a(3) Human Resources

MESA currently has a workforce of 75 full-time employees. The company employs a diverse group of professional, administrative, technical, construction, and manufacturing people in a close-knit, non-union environment. The general hiring philosophy is to attract and retain valuable employees. Although sales revenue exhibits significant seasonal variations (100% variation from January/February to September/October), the workforce is not seasonally adjusted. MESA feels its employee assets (Figure P.1-2) are too valuable to reduce workforce in the slow periods and not have them available in the busy periods. MESA has never experienced a planned workforce reduction, other than involuntary performance related terminations.

<table>
<thead>
<tr>
<th>AGE</th>
<th>TENURE</th>
<th>GENDER</th>
<th>CLASSIFICATION</th>
<th>ETHNICITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.5 years old</td>
<td>7.3 yrs w/MESA</td>
<td>Male</td>
<td>78%</td>
<td>Salaried</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td>22%</td>
<td>Hourly</td>
</tr>
<tr>
<td>CATEGORY</td>
<td>EDUCATION</td>
<td>ETHNICITY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>High School</td>
<td>Caucasian 75%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admin/Sales</td>
<td>Some College</td>
<td>African American 9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant</td>
<td>Degree</td>
<td>Native American 10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>29%</td>
<td>Hispanic 6%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure P.1-2 MESA’s workforce is stable and diverse

For hourly, unskilled positions, MESA uses temporary agencies to screen and supply personnel. Temporary employees are converted to full-time employees upon successful completion of a 6–12 month probationary period. Installation and field service personnel are carefully screened through temporary agencies. Depending on experience and qualifications, they may be hired immediately or retained through a temporary agency for an undefined probationary period. Administrative and salaried personnel are typically hired after careful review of qualifications, experience, and needs. This philosophy has resulted in a stable, experienced, qualified staff with a low turnover rate, particularly in key employee positions.

The personal safety and health of each employee is of utmost importance. MESA strives to provide a safe and healthy working environment for all personnel through the application of an effective and continuous safety program. MESA has developed formal programs to meet these objectives. Since its inception, MESA has never experienced an accident resulting in permanent injury or death. There are no unique health or safety requirements. MESA emphasizes employee wellness through an on-site physician and annual health screenings.

P.1a(4) Technologies, Equipment and Facilities

Within the MESA employee base, there is a wide range of educational and technical background. MESA has professional engineers along with knowledgeable construction workers to assist customers in the design phase. MESA has developed electronic capabilities for system design that are available internally and externally for customer or general public use. These design tools are available at no charge on the MESA website as the CP Design Center. This e-business technology is the first and largest of its kind in the cathodic protection industry. Personal interviews, informal feedback from customers, and review of competitor sites confirm the value and position of the CP Design Center as an industry leading resource.

Much of the equipment used for manufacturing at MESA is unique to the industry and has been developed and built based on needs and in-house expertise. These include a gun drill used for boring of graphite anodes, custom material carts, racks, and wire winding equipment. MESA owns heavy construction equipment such as backhoes, auger trucks and trenching machines.

P.1a(5) Regulatory Environment

Beyond the workplace environment regulations of OSHA, MESA operations are also significantly impacted by DOT regulations in three primary areas. In order to perform services for DOT regulated pipeline customers, MESA is required to maintain Anti-Drug and Alcohol programs and meet Operator Qualification requirements for any employees directly working on regulated pipelines. Additionally, MESA must comply with DOT driving regulations in the operation of its mobile construction equipment. Other regulatory agencies with which MESA interacts include the Environmental Protection Agency, Oklahoma Corporation Commission, Texas Railroad Commission, and Kansas Corporation Commission. Specialized safety training is often required by clients; including excavation and confined space entry. ISO 9001 certification requires two audits annually by an outside audit firm. There are no corporate certifications or licenses in the CP industry.

Corporate headquarters and primary manufacturing plant are located in the central part of Tulsa. In 2002, MESA created a training facility with classroom space and an outdoor training field with underground piping and tanks.
Cathodic protection is required by federal and state regulations governing underground transmission pipelines and natural gas distribution systems. These requirements include installation, monitoring, and maintenance. The federal Department of Transportation has jurisdiction over interstate operators. State agencies such as the Oklahoma Corporation Commission assume jurisdiction for intrastate operators. Similar regulations regarding underground tanks fall under the jurisdiction of the Environmental Protection Agency and/or state regulatory agencies. The net result of these regulatory requirements is a relatively stable base market for cathodic protection products and services. However, the domestic market is generally considered a mature one with limited growth opportunities.

Identification of key requirements and expectations is based upon analysis of customer satisfaction data (Figure 7.2-2), historical knowledge of the customers, and ongoing customer communication. Requirements were identified by the six operating groups in 2005 and reviewed during the December 2005 Management Review. Consensus requirements for the various customer groups are developed. It is also the consensus of Management and Sales Groups that no significant differences in these requirements exist between the various market segments served by MESA. Customer requirements were validated by the 1st quarter 2006 Customer Satisfaction Survey.

Employee stakeholder expectations are derived primarily from the annual Employee Satisfaction Survey (Figure 7.4-10). Rewards and Recognition is the primary driver for employee satisfaction. Additional satisfaction drivers identified through the January 2006 Employee Meetings include job security, career path, training, and health care.

P.1b(3) Supplier/Distributor Role

Dependable, high quality suppliers are critical to satisfy MESA objectives of service and quality. For our primary product lines of impressed current and sacrificial anodes, the supplier role is critical to quality. Materials such as magnesium, zinc, aluminum, graphite, cable and cast iron are all utilized in large quantities in the manufacturing process. MESA’s critical suppliers are those that supply raw material for value-added MESA products. For distributed products, supplier performance is less critical. Subcontractor performance for service work directly impacts customer relationships and profit margin. Organizational innovation is generally initiated by MESA; however, key suppliers are involved in supply chain performance and improvement. MESA uses its Quality Management Program to evaluate, monitor, and improve supplier performance. Purchase decisions are based upon supplier performance and quality, in addition to price. Maximizing delivered value is the objective. Our most important supply chain requirements are quality and ON-TIME shipping. Performance measurement of key suppliers was deployed in 2004 through an ongoing supplier relationship initiative. MESA’s supplier philosophy includes maintaining a primary source relationship with developed secondary sources available.

P.1b(4) Key supplier/customer relationships and communication mechanisms

A key strategy is the development of preferred relationships with both key suppliers and customers. We strive to be the preferred supplier to our customers and the preferred customer to our suppliers. Relationships are built through both formal and informal mechanisms, resulting in long-term “preferred provider” status with many key customers. Several of these relationships are formalized with sole-source alliance agreements. Similar relationships exist with key suppliers. MESA has an ongoing initiative to enhance key supplier relationships by performance measurement, defined communication tools, and best practice sharing.

Multiple channels of key supplier/customer contact and communication are used: targeted personal contacts, personal contact through seminar presentations and conference attendance, personal telephone and electronic communication, electronic newsletter, advertising, periodic letters, and regular satisfaction surveys. MESA exhibits in over 25 regional/national conferences yearly and 20–30 technical seminars each year. The AGRA line of products is distributed nationally through an annual direct mail catalog with a mailing list of over 3500 customers. MESA continually evaluates and balances resources to effectively reach as many customers and suppliers as possible. A Communication Plan defines the messages and targets.

P.2a(1) Competitive Position

- MESA estimates the size of the U.S. cathodic protection materials and service market between $250-$300 million/year, excluding cathodic protection related to offshore applications. The annual domestic CP materials market is estimated at $150-$200 million, excluding CP related to offshore applications. This figure was verified in a U. S. Federal Highways Administration Study, “Corrosion Costs and Preventive Strategies in the U.S.”, released in 2002, estimating the CP materials market at $146 million per year. One competitor dominates the domestic market with estimated annual domestic CP sales at $100 million. The remainder of the market is fragmented by regional companies. MESA is currently estimated at second nationally.

P.2a(2) Success Factors and Changes

Key factors determining MESA success over competitors:

- **Customer Service** (on-time shipping, fast delivery, quality, customer satisfaction, delivered value, and competitive pricing) Categories 7.1a and 7.2a.
- **Relationships** (personal, friendly relationships with customers and suppliers resulting in customer retention, supplier satisfaction, and supplier performance) Category 7.2a
- **Performance Excellence** (cycle time, reduced major NCRs, productivity, cost of quality, and inventory
turns) Category 7.5a

- **Work Environment** (training, turnover, accident rate, employee satisfaction, and ethical behavior) Category 7.4a and 7.6a

- **Opportunistic Growth** (ROE, profits, sales) Category 7.3a

A key change affecting MESA’s competitive position is a customer trend toward outsourcing of installation services resulting in an increase in service opportunities in the Houston and Florida operations. Another key change is MESA’s continued improvement in efficiency and quality.

### P.2a(3) Industry Comparative/Competitive Data

Comparative and competitive data is primarily obtained through personal communication with customers, suppliers, and competitors. Comparative performance data is obtained through customer satisfaction surveys. Revenue information sources include Dun & Bradstreet and suppliers. The cathodic protection industry is a small, fragmented industry with only one public company. Other competitors are privately owned, with no public information available. Industry organizations do not publish information or data for comparative use.

Operating performance comparative data is obtained from outside sources such as *Industry Week* magazine, financial providers, and insurance providers. Benchmarking against previous Baldrige recipients is also a valuable source of comparative information. Employee satisfaction survey data is benchmarked against an industry database.

### P.2b Strategic Challenges

MESA updates an analysis of strategic challenges twice a year at Management Review. Strategic challenges are defined as the Weaknesses, Opportunities, and Threats from the SWOT analysis.

#### P.2c(1) Performance Improvement System

Following an internal assessment, MESA submitted its first Baldrige application in 2002. The feedback report was a wake-up call for management, resulting in commitment to use the Baldrige model for corporate performance assessment and improvement. Baldrige site visits in 2003, 2004, and 2005 identified a number of opportunities which MESA has/is systematically addressing (Figure 7.5-7).

MESA’s Performance Improvement System is embedded and managed through the Quality Management System, primarily through ISO 9001:2000 certification. MESA’s Quality Policy is summarized by the acronym **ACT**: Accurate – Continuous Improvement – Timely.

Employees are trained and audited to ISO standards. MESA uses several improvement processes built around methodologies such as the Plan-Do-Check-Act cycle (Figure 6-2) LEAN, and DMAIC. Although performance improvement is an ongoing occurrence, systematic evaluation of key processes occurs during bi-annual Management Review of key performance metrics. The processes and metrics are reviewed for relevance including importance, alignment, and current with changing business needs. In addition, key process maps are reviewed and updated annually. Process improvement initiatives are generated by Management Review, employee suggestions, customer/supplier feedback, outside consultants, and quality feedback reports.

Organizational learning and knowledge sharing occurs through a variety of means including training programs, team-building, cross-departmental improvement teams, and general focus on process improvement (Figure P.2-3). Communication/knowledge sharing systematically occurs through implementation of MESA’s Communication Plan.

### FORUM

<table>
<thead>
<tr>
<th>FORUM</th>
<th>WHEN</th>
<th>OWNER</th>
<th>ATTENDEES/TARGET</th>
<th>PURPOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday Morning</td>
<td>Weekly</td>
<td>President</td>
<td>All Tulsa Staff</td>
<td>Communicate current status and share current events, recognition</td>
</tr>
<tr>
<td>Manager</td>
<td>Monthly</td>
<td>President</td>
<td>Managers</td>
<td>Progress review with adjustments</td>
</tr>
<tr>
<td>Management Review</td>
<td>Bi-annually</td>
<td>President</td>
<td>Managers</td>
<td>Strategic Planning and progress review</td>
</tr>
<tr>
<td>All MESA Staff Meetings</td>
<td>Bi-annually</td>
<td>President</td>
<td>Available staff</td>
<td>Communicate strategic direction, share information, answer questions, benefits, compensation issues</td>
</tr>
<tr>
<td>Lunch &amp; Learn</td>
<td>Monthly</td>
<td>President</td>
<td>Tulsa – voluntary</td>
<td>Technical, Baldrige training, general</td>
</tr>
<tr>
<td>Electronic Newsletter</td>
<td>3 times/yr</td>
<td>President</td>
<td>Customers, Employees, Suppliers</td>
<td>Share information, current events, and recognize employees</td>
</tr>
<tr>
<td>Mgmt Development</td>
<td>Varies</td>
<td>President</td>
<td>2 Managers, 2 sales staff</td>
<td>Develop management skills</td>
</tr>
<tr>
<td>LEAN events</td>
<td>Periodic</td>
<td>President</td>
<td>Various employees</td>
<td>Improve processes</td>
</tr>
<tr>
<td>MESA Newsletter</td>
<td>Quarterly</td>
<td>Admin</td>
<td>Employees</td>
<td>Communicate, share, recognize</td>
</tr>
<tr>
<td>Departmental meetings</td>
<td>Wkly/Mtly</td>
<td>Dept Mgrs</td>
<td>Dept staff</td>
<td>Develop action plans, review progress</td>
</tr>
<tr>
<td>Special Training Events</td>
<td>Periodic</td>
<td>Various</td>
<td>Varies</td>
<td>Team building, sales, communication skills, leadership, safety, etc.</td>
</tr>
<tr>
<td>Employee Performance Reviews</td>
<td>Quarterly</td>
<td>Mgrs/ supervisors</td>
<td>All employees</td>
<td>Conversation regarding performance, recognition, areas of improvement</td>
</tr>
<tr>
<td>Key Supplier Meeting</td>
<td>Annually</td>
<td>Matl Mgr</td>
<td>Key Suppliers</td>
<td>Share information, current status, goals</td>
</tr>
<tr>
<td>New Employee Orientation</td>
<td>Bi-annually</td>
<td>HR</td>
<td>New employees</td>
<td>Share vision/values/culture</td>
</tr>
</tbody>
</table>
Category 1 - LEADERSHIP

1.1a(1) Setting and Deploying Vision and Values

The MESA Senior Leadership System (Figure 1.1.1) summarizes how organizational vision and values are set, deployed, and communicated to employees, key suppliers, and customers, beginning with the Strategic Plan. This systematic approach incorporates input from stakeholders in developing a long-term strategic plan, creating an environment of continuous improvement, deploying and communicating to stakeholders. As role models within the MESA community, Senior Leaders demonstrate commitment and support of MESA values. Systems and measures are fully deployed and reviewed bi-annually at management review meetings to ensure they stay current with business needs and trends as determined by relevant data. The Senior Leadership System has undergone multiple cycles of refinement.

Organizational vision and values are defined and deployed through the Strategic Plan. The first Strategic Plan was created in 1998 and has evolved as the key tool in moving MESA from a reactionary to proactive position in the marketplace. The Strategic Plan drives development of the operating plans for the operating groups. The strategic planning process incorporates a balanced view of value creation for customers, employees, and owners. The Strategic Plan and values are communicated and deployed throughout the organization by very visible activities.

As an example, MESA’s Strategic Plan is posted on the company Intranet and displayed prominently on posters in the office and break room. MESA managers use the Plan to develop departmental objectives. Alignment of department objectives with the Strategic Plan requires employees and managers to understand the Strategic Plan, systematically communicating and reinforcing MESA’s values, short and long-term direction, guiding principles, and performance expectations. Employees have a variety of means to communicate with leadership including personal contact, the performance review process, an annual Employee Satisfaction Survey process and the President’s Open Door Policy. MESA communicates values, expectations, and direction to key suppliers through personal contact, verbal communication, and an annual meeting. Customers are informed of MESA’s values and direction through the President’s message in MESA’s electronic newsletter.

1.1a(2) Environment resulting in Legal and Ethical Behavior

Legal and ethical behavior expectations are defined to employees through the Standards of Conduct. This document was formalized in early 2004 with a revision in early 2005. Along with this formal document, MESA created an abbreviated Code of Conduct with Mission Statement in a wallet card format distributed to employees.
The President and Managers use a variety of methods to communicate values, expectations, and direction including staff meetings, departmental meetings, one-on-one contact, and role modeling.

**MESA Code of Conduct**
- **Create a safe and enjoyable workplace, producing and installing safe products**
- **Obey laws and support and protect our community and environment**
- **Deal respectfully with people, just as we would like to be treated**
- **Ethical and honest relationships with our stakeholders; neither asking, accepting nor offering anything more than quality products and services for a fair price**

Figure 1.1-2 Code of Conduct defining expectations

1.1a(3) **Sustainability and environment for improvement and learning**

In order to ensure long-term stability and sustainability, Senior Leaders developed a Business Continuity Plan (Figure 1.1-3) addressing identified risks and events. Written plans were developed for the major risks.

<table>
<thead>
<tr>
<th>EVENT</th>
<th>IMPACT</th>
<th>PROBABILITY</th>
<th>PLAN</th>
<th>POSSIBILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Succession</td>
<td>High</td>
<td>High</td>
<td>Yes</td>
<td>• President death/incapacitation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• President planned transition</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Loss of key position</td>
</tr>
<tr>
<td>Disaster/Emergency</td>
<td>High</td>
<td>Low</td>
<td>Yes</td>
<td>• Tulsa: Damage/loss/Utility disruption</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Houston</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Florida</td>
</tr>
<tr>
<td>IT System</td>
<td>High</td>
<td>Medium</td>
<td>Yes</td>
<td>• Security break</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• System crash</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Data loss</td>
</tr>
<tr>
<td>Major Accident</td>
<td>High</td>
<td>Medium</td>
<td>Yes</td>
<td>• Plant</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Field</td>
</tr>
<tr>
<td>Litigation</td>
<td>Medium</td>
<td>Medium</td>
<td>Yes</td>
<td>• Accident related</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Employment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Product liability</td>
</tr>
<tr>
<td>Workplace Violence</td>
<td>High</td>
<td>Low</td>
<td>Yes</td>
<td>• Include in emergency plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Pre-employment background checks</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• No weapons allowed on premises</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EVENT</th>
<th>IMPACT</th>
<th>PROBABILITY</th>
<th>HOW ADDRESSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply Chain Disruption</td>
<td>Medium</td>
<td>Medium</td>
<td>Maintain secondary sources</td>
</tr>
<tr>
<td>Loss of Key Customer</td>
<td>Medium</td>
<td>Medium</td>
<td>Customer Contact Plan</td>
</tr>
<tr>
<td>Customer Default</td>
<td>Medium</td>
<td>Medium</td>
<td>Credit Policy, Financial Plan</td>
</tr>
<tr>
<td>Financial Reversal</td>
<td>High</td>
<td>Low</td>
<td>Financial Plan</td>
</tr>
</tbody>
</table>

Figure 1.1-3 Business Continuity Plan identifying risks/plans for organizational sustainability

1.1b(1) **Empower, Motivate, and Communicate**

The prevalent positive environment at MESA is largely a result of senior leaders’ role model behavior, with the effectiveness measured by annual employee satisfaction surveys (Figure 7.4-10). Employee empowerment is communicated through MESA Values (Figure P.1-1) and continually reinforced by senior leaders. It is clearly personal plan has been communicated to the Management Team by the President to inform them of his personal goals and future company direction.
understood that effective operation of the company is
dependent upon each of the operating departments,
communicating, coordinating and cooperating with
each other. Senior Leaders are responsible for actively
communicating and motivating employees. Methods
employed by Senior Leaders include a Communication
Plan, Profit-Sharing Plan, recognition and rewards,
newsletters, Employee Performance Review System,
and other Human Resource Plans discussed in Category
6. The Monday Morning Meeting is the primary
communication tool used to motivate, share learning,
and discuss topics such as diversity, ethics, and values.
Minutes of these meetings are emailed to all employees,
including field and branch office employees. These
methods are designed to reinforce high performance in
those areas identified on the Strategic Plan. These
methods are fully deployed and have been employed
for a number of years through multiple cycles of
refinement.

1.1b(2) Action Focus and Creating/Balancing Value

Senior Leaders create a focus on action through the
Strategic Planning process (Figure 2.1-1). The planning
process incorporates a focus on creating and balancing value
for customers and stakeholders. Through this bi-annual
process, Senior Leaders evaluate and develop corporate
objectives, incorporate continuous improvement, define
strategic initiatives, and establish ownership and
schedule. The Strategic Plan guides Manager’s
discussion and decision-making.

1.2a(1) Key Governance Factors

MESA’s small size and flat management structure result
in direct management accountability for company
actions. Managers report directly to the President, who
has primary responsibility and accountability for any
action or inaction of MESA. The MESA Strategic Plan
provides a defined framework to assess whether a
manager’s efforts are consistent with the company’s
strategy. Key factors are addressed through the
Organizational Governance Process (Figure 1.2-1). These
methods are fully deployed, with multiple cycles of
refinement since 1999.

1.2a(2) Performance Evaluation of Senior Leaders

Leadership effectiveness is a key component in
accomplishing strategic initiatives, targets, and departmental
goals. Leadership performance evaluation includes internal
and external methods (Figure 1.2-2).

Leadership capabilities and procedures are continually
improved through on-going performance assessment and
personal development programs. As weaknesses are
identified through performance evaluation, individualized
improvement programs are developed. Leadership

<table>
<thead>
<tr>
<th>KEY FACTORS</th>
<th>METHODS</th>
</tr>
</thead>
</table>
| Management Action Accountability | • Strategic Plan  
• Open Book management style  
• Standards of Conduct  
• Employee Performance Review |
| Fiscal Accountability | • Outside accounting firm review  
• External tax return preparation  
• Lending institution review  
• Internal controls |
| Transparency for governance board members | • Not applicable to MESA |
| Audit independence (results shared at multiple levels) | • ISO 9001 system audits  
• Income, franchise, sales tax audits  
• Anti-drug/alcohol programs  
• Environmental reporting  
• DOT driver/OQ audits |
| Stakeholder/stockholder Protection | • Owner/President involved to protect personal interests  
• Standards of Conduct  
• Employee, customer, supplier annual surveys |

Figure 1.2-1 Organization Governance Process ensures accountability and protection of interests

improvement for managers is included in the development
programs identified through performance review processes.

<table>
<thead>
<tr>
<th>LEADER</th>
<th>PERFORMANCE EVALUATION</th>
</tr>
</thead>
</table>
| Chief Executive | • Management Team Review – annual  
• Employee Satisfaction Survey – annual (Figure 7.6-1)  
• Third-party coaches  
• The Alternative Board (TAB) |
| Senior Leaders | • Management Team Peer Review – annual  
• Employee Performance Review – quarterly  
• Employee Satisfaction Survey – annual (Figure 7.6-1)  
• Third-party coaches |
| Governance Board | • Not applicable to MESA |

Figure 1.2-2 Performance Evaluation Methods identify opportunities for improvement

1.2b(1) Impact on the public

Anticipation of public concerns and impacts on society for
both current and future products, services, and operations
are an integral part of the SWOT analysis and strategic
planning process performed twice per year at management
review meetings. Information used as a basis for evaluation
includes regulatory changes, education/training results, and
current industry practices. As concerns are determined to be
significant, they are addressed through the development of
strategic initiatives. The primary risks associated with
MESA’s operations are during installation and maintenance
of cathodic protection systems. The three primary risks are
driving, excavation, and technical expertise (Figure 1.2-3).
MESA addresses these risks by training, qualification, and
certification of all employees engaged in these activities.
The leadership of MESA is committed to maintaining the personal safety and health of the public, along with employees, by meeting or exceeding all regulatory requirements appropriate to MESA operations. This commitment includes a full-time employee dedicated to maintaining program documentation and insuring all training and safety requirements are met. Requirements are primarily associated with regulations from DOT and OSHA in areas such as Hazardous Material Communication; Hazardous Material Shipping; Anti-Drug and Alcohol Misuse Prevention; Workplace Safety; Operator Qualification; and Commercial Driving.

The process of cathodic protection does not pose a known risk to the public when properly designed and installed. Corrosion protection of underground or submerged structures actually provides a benefit to society in maintaining the long-term integrity of structures such as pipelines and storage tanks. The result of MESA’s operations, services, and products is a positive impact on the environment and increased public safety. Any risks to the public are protected by both state and federal regulating bodies, who impose parameters of operation on MESA customers. The products used in the installation of cathodic protection systems are non-hazardous to the public. MESA maintains complete Material Safety Data Sheet (MSDS) information on its products and makes them available upon request. MSDS information is also posted on the MESA website.

MESA annually undertakes a due diligence analysis of all operations as part of our Environmental Quality Management Program. Appropriate actions are taken to ensure compliance with Environmental Protection Agency requirements and compliance reporting under the Superfund Amendments and Reauthorization Act (SARA) of 1986 and the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986. MESA has appointed a Pollution Prevention Team and complies with the Oklahoma Pollution Discharge Elimination System (OPDES) by systematically reviewing and monitoring potential pollution sources. MESA pursues a proactive Environmental Quality Management Program and addresses any questions or concerns aggressively and thoroughly. MESA tracks its progress monthly in meeting regulatory reporting deadlines through a calendar maintained by the Administrative Department, with its goal being that all deadlines and training requirements are met (Figure 1.2-4).

<table>
<thead>
<tr>
<th>RISK</th>
<th>DESCRIPTION</th>
<th>LIKELIHOOD RANKING</th>
<th>IMPACT RANKING</th>
<th>RISK REDUCTION PROCESSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driving</td>
<td>• Cars</td>
<td>1</td>
<td>2</td>
<td>• Commercial Drivers License</td>
</tr>
<tr>
<td></td>
<td>• Trucks</td>
<td></td>
<td></td>
<td>• Insurance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Training</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Safety Program</td>
</tr>
<tr>
<td>Excavation</td>
<td>• Backhoes</td>
<td>2</td>
<td>1</td>
<td>• Training/Operator Qualification</td>
</tr>
<tr>
<td></td>
<td>• Trenchers</td>
<td></td>
<td></td>
<td>• Insurance</td>
</tr>
<tr>
<td></td>
<td>• Drill trucks</td>
<td></td>
<td></td>
<td>• Preventive maintenance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Safety Program</td>
</tr>
<tr>
<td>Technical Expertise</td>
<td>• Defective design</td>
<td>3</td>
<td>3</td>
<td>• Training</td>
</tr>
<tr>
<td></td>
<td>• Defective installation</td>
<td></td>
<td></td>
<td>• NACE certification</td>
</tr>
<tr>
<td></td>
<td>• Interference</td>
<td></td>
<td></td>
<td>• Operator Qualification</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• In-Service forms</td>
</tr>
<tr>
<td>Environmental</td>
<td>• Stormwater runoff</td>
<td>4</td>
<td>5</td>
<td>• Training</td>
</tr>
<tr>
<td></td>
<td>• Deep anode drilling</td>
<td></td>
<td></td>
<td>• Permitting</td>
</tr>
<tr>
<td></td>
<td>• Subcontractors</td>
<td></td>
<td></td>
<td>• Installation process</td>
</tr>
<tr>
<td>Hazardous Materials</td>
<td>• Epoxies</td>
<td>5</td>
<td>4</td>
<td>• Training</td>
</tr>
<tr>
<td></td>
<td>• Solvents</td>
<td></td>
<td></td>
<td>• Hazcom Program</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Quantity control</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• MSDS</td>
</tr>
</tbody>
</table>

Figure 1.2-3 Societal risks of products/services

<table>
<thead>
<tr>
<th>REGULATORY/LEGAL REQUIREMENTS</th>
<th>KEY RISK REDUCTION PROCESSES</th>
<th>MEASURES</th>
<th>GOALS</th>
<th>FIGURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory Reporting</td>
<td>Monthly Reporting Calendar</td>
<td>Submitted On-Time</td>
<td>100%</td>
<td>7.6-6</td>
</tr>
<tr>
<td>Regulatory Compliance</td>
<td>Audits &amp; Training</td>
<td>Violations</td>
<td>0</td>
<td>7.6-6</td>
</tr>
<tr>
<td>Safe Workplace</td>
<td>Safety Program</td>
<td>Lost Time Accidents</td>
<td>0</td>
<td>7.4-9</td>
</tr>
<tr>
<td>DOT Compliance</td>
<td>Anti-Drug/Alcohol Program Operator Qualification</td>
<td>• Incidents</td>
<td>0</td>
<td>On-site</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Qualified People</td>
<td>50%</td>
<td>7.4-5</td>
</tr>
</tbody>
</table>

Figure 1.2-4 MESA manages regulatory/legal requirements by achieving 100% compliance in critical areas.
1.2b(2) Promoting and ensuring ethical behavior

The cathodic protection industry is a relatively small, mature market. Retention and growth of existing customer and vendor relationships is critical to long-term success. MESA recognizes that its reputation is one of its most important assets in developing critical, long-term customer and vendor relationships. From its origin in 1979, MESA business practices have been based on a foundation of trust, honesty and ethics. MESA demonstrates this philosophy to employees, customers, suppliers, and the public through a Values Statement in its Strategic Plan.

Employees are provided a documented Standards of Conduct which guides business activities with MESA stakeholders: other employees, customers, vendors and communities where MESA operates. The Standards of Conduct are reinforced through processes such as the Monday Morning Meeting, employee newsletters, and the MESA Intranet. Ethical behavior is monitored by regular communication and contact between senior leadership, employees, customers, and suppliers (Figure 1.2-5). Employee satisfaction, customer satisfaction, and supplier surveys provide additional feedback mechanisms. Ethical behavior is measured by incident occurrence and monitored through an incident log.

1.2c Support of Key Communities

MESA encourages and supports volunteer community activities by its employees. (Figure 1.2-6)

The MESA Vision and Values (Figure P.1-1) addresses this commitment.

<table>
<thead>
<tr>
<th>RISK</th>
<th>DESCRIPTION</th>
<th>RISK REDUCTION PROCESSES</th>
<th>MEASURES</th>
<th>GOALS</th>
<th>FIGURE</th>
</tr>
</thead>
</table>
| Employee    | Theft, harassment, kickbacks, illegal behavior, fraud | ● Employee Hiring Process  
● New Employee Orientation  
● Communication  
● Training  
● Standards of Conduct  
● Insurance | Major Incidents | 0       | 7.6-4  |
| Suppliers   | Kickbacks, preferential treatment, gifts | ● References/referrals  
● Standards of Conduct  
● Communication Plan | Major Incidents | 0       | 7.6-4  |
| Customers   | Kickbacks, preferential treatments, gifts | ● References/Referrals  
● Standards of Conduct  
● Communication Plan | Major Incidents | 0       | 7.6-4  |
| Corporate   | Fraud, ignore legal requirements, software licensing | ● Standards of Conduct  
● Training  
● Regulatory reporting | Major Incidents | 0       | 7.6-4  |

Figure 1.2-5 Ethical Risk Reduction and Communication

**Key Community Support Process**

<table>
<thead>
<tr>
<th>Why</th>
<th>Identify/Select Key Communities</th>
<th>Key Communities</th>
<th>Support, Contribute and Improve</th>
<th>Result</th>
</tr>
</thead>
</table>
| Industry Connection  | • Industry Connection  
• Personal Connection  
• Personal Involvement  
• Geographical   | • Nace International  
• Nace Foundation  
• Tulsa - Houston – Tallahassee  
• Cystic Fibrosis Foundation  
• Blue Star Mothers  
• Oklahoma Blood Institute  
• Food For Families  
• Adopt a Family | • Time  
• Company Money  
• Employee Donations | • Recognized Community Leader  
• Employee Satisfaction  
• Better Community |

Rules

• No religious affiliation  
• No schools  
• No political affiliation  
• No athletic teams

Figure 1.2-6 Key Community Support Process showing how MESA selects and supports its communities
Generally, volunteer activities are selected because of an employee’s personal commitment to an organization. The company joins in that commitment through either financial or additional volunteer support. Deployment to Tulsa-based employees is accomplished through the operational plan created by the group, including such activities as contests, employee newsletter, and vendor support. Deployment to Houston and Florida based employees is primarily through leadership encouragement. Because of the limited personnel in each location, participation is primarily a result of individual desire rather than a company-organized event. MESA’s return on investment is recognition of leadership in our local and professional community, increased employee satisfaction, and a better community to live in. A summary of community support activities is provided in Figure 7.6-7. An abbreviated listing of community support activities is provided below.

**Cystic Fibrosis Foundation:** MESA has actively supported the Cystic Fibrosis Foundation (CFF) for over ten years with both financial and time contributions. MESA has been a Premier Corporate Sponsor for seven years, donating $5,000 to $10,000 annually. In addition, MESA employees have provided leadership to the Sooner Chapter of Cystic Fibrosis Foundation. MESA’s President served as Vice-President and President of the Sooner Chapter in 2000 and 2001. MESA’s Sales Manager, John Cole and his wife Stephanie, received the Henry Zarrow Award for Leadership in 2001 for demonstrating continued leadership over a sustained period. Additionally, Terry May and his wife Pat, received this award in 2002. This award is the highest award for the Sooner Chapter. John Cole served as President of the Sooner Chapter in 2004. Other employees have provided time to support activities such as Bon Voyage and Guys and Dolls. Each year, a Christmas contribution is given to the Sooner Chapter of CFF on behalf of key MESA customers. Customers have been very positive about this annual gift given in recognition of the business they do with MESA.

**Food for Families:** MESA organized a food drive in 2002 that collected $930 plus 779 cans of food distributed to needy families in the Tulsa area. During the same event in 2003, MESA employees collected $1,589 and 174 cans of food for need families. In 2004, MESA increased its donations to $4349 and 163 pounds of food. MESA was recognized as the largest contributor in the category of organizations with 50 to 300 employees in Tulsa and having the highest per employee contribution rate in the city of Tulsa. MESA was again recognized in 2005 and 2006 as the largest Tulsa contributor in the category of companies with 50 to 300 employees.

**NACE International:** MESA commitment to its communities includes technical societies. The entire oil and gas industry has benefited by the contributions of MESA through its participation in NACE International. NACE International is a 15,000 member society based in Houston, Texas. The organization, previously known as the National Association of Corrosion Engineers, is the premier technical society focused on corrosion and corrosion control. MESA has supported this organization at local, regional, and national levels for over 26 years.

MESA is a Gold Corporate Member of NACE International and provides additional financial support through sponsorships, advertisements, education courses, and trade show exhibits. MESA employees have provided leadership for three local sections of NACE and the Central Area of NACE. MESA’s President served on the Board of Directors from 1999 to 2001 as the National Treasurer. Additionally, he has written a series of articles in *Materials Performance*, the industry magazine. The articles focus on quality improvement, the Baldrige model, and other business oriented topics. MESA employees have served on a wide variety of national committees. NACE participation summary is shown in Figure 7.6-7.

This dedicated commitment was recognized in 2000 when MESA received the NACE International honor of Distinguished Organization Award. Three MESA employees have received the NACE Distinguished Service Award; in 1997, 2002, and 2006.

In 2002, MESA’s President was certified as an Instructor of NACE cathodic protection courses. MESA built a dedicated training center at the Tulsa headquarters in 2002/2003 with the intention of hosting NACE courses at this facility. Nine courses have been held so far, with a total of over 150 industry participants.

MESA employees participate in a number of other NACE affiliated educational programs including the annual Appalachian Underground Corrosion Short Course and the Oklahoma University Underground Short Course.

**NACE Foundation:** In 2002, Terry May was elected as the first President of the NACE Foundation, which is an educational outreach organization arising out of NACE International. As President of the Board, he implemented the strategic planning process utilized within MESA to develop a strategic plan for the Foundation. Together, with other industry volunteers, he is leading the effort to grow this organization from a startup position to a national resource with the mission "to excite and educate students and the public about corrosion science and engineering”. Outreach programs are planned for K-12 and university level students. Recognizing Terry’s leadership abilities, in March 2003, 2004, and 2005, he was elected to a second, third, and fourth term as President of the NACE Foundation. MESA contributes over $10,000 annually to the NACE Foundation and is one of the largest contributors with a $100,000 multi-year pledge.
Category 2 - STRATEGIC PLANNING

2.1a(1) Strategic Planning Process

MESA senior leadership, consisting of the President and six department managers, reviews the company vision and mission biannually as part of the strategic planning process (Figure 2.1-1). Specific objectives are established to maintain the focus and direction of the company. This process includes both a long-term and short-term outlook of the future. The outcome of MESA’s strategic planning process is presented in a one-page document that is easily communicated to stakeholders. This presentation clearly establishes linkages between the Vision, Values, and Mission to the strategies and actions required to accomplish them. The simplicity of the presentation enables management to assess the impacts of change and evaluate potential responses without recreating the plan. The document serves as the driving force behind MESA operational planning and resource allocations.

The strategic plan is used to communicate to employees the company’s vision and each individual’s role in achieving that vision. New opportunities and projects are evaluated against the plan to determine the impact on priorities and resource allocations. Additionally, operating results are measured against near-term objectives and strategies to evaluate progress and to identify required changes. Through these biannual reviews, along with monthly manager meetings and daily communication with customers and suppliers, MESA stays in touch with the current business environment. This very simple presentation allows integration of both strategic and tactical planning into day-to-day management. The strategic plan is global in its orientation and long-term in its focus. It presents lasting values, beliefs, purpose and mission. It guides resource deployment and establishes clarity in MESA strategic positions that deliver clear differentiation from competitors and added value to target markets. The strategic planning process has been developed and expanded since the original plan was developed in 1997, undergoing numerous cycles of refinement to improve the planning process. An example is the addition to the plan document, assigning responsibilities and time-based deadlines.

**Step 1 – Define and Build Foundation:** This phase defines the company’s vision and mission and establishes the principles on which strategies will be based. It is the critical component of the strategic plan that defines the long-term direction of the company. In preparation for creating the initial vision and mission, MESA conducted extensive research and analysis defining core markets and opportunities as well as company capabilities. These same areas are revisited in the continual process of redefining MESA’s strategic direction. Results are the MESA Vision, Values, and Mission. These statements are the operating philosophy that drive the company and describe the purpose for which MESA exists. These statements are regularly reviewed, most recently in 2005 with employees directly involved in the development process. Through a series of Lunch and Learn sessions, a voluntary group representing 40% of employees participated in a complete revision of the Vision and Mission. The Strategic Plan Foundation is reviewed and revised twice annually at management retreats. The long-term outlook is a visionary view of MESA’s future, looking out at least five (5) years in the future. Five years was selected as the long-term horizon because of the relative stability of the industry. While the basic foundation for MESA’s strategic thinking was developed many years ago, it is kept current on a daily, weekly, monthly and semi-annual basis through a series of management interactions and review.

Figure 2.1-1 Strategic Planning Process consists of 5 steps with a feedback loop
Step 2 – Analyze Information: Information obtained from internal and external sources is analyzed to identify and prioritize strategic challenges and opportunities. A formal Strengths-Weaknesses-Opportunities-Threats (SWOT) analysis is performed at bi-annual Management Reviews. This analysis is the collective view of MESA’s senior management team. Senior leaders “re-affirm” the basic components of the Strategic Plan. In these meetings, senior leaders focus on the current SWOT analysis, set in the context of the current version of the Strategic Plan. The end purpose of these sessions is to identify those items of greatest significance in terms of the impacts (positive or negative) on MESA.

Step 3 – Develop Strategy: The outcomes of Step 2 are utilized to create a business strategy defining overall goals, specific initiatives and the strategic targets required to achieve the initiatives. This part of the strategic planning process establishes very specific, prioritized activities that become the primary focus of business operations. Where Step 1 defines “what we are going to do or be,” Step 3 defines “how we are going to do it.” Items that can be addressed immediately (within MESA current resource base) are included as short-term strategic targets (1 year). This review process is MESA’s systematic approach for anticipating public concerns with current and future products, services, and operations then proactively preparing for those concerns.

Step 4 – Implement: MESA implementation efforts include the assignment of overall responsibility for strategic initiatives to specific managers. These may be individually performed or addressed by inter-departmental teams. Assigned managers are responsible for successful implementation and reporting results to the management team. As priority decisions are reached, the implementation process includes developing specific action plans, balancing resources and finalizing the time frames for accomplishing the objectives. The Communication Plan assures employees are aware of their part in accomplishing the plan.

Step 5 - Manage and Renew: Management meets twice a year in June/July and in December. These meetings result in a complete review and update of the strategic plan along with operational/organizational performance results. Monthly performance is monitored through Corporate and Departmental Scorecards reflecting key indicators. Financial performance is reviewed against the revenue plan and sales projections. Strategic Plan goals and corresponding performance measurements are systematically confirmed or modified by senior management after a comprehensive review and analysis of available data. Performance review is accomplished on a monthly, bi-annual, and annual frequency described in Category 4.

2.1a(2) Key Factors and Data Analysis

MESA’s strategic planning process is a systematic method for ensuring that key factors (Figure 2.1-2) are addressed in the development of the strategic plan. These factors are analyzed in the SWOT analysis described in Step 2 of the strategic planning process (Figure 2.1-1).

2.1b(1) Strategic Objectives

The one-page Strategic Plan is used to communicate and focus resources on the Key Strategic Objectives. MESA has systematically used this approach since 1997, with numerous improvements made in the format and content. The approach ensures comprehensive deployment throughout the organization. Aligned, linked activities ensure integration of organizational needs to MESA Vision.

<table>
<thead>
<tr>
<th>KEY FACTORS</th>
<th>COLLECTION</th>
</tr>
</thead>
</table>
| Customer/market needs, expectations, opportunities | • Customer communications  
| | • Customer Satisfaction Survey Process  
| | • Market Surveys  |
| Competitive environment and relative capabilities | • Customer communications  
| | • Customer Satisfaction Survey Process  
| | • Supplier input/survey  
| | • Competitor data from financial sources  |
| Innovations or changes affecting MESA | • Customer communications  
| | • Customer Satisfaction Survey Process  
| | • Industry publications  
| | • Conferences, training, seminars  
| | • Supplier input/survey  |
| Strengths/Weaknesses | • Customer Communications  
| | • Customer Satisfaction Survey Process  
| | • Supplier input/survey  
| | • Organizational Performance Review  
| | • Quality System results  
| | • Employee Satisfaction Survey Process  
| | • Quality Application Feedback Reports  |
| Redirection of resources | • Periodic review and reassessment (Bi-annual Management Review and monthly Manager Meetings)  |
| Financial, societal, ethical, regulatory, and other risks | • Bi-annual Management Review of identified risks  |
| Changes in economy | • Periodic review and reassessment (Bi-annual Management Review and monthly Manager Meetings)  |
| Unique organizational factors | • Periodic review and reassessment (Bi-annual Management Review and monthly Manager Meetings)  |

Figure 2.1-2 Key Factors and data collection processes enable a comprehensive Strategic Planning Process.
What We Do This column in the MESA Strategic Plan identifies the distinctive capabilities of MESA that have special value to the marketplace. These are areas where MESA must excel in order to achieve its mission. The positions must be of high value to the customer and significant enough to be clearly distinguishable from competitors. These positions are supported by capability goals, such as financial strength, access to capital and employment capabilities. The underlying values and required capabilities of the company may change as market and industry conditions, external environments and the basis for competition moves. Monitoring these positions and external trends is on-going at the market and customer level to determine changes and opportunities. These distinct capabilities along with the Vision, Values, and Mission, establish the 5-year plan for MESA. The five Key Strategic Objectives are Customer Service, Relationships, Performance Excellence, Work Environment, and Opportunistic Growth.

How We Measure Success This column represents the measurements and goals or targets that MESA uses to monitor progress towards achieving the strategic initiatives and positions of excellence. MESA targets are time specific and measurable, typically creating the annual operating plan for MESA. Responsibility for achievement of targets is assigned to a Department Manager. The measurable targets identified through the strategic planning process are viewed to be drivers of success for MESA.

How We Achieve Success This column represents the business, functional and resource commitments made by MESA. These activities define how the company will deploy resources to accomplish a specific goal. Internal operating departments utilize strategic initiatives as guides for developing related departmental goals, strategies and objectives. These initiatives are the mid-term portion of MESA’s Strategic Plan. The planning horizon is 1 year.

Who Leads This column identifies the Manager assigned responsibility for the initiative, along with the timeline for completion. This Manager is also responsible for providing progress and performance information for review as described in 4.1 b (1).

2.1b(2) Addressing Strategic Challenges/Opportunities MESA identifies strategic challenges as the Threats/Weaknesses/Opportunities identified at Management Review. The fourteen threats, weaknesses, and opportunities identified at the last Management Review are addressed by the Strategic Plan; including a combination of short and long-term initiatives. The initiatives are developed following a thorough analysis and prioritization of identified challenges and opportunities. With its balanced focus on customers, employees, and suppliers plus the direct participation by the Owner/President, MESA’s key stakeholder needs and expectations are included in the Strategic Planning Process.

2.2a(1) Action Plan Development & Deployment Development and deployment of the Action Planning Process (Figure 2.2-1) is managed through the MESA Quality Management System. Most action plans are initiated through the ISO Action Request Process to evaluate and initiate action on strategic initiatives, suggestions, process improvements, etc. Action Requests are reviewed and approved by the President. Depending upon the complexity of the Action Request, the President may require that a formal action plan be prepared. Action plans for strategic initiatives are documented on an Action Plan form. The Action Plan form defines steps based on DMAIC (Define, Measure, Analyze, Implement, Control) methodology to ensure that action plans are comprehensive and consider alternatives, resource requirements, schedule, and control. Resources are allocated, following review and approval of action plans by the President. Our approach to the formal development of key action plans resulted from an improvement opportunity identified in a Baldrige site visit in 2003.

2.2a(2) Key Action Plans Key strategic initiative action plans for 2006 include: continued development of key supplier relationships, LEAN program implementation, development of a MESA Database (with corporate and department performance indicators defined, measured, deployed, and displayed), inter-office coordination of field service projects, development of new training events, and implementation of growth plans.

Other major action plans include a Communication Plan, Revenue plan, Customer-Based Sales Plans and Training Plan. The Communication Plan defines the tools used for communication with MESA’s stakeholders including customers, employees, suppliers, and community. The presentation of this plan mirrors the Strategic Plan. The Revenue plan includes annual targets, as well as a rolling monthly revenue projection. The four revenue departments develop annual Customer-Based Sales Plans supporting the annual financial targets. The Training Plan identifies specific training scheduled for each employee during the year.

The underlying market condition supporting MESA’s strategic plan and the ultimate successful implementation is the long-term stability of the cathodic protection industry. Cathodic protection is federally mandated for underground steel structures such as gas and oil pipelines, underground storage tanks, and above-ground storage tanks. These markets comprise the major percentage of MESA’s revenues and are largely maintenance driven rather than new construction driven. A major trend occurring in the customer base over the past five years is an increase in revenue from the service/construction divisions, indicating more reliance on outsourced turn-key services by end-user segment. This trend is further confirmed through an increase in sales to contractors with resulting decrease in the
reseller segment. Based on this information, MESA is expanding its service capabilities in its Houston and Florida offices to capitalize on growth opportunities. Supporting opportunity in this region is competitor weakness and increased activity in the gas/oil exploration and production market in Texas.

2.2a(3) Key Human Resource Plans


2.2a(4) Key performance measures

Progress on action plans is tracked through the Action Request process. Progress for major supporting action plans are monitored and measured monthly. Communication Plan results are measured by the actions completed. Revenue Plan is assessed by variance comparison of actual results versus the plan, with a resulting annual projection calculated monthly. Sales Plan results are measured by variance analysis of results versus plan for key customer accounts. The column How We Measure Success in our Strategic Plan identifies key metrics used to track the progress of our action plans.

As shown in the Action Planning Process (Figure 2.2-1), the five Strategic Goals are covered by the measurement system, ensuring complete deployment and organizational alignment.

2.2b Performance Projection

There is no published data available for comparison to competitor performance. Verbal communication with customers, competitors, and suppliers indicates that MESA’s performance generally leads the industry in the areas of quality and service with both customers and suppliers. Quarterly customer satisfaction surveys indicate MESA superiority over best competitors. Employee satisfaction surveys indicate high performance compared to a national database. Other sources of comparative information include Dun & Bradstreet, Wright Reports, Industry Week magazine, American Society for Training and Development, NACE International, ACSI, financial, and insurance providers.
Category 3 CUSTOMER AND MARKET FOCUS

3.1 Customer and Market Knowledge

MESA’s core business (cathodic protection services and materials) is historically focused on the pipeline industry. Although this industry is still the primary customer base, MESA has used the Customer and Market Focus Approach to identify a number of additional markets to grow its business. MESA’s processes to Customer and Market Focus (Figure 3.1-1) are fully deployed and have undergone numerous cycles of refinement and integration.

3.1a(1) Customer Identification and Selection

Customers, Customer Groups, and Market Segments have been identified through historical experience over MESA’s 27 year history. Through deployment and refinement of our Customer and Market Focus Approach, MESA is systematic in identifying new customer/

The primary segmentation of customer type is end user, contractor, and reseller. Additional segmentation includes information used in analysis of the MESA customer base. Segmentation data is obtained through previous knowledge of the customer, along with other identification methods listed in Figure 3.1-2. As information is obtained, it is entered into the MESA customer database.

Although no formal information is retained for competitor clients, data compiled within the MESA customer database is considered comprehensive enough to identify market trends and emerging customer requirements. In targeted market segments, MESA obtains specific information through multiple channels such as competitor customers, customer/prospect interviews, referrals, trade shows, etc.

Target markets and customers are selected following analysis and matching with MESA capabilities and strengths. These opportunities are prioritized, with highest ranked opportunities considered during bi-annual SWOT analysis or monthly Manager Meetings. SWOT Analysis results are assigned to the appropriate Sales Group and Action Plans developed for chosen customers/markets.

A documented Business Acquisition Strategy was developed through a 2005 Strategic Initiative. MESA’s acquisition strategy begins with a comprehensive knowledge of the industry and positioning to respond to opportunities. As opportunities are developed, MESA balances resources to target and build relationships with key identified prospects.

### Table: ID Methods and Selection

<table>
<thead>
<tr>
<th>ID METHODS</th>
<th>SELECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market research</td>
<td>Market surveys</td>
</tr>
<tr>
<td>Referrals</td>
<td>Specific customer research</td>
</tr>
<tr>
<td>Industry knowledge</td>
<td>Match w/ MESA capabilities</td>
</tr>
<tr>
<td>Industry organization participation</td>
<td>Situational analysis of customer including competitor position</td>
</tr>
<tr>
<td>Competitor customers</td>
<td>and vulnerability</td>
</tr>
<tr>
<td>Personal relationships</td>
<td></td>
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</tbody>
</table>

Figure 3.1-1 Customer and Market Focus Approach demonstrating an aligned, balanced approach

Figure 3.1-2 New market/customer identification methods
3.1a(2) Listening and Learning

MESA acquires customer and market intelligence through formal and informal processes. The primary source is a Customer Satisfaction Survey Program (Figure 3.2-2) implemented in 1999 providing market and customer satisfaction information. Secondary and less formal sources of information include interactions with customers, competitors, suppliers, and previous customers. This information gathering occurs at trade shows, during sales calls, or as part of routine telephone conversations. Credible information is shared within the organization verbally or by e-mail. Through extensive connections in the customer, supplier, and competitor arenas, MESA becomes quickly aware of industry events, market changes, and competitor moves. This listening and learning capability results in the ability for quick analysis and decision-making. Determination methods are essentially the same for all different Customers and Customer groups.

Key customer requirements and expectations are identified through analysis of the Customer Satisfaction Survey Process. This third-party process provides quarterly data, statistically analyzed and summarized annually. This information is reviewed quarterly to monitor MESA performance relative to best competitor; ensuring current information is available for decision-making and direction changes as required.

MESA’s Strategic Plan includes two goals highlighting the importance of gathering market information. The first goal relates to customer service and specifically targets the measurement of customer satisfaction. The second goal relates to the development of “preferred” customer relationships. The MLM alliance between MESA and two other companies exists because of information developed through intelligence gathering. This alliance arrangement serves the customers’ need for one source to provide CP requirements and has been successful since 1996.

Additional market information is acquired through general industry sources including technical magazines; Cost of Corrosion Study sponsored by NACE International; third-party sponsored brand preference studies, and independent consultants. MESA also performs internal market surveys of the cathodic protection (CP) industry relative to sales and competitor position. Regular renewal and updating of the MESA Strategic Plan assures that gathering market data is an on-going process.

Annually, MESA summarizes customer data into reports with a segmentation breakdown by the parameters described in Figure 3.1-2. Significant changes with key customers are analyzed to determine cause and effect. Market data is used by the management team in its review and renewal of the strategic plan to insure that company direction is consistent and current with market changes and needs. Annually, major customer accounts are reviewed and analyzed. Additional information compiled by MESA includes feedback from current and former customers, customer retention results, and complaint (NCR) data. This information is incorporated into the Strategic Planning Process and Action Planning Process. Improvement opportunities are identified and considered during the SWOT Analysis process. Specific actionable information obtained is referred to Sales Groups for follow-up.

3.1a(3) Keeping Listening/Learning methods current

Listening and learning methods are kept current with business needs through our systematic annual evaluation of our customer satisfaction survey program and an ongoing focus on the importance of customer and market knowledge. A major initiative in 2004 was the implementation and deployment of Microsoft CRM program for sales personnel, which facilitates customer information gathering and sharing. Included in the CRM implementation is the acquisition of information for 14 key factors identified by the Sales groups as those most important in identifying customer value to MESA. These 14 factors are scored for each customer to determine contact schedule, pricing, and service levels (Figure 3.1-3).

<table>
<thead>
<tr>
<th>CUSTOMER VALUE FACTORS TO MESA</th>
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<tbody>
<tr>
<td>Current Sales $</td>
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<tr>
<td>Projected Sales $</td>
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<tr>
<td>Buy on price or value?</td>
</tr>
<tr>
<td>Client buying process</td>
</tr>
<tr>
<td>Competitive position</td>
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<tr>
<td>Payment history</td>
</tr>
<tr>
<td>Client contact relationship</td>
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</tbody>
</table>

The Customer Satisfaction Survey Process is annually reviewed and revised. Survey questions are updated, along with the list of respondents. First implemented in 1999, the Customer Satisfaction Survey Process has undergone numerous cycles of improvement.

3.2a(1) Building Customer Relationships

MESA has a clear vision of communicating with customers in a manner leading to positive personal relationships. Two key strategic goals: Customer Service and Relationships are directly focused on building positive customer relationships. The MESA Strategic Plan identifies specific strategic initiatives aimed specifically at increasing loyalty, repeat business, and positive referrals.
Since 1979, the company reputation has been built on service and quality. The success of this focus is apparent as seen in feedback from the Customer Satisfaction Surveys that says 94% of customers interviewed consider MESA a company they prefer doing business with due to the total quality of the relationship. This recognition exceeds that of competitors by an overwhelming margin (Figure 7.2-1). One of the outcomes of the December 2002 strategic planning process was the implementation and deployment of a guarantee program. The MESA Value Promise (MVP) program was unveiled in March 2003 to strengthen the MESA position as the industry’s quality and service leader.

A routine part of weekly, Monday morning employee meetings is the reinforcement and importance of customer service. MESA employees understand that customer service means responding quickly, in a matter of hours, not days. MESA does not usually compete on price but on the value of quality and service they are able to provide to customers. Key accounts are assigned to each salesperson as the primary contact for that account. The primary salesperson is responsible for maintaining communication with the customer and ensuring that needs are satisfied. Salespeople initiate communication with key customers on a defined schedule based on customer rating.

MESA’s approach for building relationships with key customers in different markets is essentially the same. The philosophy of customer service and quality is consistently emphasized in markets. Focus on key performance metrics such as ON-TIME shipping and nonconformance (NCR) rate reinforce MESA commitment to the development of strong customer relationships. Follow-up and resolution of “ALL” customer complaints is also instrumental in customer retention and loyalty. Unique approaches may be used for a specific market.

External customer service is measured and tracked on the Sales Group Visual Performance Board. The contact scheduling process is currently being improved through the customer scoring process described in 3.1a(3). Prompt/accurate response to customer inquiries is important in maintaining positive relationships.

3.2a(2) Key access mechanisms

MESA’s key access mechanisms enable customers to seek information, conduct business, and make complaints via personal contact, trade shows, mail, fax, telephone, email, and the MESA website. Each of these mechanisms is utilized, with a heavy reliance on personal and telephone contact to aid in the development of personal relationships. Customer contact schedule is defined by the Customer Based Sales Plan. The primary factors in establishing the contact schedule are sales volume level and targeted customers. The Sales Group annually prepares a listing of customer contact requirements and communicates these requirements to personnel involved in the customer response chain. Deployment throughout the Sales Groups is reinforced through regular meetings.

The MESA website is a key customer resource in providing technical and material data. Customers are encouraged to access this information through referral by sales personnel and annual distribution of CDs containing the information provided on the website. The CP Design Center section of the website provides technical information assisting customers in the design stages of cathodic protection applications. The easy-to-navigate site provides comprehensive information including product data, MSDS, credit information, terms of conditions, etc.

3.2a(3) Customer Complaint Process

A key part of the MESA Quality Management System is Corrective and Preventive Action. The MESA Complaint System (Figure 3.2-1) is incorporated into this part of our ISO 9001 based system. MESA documents internal and external non-conformances (NCRs) to identify recurring opportunities for improvement. External NCRs are defined as those directly impacting a customer and are reported monthly on the Corporate Report Card. Examples of external NCRs include late deliveries, faulty materials, incorrect quantities or incorrect invoice. Complaints received via e-mail or on-line are dealt with in the same manner as complaints received verbally or in writing. As complaints are received, information is entered onto an NCR form and logged into the complaint system. Additionally, the scheduled customer contact process is used to solicit actionable information.

Employees are empowered to make decisions concerning immediate corrective action for quick complaint resolution. The problem is analyzed for root cause of the complaint. Process changes are made when appropriate. NCR closure requires review and approval by the President. In most cases, the President makes telephone contact with the affected customer to ensure satisfactory resolution and make a final apology. Customer feedback provides the President with information regarding complaint resolution. This contact is usually made within two weeks of the NCR. Follow-up contact by the President results in overwhelmingly positive feedback and response.
In order to better understand NCR occurrence and impact, an improvement was made to the classification system in 2002 to segment NCRs into three categories: major, minor, and observation. Classification is based upon dollar value and impact to customer. MESA has an external NCR performance goal of ≤5 major customer-affected NCRs monthly. Follow-up actions are recorded, tracked, documented, and classified in the Quality Management System records maintained on the MESA Intranet. MESA aggregates complaints in an NCR Summary Log, broken down by source and cause. The Summary Log is reviewed at bi-annual Management Review meetings to detect and address trends in performance and to share lessons learned across the organization. Improvement opportunities are identified and strategic initiatives developed to address negative trends. A Quality Report Card was developed in 2005 to aid in analysis and evaluation of quality results.

3.2b(1) Customer Satisfaction Determination

MESA has always focused on customer satisfaction; however, there was no formal measurement method until 1999. At that time, the first external survey program was established to obtain baseline data. This program has since been expanded to include an ongoing program for measurement of customer satisfaction. One other critical program for monitoring customer satisfaction is the MESA Customer Complaint Process. Through follow-up contact with customers regarding performance problems, MESA continually receives actionable feedback on product and service quality. Both the Customer Complaint Process (Figure 3.2-1) and Customer Satisfaction Survey Process (Figure 3.2-2) are fully deployed and have undergone numerous cycles of refinement and integration with MESA’s Vision, Mission, and Strategic Objectives.

The primary source of information is an independent, third party customer survey program (Figure 3.2-2). The survey program is a comprehensive statistical survey of major customers. Surveys are conducted quarterly, with 35 to 40 respondents in each quarter. The questionnaire for the survey is reviewed annually for relevance. Questions are developed with input from the research firm, sales staff, administrative staff, and results of previous surveys. Some of the questions are specific to help MESA in making business decisions and improvements in service and performance. Actionable feedback is reported to MESA and assigned to the appropriate Sales Group for follow-up. Results are provided for the three primary segments: end-users, contractors, and resellers and the three primary job responsibilities: technical, purchasing, and management. Overall results provide a value score used for monitoring trends and comparison to competitors. Management feels the information provided through the survey process is representative of all Customer groups.

3.2a(4) Keeping approaches current

MESA’s approach to building relationships and providing customer access current with business needs and directions is through the ongoing strategic planning process described in Section 2. Input from numerous feedback sources including the Customer Satisfaction Survey Program is used to validate current approaches or develop new approaches.

The Communication Plan described in Section 2 addresses structured communication methods and frequency with our customers. This plan was developed utilizing the Strategic Plan as the basis for development and insures on-going and consistent communications with MESA stakeholders. Communication tools such as trade shows, direct mail, advertising, brochures and newsletters emphasize MESA’s strategic corporate messages. These overarching messages are reinforced by four supporting messages: quality, service, integrity, and stability. Both the strategic and supporting messages are directly tied to the strategic goals and initiatives in the Strategic Plan. The Communication Plan is reviewed at bi-annual Management Review and updated to coincide with any changes to the Strategic Plan.
Ongoing customer data acquisition is performed on a schedule determined by the MESA Sales Group. Information gathered from customer data acquisition is entered in the CRM database to be used by material Sales Groups. Data considered critical or vital to the Sales Group is communicated verbally or via email after entry into CRM. Information that is relevant to all employees is also discussed at Monday Morning Meetings to insure all employees are aware of feedback on a timely basis. Through this process, any corrective actions that are needed can be acted upon immediately.

All customer satisfaction information is aggregated and considered during management reviews and development of strategic initiatives. A recent example of a service improvement resulting from customer satisfaction surveys is a semi-automated shipping notice to customers. E-mail notice is sent to customers when orders are shipped from MESA using a Microsoft Access database program developed internally. The notice is initiated during the invoice process and requires no human intervention.

### 3.2b(2) Customer Follow-up

Follow-up to customers on products, services, and transaction quality primarily occurs during the NCR process. The first contact occurs during and following correction or resolution of the complaint. Additional contacts may occur during Manager and President follow-up. Actionable feedback is solicited during each contact.

### 3.2b(3) Competitor/Industry Benchmarks

There are no published customer satisfaction benchmarks for competitors or the cathodic protection industry. According to the research firm retained by MESA, the Customer Satisfaction Index and Customer Value Index resulting from MESA’s third-party quarterly surveys is comparable to the American Customer Satisfaction Index produced by a partnership of the University of Michigan, American Society for Quality, and CFI Group. The formal survey process (Figure 3.2-2) commissioned by MESA produces a comparison of customer satisfaction for MESA and its best competitor in each of the performance attributes. This information is used to monitor MESA performance in each of these areas and to identify areas in which our advantage is changing. These changes are evaluated and used in the development of strategic initiatives.

### 3.2b(4) Keeping Approaches Current

The customized third-party Customer Satisfaction Survey is the primary tool used to determining customer satisfaction. This survey process is improved through annual review and adjustment and has undergone several cycles of refinement. Approaches to determining customer satisfaction and staying current with business needs and directions include an annual review of third party survey questions and respondent list. A major improvement occurred in 2002, when MESA determined that a three year cycle was too long to provide timely information to keep MESA agile. An abbreviated quarterly cycle was implemented in 2003. In 2005, another improvement was made by increasing the scope of quarterly surveys. Evaluation of the NCR summary log also identifies trends related to current business direction.
Category 4 – MEASUREMENT, ANALYSIS AND KNOWLEDGE MANAGEMENT

4.1a(1) Performance Measurement

Four levels of Performance Measurement Systems are in place at MESA: 1. Corporate, 2. Department, 3. Process, and 4. Individual. MESA’s President owns the Corporate system. Department/Value Stream and Process systems are owned by the respective Department Manager. The Individual Performance Measurement System is owned by the Human Resources Specialist. Systems are designed to measure, analyze, and improve performance at the corporate, departmental, process and individual levels. Information generated by these systems is used to identify strengths, weaknesses, opportunities and threats to the organization and to identify opportunities for improvement. The systems and measures have been developed based upon industry knowledge, customer feedback, customer satisfaction value attributes, renewal of the strategic plan, and support of strategic goals and initiatives. Systems and measures are fully deployed and the organizational-level analysis is reviewed bi-annually at Management Review to insure they stay current with business needs and trends. Monthly and bi-annual reviews ensure the Performance Measurement System is sensitive to rapid or unexpected changes. The Performance Measurement Systems have undergone multiple cycles of refinement. The latest version of each of these systems is now fully integrated with MESA’s Strategic Plan.

MESA’s performance measurements are key drivers of decision-making and innovation. A strategic initiative is the development of a MESA Database to facilitate data acquisition and accessibility. Included in this initiative is a review and validation of current performance measurements. Monthly, bi-annual, and annual organizational performance review findings form the basis for identification of improvement opportunities. MESA leadership also uses information gained through previous Baldrige applications, site visits, and feedback reports to identify opportunities. The strategic planning process described further in Section 2 is used to align and incorporate these opportunities into company operations. Deployment and communication to stakeholders is defined through the Communication Plan.

1. Corporate Performance:

Overall corporate performance is primarily monitored in five ways: performance projection to annual and long-term goals, monthly report card, monthly financial review, bi-annual management review and annual financial results. The MESA Monthly Balanced Report Card with leading/lagging indicators, is reviewed monthly by management after month-end posting. The Balanced Report Card is available on a shared Managers’ directory on the MESA Information System. The scorecard is a one-page snapshot of balanced, critical performance measurements including financial, operational, customer, and human resources. The measures selected and included in the scorecard are the consensus of senior management as best reflecting alignment with company direction and indicative of organizational performance. The measures selected by MESA are primarily validated by customer feedback derived through the Customer Survey Program. The Balanced Report Card is posted monthly by the 5th business day after month end in the Managers Directory of the MESA Information System. Metrics are regularly and systematically reviewed by the President and Controller, with changes based on company needs and direction.

As an improvement identified in a previous Baldrige site visit, MESA developed long-term performance projections, identifying 33 metrics balanced across the five key strategic objectives. Performance projections are developed for both one year and five year outlook. Results are reviewed bi-annually at Management Review and included as the basis for decision-making and innovation.

2. Departmental Performance:

Each operating group develops customized performance metrics that drive group performance. These metrics are aligned with MESA’s strategic plan and balanced across key strategic goals. Data is gathered and displayed on Visual Performance Boards or Sharepoint scorecards.

3. Process Performance:

Process performance is measured by the metrics listed on the Monthly Report Card including 3-day shipments, on-time shipments, customer affected NCRs, and total NCRs. MESA has a five-year history of these metrics. Additional metrics were added in 2003 to enhance knowledge of process performance. These metrics were identified through organizational level analysis by the Plant Manager and President. These include average turn-around time for fabricated, non-fabricated, and direct shipments.

4. Individual Performance:

Individual performance assessments are performed quarterly for each employee. Historically, these assessments have been performed informally; however, a formal system was developed and implemented in 2001 for documentation of assessments. An improved system was deployed in 2004. Additional information regarding individual performance review is included in Category 5. The survey process consists of a series of questions aligned and balanced across MESA’s five key strategic objectives.

4.1a(2) Key Comparative Data

MESA’s process for selection and use of key comparative data is owned by the President and consists of an annual review of available data. This process is included in the
annual preparation of Baldrige applications and has undergone several cycles of refinement since deployment in 2002. The selection process consists of identification of the key metrics and searching for the closest applicable benchmark inside and outside of the industry. The primary emphasis in benchmark selection is the 34 measures listed on the Strategic Plan. MESA’s President, with third-party consultants, selects the benchmark and shares with the senior managers during the Strategic Planning Process to support operational and strategic decision making. Opportunities for performance improvement are considered during this process.

In most cases, there is little published comparative data available due to the size and make-up of industry competitors. Limited information is obtained from the annual report of the only public company in the industry. Some financial information for other competitors can be obtained through Dun and Bradstreet. In most cases, comparative information used for operational and strategic decision-making is obtained from outside the CP industry, such as the publication *Industry Week*. Information is primarily oriented to performance measurements such as On-Time shipping and productivity. Additional information regarding competitors is obtained through supplier and customer communication. A specific example of quality information about competitors came out of a study and subsequent article. This article focused on quality problems identified in the production of magnesium anodes. MESA obtained competitor products for testing that provided information in benchmarking quality of MESA anodes. This “secret shopper” approach was repeated in 2005 to evaluate market changes in quality.

4.1a(3) Keeping Performance Measurement System Current

The Performance Measurement System is kept current with business needs through annual review and alignment with the Strategic Plan’s analysis of important trends. This is the PLAN step of MESA’s Process Improvement Process (Figure 6-2). The Monthly Scorecard undergoes continuing evolution as each measurement is reviewed for relevance and new measurements added when appropriate. A strategic initiative is the redesign and development of a MESA Database. A review of current performance measures was included in that initiative. Additional feedback in 2004 and 2005 was acquired through Oklahoma Quality Award and Malcolm Baldrige Award site visits and feedback reports. MESA insures the performance measurement system is sensitive to change through the bi-annual Management Review and monthly result analysis.

4.1b(1) Performance Analysis

MESA’s Organizational Performance Review System (Figure 4.1-1) lists the various processes and systems used to review organizational performance. Senior leaders participate at their respective department or process level review, as well as the Strategic Planning Process included in bi-annual Management Review. Analysis methods include trend analysis, variance analysis, gap analysis, compliance, and statistical control charting.

The Strategic Plan and corresponding operating plans are reviewed bi-annually at Management Review meetings to evaluate progress. Organizational performance is reviewed and assessed, with adjustments made as necessary. The approach taken in these bi-annual Strategic Plan reviews and revision result in a continually evolving strategy establishing clear direction for managers and employees.

Additional benchmarking and performance assessment occurs through informal communications between MESA senior management, vendors, and customers. Outside consultants, such as those used for customer satisfaction surveys, market surveys, and employee satisfaction surveys provide additional feedback. This feedback is reviewed and analyzed at Management Reviews to help determine strategic direction of the company.

The President of MESA participates in an outside group to help benchmark performance expectations against other small businesses. The Alternative Board (TAB) is made up of owners, presidents and senior management of local businesses in the Tulsa, Oklahoma area. The group meets with a facilitator once per month to discuss issues such as financial, operational and human resources within their individual companies. Members share successes and challenges with the group and group members give feedback based on their personal experiences. There is a diverse expertise background in the group that allows for engineering, accounting, legal and management consulting input. Most of the members do not have an operational board of directors within their own companies. The TAB group provides a venue to get advice about subjects that are difficult to discuss internally.
Data from NCRs and ARs is available through the MESA Intranet. NCR trends are reviewed and analyzed by management and the ISO coordinator. MESA uses these results, along with audit results and management review to continually improve its performance.

Customer satisfaction data including customer satisfaction surveys; quarterly service performance audits; customer data acquisition from sales, and customer complaints are reviewed by the management team at their bi-annual meetings. Review and analysis highlights gaps that may be developing in reaching targets and aid in early detection of market or customer trends impacting strategic direction.

One gap that the management team identified through the major customer satisfaction data was that customers wanted more frequent communication. A process analysis was done that included all forms of MESA communication: verbal, written, electronic and face-to-face. The management team decided that a defined communication plan and an electronic database containing comprehensive data about a particular customer could narrow this communication gap. The Communication Plan was developed and a CRM software program integrated with MESA’s financial software installed and implemented.

4.1b(2) Translation/Communication of Results

The results of performance analyses are translated into priorities for improvement and innovation through Management Review on a monthly and bi-annual schedule (Figure 4.1-1). As priorities are developed into improvement opportunities, Action Requests are generated and assigned to an owner for follow-up. The AR Process is used to manage and deploy opportunities to work groups and operations. Results and changes are communicated throughout the company in the form of strategic plan revision, performance measure changes, and other communication channels described in Section 4.2a and the Communication Plan. The Communication Plan is the primary vehicle for communicating opportunities and priorities affecting suppliers and partners.

4.2a(1) Data and Information Availability

Information is communicated verbally, electronically and in writing where appropriate. Information is made available to employees, suppliers, partners, and customers through a variety of communication tools shown on the MESA Communication Plan and the following table (Figure 4.2-1).
Monday Morning Meeting - A complete staff meeting is held every Monday morning with Tulsa-based employees to review the past week and upcoming week activities. Key information is made available including sales, profitability, performance information, human resource issues and general administrative topics. Reports from Florida and Houston are included in the meeting. Key performance metrics are reported weekly. Minutes of the meeting (Monday Morning Message) are distributed by e-mail to all employees including the Houston and Florida employees.

E-mail - Management, administrative, and key operating personnel use e-mail as a primary form of communication, both internally and externally. Hourly personnel have access to the e-mail system through shared computers located in the production areas. Most of the supervisory and traveling personnel are assigned a portable computer, with the MESA information system accessed through telephone or internet connection.

Intranet - The MESA intranet is used to disseminate information to employees such as policies and procedures, quality system information, and general information used in everyday operations. Included are the quality forms, NCR logs, AR logs, and procedures such as Standards of Conduct. The Intranet is available to employees through assigned or shared terminals.

f/common directory - A common directory on the MESA computer network is structured to maintain a common database of information relative to operations and customers. Each operating department maintains a folder that is available to share information interdepartmentally. Customer-related information is stored in a client directory, regardless of the source of the information. Management has a restricted directory for financial and management files. The Manager’s directory is aligned with the outline of ISO 9001:2000 and the Baldrige format.

MESA website - The website is identified through customer feedback as a key differentiator to market competitors. The product catalog maintained electronically on the website is particularly useful to customers and prospects. It contains complete and current information, which is regularly updated. Additional information on the website includes MSDS information and a CP Design Center used by both customers and employees. The website and catalog are regularly updated electronically. A CD of the website and catalog is produced annually in the spring for distribution to customers at conferences or by mail. This CD constitutes the sole product catalog of MESA. Information available on the MESA website and CD is so comprehensive, it has become a primary communicating method to MESA partners and suppliers.

MESA ONLINE - An electronic newsletter is published three times yearly to update customers and key vendors. The editorial content of the newsletter is structured to make recipients feel they are part of the “MESA family.” Articles include profiles of MESA employees as well as information about new technologies within the industry. The newsletter is e-mailed and also available through the website. The mailing list is a compilation of e-mail addresses from customers, key vendors, or those who request inclusion via the website. This list is updated regularly by responses received during distribution. The general feedback from those that receive the newsletter is positive. The mailing list currently includes approximately 600 addresses. A print version of the spring edition is distributed at various conferences and shows, as well as mailed to key customers.

4.2a(2) Information System Reliability, Security, & Useability

MESA utilizes an integrated MIS system which includes accounting and inventory functions. The system is the Windows based product DYNAMICS produced by MicroSoft Great Plains. It is a leading Windows based system for mid-sized company applications. The MESA Sales group utilizes Dynamics Front Office to access Microsoft Customer Relationship Management as their customer service tool. MESA operates on a Windows 2000 LAN and multiple Windows applications including Word, Excel, Powerpoint, Outlook and AutoCad. General e-mail capability is direct to a local server.

MESA has one full-time technical person assigned responsibility for monitoring system performance, maintaining hardware and software. Frequent system replacement and upgrades are the primary means of insuring that hardware/software systems are reliable, secure, and user
friendly. Security is managed by allowing only authorized individuals to make system changes.

4.2a(3) Information System availability in emergency

MESA developed and documented an IT Disaster Recovery Plan in the event of a disaster. MESA’s data is housed offsite with LiveVault. Critical data is backed up continuously 24/7. In the event of data loss we can restore data from LiveVault 24/7. In the event of large scale data and equipment loss, the data can be sent overnight for use in a system rebuild. Each of the servers at MESA is protected against operating system failure by the use of a built-in Windows 2003 feature called ASR (Automated System Recovery). We take a virtual “snapshot” of each server on a scheduled basis. This snapshot is a complete copy of the system drive of the server. This feature allows server recreation with little effort.

4.2a(4) Information System Current w/ Business Needs

Electronic capabilities are benchmarked to insure MESA remains abreast of new technology changes through customer satisfaction survey feedback, trade shows and publications. The Microsoft CRM solution is an initiative to improve customer service through a more comprehensive and accessible information system. Another strategic initiative for 2006 is the development and deployment of a comprehensive MESA Database for management of performance measurement data. Initiatives typically originate through the strategic planning process. Through the TAB group participation by the company President, information systems within MESA are benchmarked with other companies of comparable size.

The Controller and IT staff continuously review the requirements of major business processes and analyze how best to meet those needs with available MIS technology. MESA has made a commitment to Microsoft products company-wide. Software is updated when a productivity advantage is achieved in the upgrade. MESA is licensed on software packages in use.

4.2b Organizational Knowledge

MESA utilizes an information architecture concept to describe the categories of information required to manage the business, the methods the company uses to generate information and the guidelines regulating the flow of information. Collection of knowledge is described in the Organization Performance Review System (Figure 4.1-1). Knowledge transfer is managed by the MESA Quality Management System (Figure 6-1) and the MESA Communication Plan using tools listed in Figure 4.2-1. Rapid identification, sharing, and implementation of best practices are managed by the Action Request Process.

Employee knowledge and best practices are captured and transferred in written procedures for major administrative and production activities. Written procedures are very detailed and document the years of accumulated knowledge from individuals performing the task. Written procedures are reviewed as needed and annually. Knowledge is shared intra-departmentally through team meetings and company-wide via Monday Morning meetings and daily interaction between employees. Cross-departmental improvement teams encourage communication and information sharing.

Customer, supplier and partner knowledge is captured and transferred via trade show conferences, product literature and routine personal contact. MESA utilizes a shared knowledge base to serve customers efficiently; allowing shared information across teams and departments.

4.2c Maintaining Data, Information, and Knowledge properties

Accuracy and integrity of information management at MESA is insured by having only a limited number of individuals who are able to make changes within any of the systems. This policy also insures reliability of the available data for users. MESA uses a multifaceted approach to system security. MESA’s link to the internet is protected by a WatchGuard Firewall. Inside the firewall, a number of antivirus and e-mail scanning packages protect the system from virus threats. With the use of NTFS for file systems on all servers, security is insured down to the file level, providing protection for both critical and sensitive data. Data, information, and organizational knowledge are protected to insure important properties (Figure 4.2-2).

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>METHOD</th>
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</thead>
<tbody>
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<td>Integrity</td>
<td>• Maintaining source documents electronically&lt;br&gt; • Systematic, repetitive processes&lt;br&gt; • Comparison to historical data&lt;br&gt; • Hardecopy backup for sales/customer/financial information</td>
</tr>
<tr>
<td>Timeliness</td>
<td>• Establishing reporting deadlines&lt;br&gt; • Monitoring performance</td>
</tr>
<tr>
<td>Reliability</td>
<td>• Software/hardware updating&lt;br&gt; • Software licensing&lt;br&gt; • NCR tracking&lt;br&gt; • Limiting access to system changes</td>
</tr>
<tr>
<td>Security</td>
<td>• Limiting access to system changes&lt;br&gt; • Firewall, anti-virus, NTFS</td>
</tr>
<tr>
<td>Accuracy</td>
<td>• Collection process design&lt;br&gt; • Systematic collection processes&lt;br&gt; • Comparison to historical data</td>
</tr>
<tr>
<td>Confidentiality</td>
<td>• Restricted access to assigned individuals</td>
</tr>
</tbody>
</table>

Figure 4.2-2 Protection of data, information, and knowledge
MESA’s Human Resource System is owned by the President. This system has been designed to assure we have the right people with the right skills in the right jobs to support our customers and accomplish our Strategic Plan. Information generated by this system is used to identify strengths, weaknesses, opportunities and threats to the organization and to identify opportunities for improvement. The systems and measures have been developed based upon industry knowledge, employee feedback, employee satisfaction value attributes, renewal of the strategic plan, and support of strategic goals and initiatives. Systems and measures are fully deployed in all three locations and the organizational-level analysis is reviewed bi-annually at Management Review to ensure they stay current with business needs and trends as determined by MESA customer survey data. Monthly and bi-annual reviews ensure the performance measurement system is sensitive to rapid or unexpected changes. The Human Resource System has undergone multiple cycles of refinement like other components of our organization.

5.1a(1) Organization and Management of Work

Human resource programs and functions are a support process within the company. A Human Resource Specialist reporting to the Controller is responsible for management of human resource functions. Job requirements and workflow within the company are designed around key value creation and support processes (Figures 6.1-1 and 6.2-1). Even though specific jobs are designed around processes, employees are cross-trained to allow job enrichment for the employee and insure operational effectiveness. This policy extends throughout the company including management as well as all locations of the company. Cross-training facilitates operational effectiveness as employees fill in for employees on personal time off or other leaves.

The positive, team-based environment at MESA is a key factor in MESA’s success. The organizational culture of MESA has always been that employees are the most important asset. The general hiring philosophy is to attract and retain valuable employees. Although sales revenue exhibits significant seasonal variations (100% variation from January/February to September/October), the workforce is not significantly adjusted. MESA feels that its employee assets are too valuable to reduce workforce in the seasonally slow periods and not have them available in the busy periods. Since its inception in 1979, MESA has never experienced a planned workforce reduction, other than involuntary terminations based on performance.

5.1a(2) Diversity and culture

MESA promotes a positive and caring environment; which allow its employees to contribute to shared success. The MESA Standards of Conduct clearly establish the guidelines that reinforce MESA philosophy. Diversity and sensitivity training are an important part of employee development. MESA employee demographics (Figure P.1-2) demonstrate the diversity of the employee population. MESA capitalizes on the diverse ideas, cultures, and thinking by establishing cross-departmental improvement teams and action teams, with representation from all employee groups. Minority groups are represented in the five largest operating groups.

5.1a(3) Effective Communication

A key part of the performance assessment is opening communication between management and employee. This open communication is vital to the attainment of Strategic Goal 4 related to work environment (Figure 5.1-1).

“Have a safe work environment that attracts, develops, and retains high quality people.”

The Communication Plan developed and implemented in 2002 provides multiple communication channels to employees. The plan identifies messages, communication vehicles, and frequency of communications to ensure that information is accessible and available to employees. Effective communication and skill-sharing is accomplished through cross-departmental improvement teams, improvement events, performance reviews, and employee satisfaction surveys. The Monday Morning Meeting is a key communication vehicle for sharing of information.

5.1b Employee Performance Management System

The Employee Performance Management System consists of four areas (Figure 5.1-2). A key process is the Employee Performance Review. This process was converted from an annual appraisal to quarterly appraisals in 2004. This change was initiated following a review of the current process after the 2003 review cycle. To promote communication with employees, management felt that a shorter time frame between reviews would have a major positive impact. The final result is a quarterly process that is less intense than the former annual process.

MESA shares financial success with employees through a profit-sharing plan. Since MESA’s formation in 1979, management has shared profits with employees through a year-end distribution. Until 2000, the year-end, profit-sharing distribution was a discretionary amount typically resulting in an average one month’s salary for employees. In 2001, management created a more formal plan that provided for a profit-sharing pool equal to 35% of pre-tax profit. All employees except for the President are eligible for this distribution.
monitors employee diversity, but does not actively recruit minorities since the current employee mix exhibits diversity.

The purpose is to individually reward employees with a portion of company profits and to link employee’s performance to their distribution. Profit sharing distributions are divided into 71% cash and 29% contribution to the defined MESA Profit Sharing Plan (Figure 7.3-2).

5.1c(1) Employee Characteristics and Skills

Job descriptions for each position define the skills and capabilities required. Job descriptions were created by the employees performing the jobs. Prospective employees must either possess or demonstrate the ability to learn the required skills. Just as important as specific skill learning is a positive attitude with the ability to function in an open, team-based environment.

5.1c(2) New Employee Recruitment, Hiring, Retention

Four primary recruiting methods are used to attract new employees: referrals, word-of-mouth, on-line ads, and screening through placement agencies. For hourly, unskilled positions, MESA uses temporary agencies to screen and supply personnel. These personnel work as contract employees for a probationary period ranging from 6 to 12 months. Temporary employees are converted to full-time employees upon successful completion of the probationary period. Installation and field service personnel are carefully screened and sometimes hired through temporary agencies. Depending upon experience and qualifications, they may be hired immediately or may be utilized through a temporary agency for an undefined probationary period. Administrative and salaried personnel are typically hired after a careful review of qualifications, experience and needs. Retention is a result of the environment and culture created at MESA, along with a number of Human Resource programs and processes described in detail in Category 5.2 and 5.3. MESA monitors employee diversity, but does not actively recruit minorities since the current employee mix exhibits diversity.

5.1c(3) Succession Planning – Career Progression

Succession planning is vitally important in a privately owned company such as MESA. Employees need to feel the company is stable and has a long-term plan for continuing operations. Senior management responsibilities include insuring on-going operations of the company. Contingency plans have been created to fill key positions within MESA when vacancies occur for any reason. The plan covers all management roles and extends to the President of the company. A 10-year personal plan has also been communicated to the management team by the President to inform them of his personal goals and direction for the future of the company.

For key management positions, a process is used to match job requirements with personality profiles of prospective managers. This practice has led to identification of training needs to enable the job candidate to correct any deficiency or alter behavior to increase probability of success in a new job role. For example, a potential managerial candidate may lack interpersonal skills but be very strong technically. A training program would be developed for the individual that would focus on this shortcoming. Achievement of management development goals is the combined responsibility of the President and Managers. Two key initiatives for Managers in 2006 are training and participation in the Oklahoma Quality Award Process and a development program described in 5.2a(2).

Another form of succession planning is career progression. In a small company environment like MESA, managing career progression is a challenge. With a limited number of available positions, upward mobility is very limited. MESA focuses efforts on employee development through educational and training opportunities. These opportunities include new skill learning through cross-training, as well as technical industry certifications. MESA has a high percentage of NACE International certified cathodic protection professionals (Figure 7.4-5). Job advancement occurs within the company whenever possible. Employees with potential for advancement are identified through the individual performance review process. Computer training is offered to many employees, including those assigned to manufacturing and field positions. Soft skill training such as leadership, supervisory, and communication skills are a key part of career development. Training needs are identified through the employee performance review process.
5.2a Employee Education, Training, and Development

One of the identified competitive strengths of MESA is the capability and attitude of employees, as evidenced by employee satisfaction results. Strategically, MESA recognizes the importance of education, training, and development.

5.2a(1) Employee Education, Training, and Development

Training requirements for each position are developed based on job evaluation, regulatory requirements, employee input, and experience. Each of these training requirements can be directly linked to the MESA Strategic Plan. The Training Plan supports the Strategic Plan and action plans by providing employees the skills necessary to successfully achieve strategic goals. Examples include quality tools and techniques, improvement methodology, communication skills, time management skills. Organizational objectives are aligned and balanced with employee development needs through the Strategic Plan and Employee Performance Review Process. MESA has a long-term view of employee development and skill learning.

To keep abreast of technological developments, MESA built a training facility in 2002/2003 consisting of over 1000 square feet of classroom space and a field-training site adjacent to the corporate headquarters in Tulsa, Oklahoma. This hands-on training site is utilized to train employees in the technology of cathodic protection systems. In addition to in-house training, MESA allows other customer and industry groups to utilize the training field for educational opportunities. The building of this field-training site represents a significant capital investment on the part of MESA and demonstrates commitment to their employees, the community and the corrosion control industry.

5.2a(2) Key Organizational Needs

New employee orientation is accomplished with a checklist covering all mandated and many MESA specific requirements. All employees receive training in diversity and ethical practices through the MESA Standards of Conduct. Safety training includes employee, workplace, and environmental safety. A 2006 strategic initiative is the development of a New Employee Orientation Program. Management and leadership development is incorporated into the Employee Performance Appraisal Process with identified needs addressed. The Plant Manager is currently enrolled in a LEAN Implementer Training Program. This program is a twelve-week program consisting of one week per month with instruction in the various LEAN tools and methodologies. Upon completion of the course, the Plant Manager will be the primary facilitator for LEAN events.

Effective October 2002, the U.S. Department of Transportation implemented the Operator Qualification (OQ) Rule. This rule applied to all individuals who perform certain tasks in the operation of pipelines, regardless of whether they are employed by the operator of the pipeline, a contractor, a sub-contractor or any other entity performing those covered tasks on behalf of the pipeline operating company. MESA is approaching this area of OQ with the idea of not just meeting expectations but exceeding them. MESA completed the qualifications to become an assessment center for not only MESA employees but for customer employees. This positions MESA as a regional resource for the pipeline industry.

5.2a(3) Employee Input

The primary input from employees and Managers on education and training needs is through the Employee Performance Review Process. A secondary input source is the Employee Satisfaction Survey Process. MESA has developed a core of employees who are highly qualified in their technical fields. These individuals are utilized for in-house technical training for other employees as well as teaching seminars and training sessions for customers and general industry. This practice benefits the company by utilizing in-house talent but also makes a tremendous contribution to the corrosion control industry. Learning forums include Lunch and Learn sessions and one-on-one mentoring/sharing. Additional knowledge assets include ISO documentation (Process Control Documents), process maps, and shared information server.

5.2a(4) Delivery of Education and Training

A comprehensive matrix of training requirements is maintained for every employee at all job levels. As additional needs are identified such as regulatory changes, the training matrix is updated. This training encompasses technical, safety related, governmental required training, computer, company specific such as payroll processing and management training for managers such as sexual harassment in the workplace and supervisory training. Training is accomplished and verified through a variety of means including on-the-job training, outside classes and seminars, written assessments, performance verification, vendor presentations, and industry certification. Documentation of training and certification is incorporated into the company and employee training records. The HR Specialist and/or the immediate Supervisor review all items on the Employee Orientation form with all new employees. This review covers topics such as employee Standards of Conduct, Quality System overview, employee benefits, MESA Safety procedures, OSHA requirements, emergency information, and any applicable DOT requirements. Sufficient time is spent with each new employee to insure a thorough understanding of all procedures. After assignment to a specific area, the lead person and/or supervisor show the new employee around and explain the operations. Another trained/full-time employee is assigned to job coach the new employee for a period of time. The coaching
process continues in each area for which an employee is being trained. Length of time is dependent on the necessary skills and complexity for the job. Additionally, all employees are trained to meet ISO 9001:2000 requirements.

PCD’s are used as training tools individually, and for group training sessions as necessary. To track progress and record completion of on-the-job training, a Qualification Statement is signed by a supervisor to show completion of training. Operator Qualification performance verification or examinations are used for field operations personnel. Employee input is solicited in the delivery approach through personal contact during the Performance Appraisal Process and ongoing personal communications.

A delivery program initiated in 2005 was Lunch and Learn sessions in the Tulsa office. This forum was used to present various sessions of both technical and business information. Average attendance at the voluntary sessions is 20 employees. Two additional education delivery programs were implemented in 2006: a New Employee Orientation and an all-employee training event scheduled for August. These events are held in Tulsa and afford the opportunity for remote office personnel to become acquainted and to interact with corporate personnel.

5.2a(5) Reinforcement of Knowledge and Skills

Knowledge and skill reinforcement occurs primarily through on the job application. Reinforcement tools include monthly and annual safety training, cross-training, and critical position backups. Periodic cross-training in the manufacturing group ensures that production knowledge is retained. Critical position backups periodically function in backup roles to retain the skills necessary for effectiveness. The annual Training Plan identifies additional training opportunities to reinforce existing capabilities. Knowledge is documented in Process Control Documents and other ISO documents, or other information systems such as Microsoft CRM. Knowledge is systematically transferred from departing or retiring employees through continual career development and succession planning activities such as cross-training and back-up training.

5.2a(6) Effectiveness of Education and Training

MESA’s investment in training exceeds that of most companies. According to the American Society for Training & Development, data from their 2005 State of the Industry Report shows an average training investment of $820 per employee in 2003 increasing to $955 in 2004. These statistics were based on small to medium size firms in a total study population of 281 U.S. organizations. MESA consistently invests more than this average on employee training with significantly higher expenditures in 2002, 2003, 2004 and 2005 (Figure 7.4-2). Training expenditures in 2006 are projected at $1700 per employee.

Training effectiveness is assessed at the individual level through performance verification by visual observation of changed behaviors and improved results. Some of the qualifications required by installation personnel are assessed through a formal assessment program administered by industry organizations. Other effectiveness measurements include accident rate, NCR rate, and productivity. Effectiveness of education and training at the organizational level is assessed through indicators including profitability increase, productivity increase, employee satisfaction survey results (Figure 7.4-10), and direct employee feedback. MESA’s primary assessment processes are: industry certification, performance verification, performance appraisal, and Organizational Performance Review.

5.2b Motivation and Career Development

MESA is now implementing LEAN Enterprise concepts leading to elimination of waste and the creation of flow throughout the whole company. In order to effectively implement lean concepts, MESA employees in Tulsa undergo at least 8 hours of classroom training in LEAN. LEAN concepts incorporate cross-departmental teams organizing processes in cooperative, innovative ways. LEAN concepts provide the flexibility to keep processes current with business needs. LEAN is MESA’s approach for involving employees in improving the work environment while also improving organizational performance (Figure 5.2-1).

5.3a(1) Workplace Health and Safety

MESA extends the same emphasis of caring for customers to caring for its employees. As described in section 5.3b, MESA provides for on-site health professionals to insure employees are afforded the most convenient and up-to-date health

<table>
<thead>
<tr>
<th>MOTIVATE</th>
<th>HELP MECHANISMS</th>
<th>MANAGEMENT ASSISTANCE</th>
</tr>
</thead>
</table>
| • Create learning opportunities  
  o Internal  
  o External  
| • Tuition reimbursement program  
  • Company paid training  
  • Annual compensation survey  
  • Cross-departmental team events  
  • Mentoring  
  • Employee Performance Review process  
| • Commitment and communication through Strategic Plan  
  • Respond/assist employee’s identified desires as possible  
  • Mentoring and encouragement  
  • Development of succession plans  |

Figure 5.2-1 Motivating and assisting employees
treatment available. This practice of on-site health care is a way to demonstrate our commitment to employee well being, satisfaction and motivation. This improvement was a result of feedback from employee satisfaction surveys. Employees participate in improving workplace factors through identification and participation in improvement efforts as well as improvement suggestions through the Action Request Process.

Workplace health and safety issues are taken into consideration in workplace design activities. These considerations include safety stations located in the manufacturing areas and handicapped access to buildings. MESA retains an outside safety consultant to perform periodic site visits to evaluate health and safety practices. Improvements are made as necessary to insure a safe environment for all employees.

There are three primary environments in which MESA employees perform work: office, manufacturing, and field operations. There are significant differences between these environments including operation of specialized equipment and machinery, driving, excavation, mental, and physical exertion. Specific training is provided to employees exposed to unique environments.

During the December 2004 Strategic Planning Process, the current safety infrastructure at MESA was identified as an actionable Weakness, but also considered as a possible Opportunity. With an increased focus on safety in our core pipeline market, converting this Weakness to a Strength would be a positive differentiator for MESA. Improving our current safety infrastructure emerged as one of the key strategic initiatives for 2005 and 2006. Lost-time accidents (Figure 7.4-8) is MESA’s key performance measure, with additional targets shown in Figure 5.2-2.

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>OFFICE</th>
<th>MFG</th>
<th>FIELD</th>
<th>RESULTS</th>
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<td>Health</td>
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<td>-0- issues</td>
<td>-0- issues</td>
<td>On-site</td>
</tr>
<tr>
<td>Safety</td>
<td>-0- lost time accidents</td>
<td>-0- lost time accidents</td>
<td>-0- lost time accidents</td>
<td>Figure 7.4-9</td>
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<td>-0- incidents</td>
<td>-0- incidents</td>
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</tr>
<tr>
<td>Ergonomics</td>
<td>-0- issues</td>
<td>-0- issues</td>
<td>-0- issues</td>
<td>On-site</td>
</tr>
</tbody>
</table>

Figure 5.2-2 Performance targets for key workplace factors

5.3a(2) Workplace Preparedness

MESA has an emergency response plan for civil disasters such as storms, fire, etc.; and includes emergency provider notification and evacuation instructions. MESA has experienced two major fire incidents and one major flood incident in its history and successfully emerged with no major disruption of operations. Tulsa’s emergency response plan is posted on the MESA Intranet and reinforced through communication channels such as the Monday Morning Meeting. Similar plans are posted in the Houston and Florida offices. In order to insure long-term stability and business continuation for the benefit of stakeholders, the President and key management continually assess business risks. MESA and the President have put in place a number of business continuation plans including emergency response, loss of key position and succession. Potential liability for operations is addressed through employee training and development programs. Financial security is protected by business continuation insurance and life insurance policies. A comprehensive Business Continuity Plan was developed in 2004. This plan includes disaster response as well as loss of key positions.

5.3b(1) Key Factors affecting Well-being, Satisfaction, and Motivation

MESA determines the key factors affecting well-being, satisfaction, and motivation through the Employee Satisfaction Survey Process. This process statistically identifies those factors most important and provides specific satisfaction results for those factors. Prior to 2005, our analysis of the extremely positive multi-year results lead to the conclusion that there is limited value in segmentation of results. However, the 2004 Baldrige site visit identified this as an Opportunity for Improvement. The process was improved in the January 2005 survey to segment results by the following attributes: Department, Income, Tenure, Role, and Age. Results are provided in Category 7.4.

5.3b(2) Benefits, Services, Policies

MESA manages the company with the philosophy of providing an enjoyable and satisfying career to its employees. Average voluntary turnover rate over the past five years is less than 7%. Average turnover rate in key positions over the past five years is 4%, consisting of two involuntary terminations in 2005. The low turnover rate is largely attributed to the working environment. The atmosphere is friendly, casual and includes many opportunities for employee recreation and recognition. MESA has nine specific programs aimed at creating an employee friendly environment resulting in a motivated workforce and retention of valued employees. Recognition and reward programs are designed to appeal to the diverse ideas and culture of MESA employees. The Employee Satisfaction Process annually solicits feedback regarding benefits, programs, etc. This feedback is considered during Management Review. Exit interviews are conducted at termination to identify conditions reflecting dissatisfaction.

MESA management recognizes that the company has a responsibility to provide attractive salary and benefit packages (Figure 5.3-1) for retention of quality employees. MESA participates in salary and benchmarking studies, both geographically and in their industry. A highly ranked benefit package including employer-subsidized health insurance, disability insurance, a profit sharing plan, and 401K plan insures the company stays in a competitive
position. MESA provides a doctor and registered nurse on-site one afternoon weekly to treat the medical needs of MESA employees and their families. Patients are treated from a medical office equipped at the MESA facility in Tulsa. These medical personnel are provided through MESA’s self-funded health insurance plan, with no cost to employees or their families to receive treatment. The doctor’s time and services are shared by several local employers participating in the “Care Around The Clock” program. Reduced benefit costs to employees and reduction in time required for external doctor visits (32 minutes vs. 180) have resulted from this program.

MESA has a complete suite of services, benefits and policies for employees. MESA is sensitive to individual employee needs and makes every effort to accommodate any special needs. Examples of this flexibility include accommodation of occasional childcare needs when employee’s normal arrangements are unavailable.

5.3b(3) Employee Satisfaction Assessment

In 2001, senior management implemented an Employee Satisfaction Survey Program to more accurately assess employee satisfaction and create a system where negative trends could be detected at an early stage. The survey investigates 62 attributes in 11 general areas related to employee satisfaction and compares the data to a normative database. The first survey established a baseline and provided a comparison to industry norms. This survey was repeated in 2002 and is now an annual evaluation tool for measurement of employee satisfaction. MESA now conducts this survey each year to maintain the company’s reputation as employer of employee satisfaction. MESA significantly outperforms the norm (Figure 7.4-13). Beginning in 2005, survey results are segmented by five attributes. Other informal assessments of employee wellbeing, satisfaction, and motivation are listed in Figure 5.3-2.

5.3b(4) Relating Findings to Key Business Results

The area driving employee satisfaction in 2005 was Recognition/Rewards. Importance or leverage is determined statistically from the survey data. In the top ten attributes having the highest leverage to employee satisfaction, MESA significantly outperforms the norm (Figure 7.4-11) and outperforms the top 10% in nine of the ten attributes. Gains were made in five of the ten areas between the 2005 and 2006 surveys. Although four of the ten attributes declined in 2005; only one (Job security) is statistically significant. Senior management has reviewed the January 2006 survey results and will continue improvement efforts through the various HR plans.

Additionally, senior management has addressed the significant decline in highly satisfied employees through a series of meetings with plant personnel. As a result, two initiatives are now underway.

- Improvements to performance appraisal process
- Creation of advancement opportunities in the plant

Figure 5.3-1 MESA Benefit Programs

Figure 5.3-2 Satisfaction Indicators

The key business results in the #4 strategic goal WORK ENVIRONMENT shown on the Strategic Plan are directly connected to employee satisfaction. Satisfied employees are productive employees; as measured by revenue per employee (Figure 7.5-5). Assessment findings from Employee Satisfaction Surveys are reviewed by the MESA management team and are utilized when considering adjustments to the Strategic Plan at Management Reviews.
Category 6 – PROCESS MANAGEMENT

The MESA Quality Management System (Figure 6-1) is the overarching system used to manage and integrate MESA value creation and support processes. Certification of the MESA Quality Management System to ISO 9001:2000 standard serves as evidence of the value that MESA places on quality. The Quality Management System with Baldrige Criteria bind business processes together in an integrated, aligned direction resulting in performance excellence.

MESA employees view quality and process improvement as an integral part of their job. The Quality Policy ACT – Accurate, Continuous Improvement, and Timely describe MESA’s approach to customer satisfaction. MESA has made a strong commitment that quality and process system’s requirements will be understood, implemented and maintained through all levels of the organization.

Through the Quality Manual available to employees on a shared server, procedures related to design control, document and data control, purchasing, process control, inspection and testing, corrective and preventive action and internal quality audits become part of everyday operations for MESA. The Quality Manual describes MESA’s commitment for each element of the Quality System and references Quality Procedures describing how the requirements are met. Quality Procedures reference specific Process Control Documents and Quality Forms which become objective evidence/records.

The range and detail of these documents depend on the complexity of the work, the methods used, and the skill and training needed by personnel involved in carrying out the activity. This information is the core of MESA’s knowledge management system described in 4.2b.

The Corrective and Preventive Action process provides a means to measure and ensure analysis and correction of non-conformities. It also allows an opportunity to review the effectiveness of the corrective actions taken and to alert management to systemic problems. MESA uses the process to systematically prevent recurrence and eliminate the cause of potential nonconformities.

The Quality Management System is reviewed at bi-annual Management Reviews to insure continuing suitability and effectiveness in satisfying the requirements of ISO standards as well as alignment with MESA’s Strategic Plan. This includes a review of NCR history, classification, trends, along with review of the Action Request (AR) process. Results of Management Review and resulting initiatives are shared through departmental meetings, Monday Morning Meetings, newsletter articles, and Strategic Plan.

MESA’s audit program ensures that every section of the standard is audited at least once per year; other sections may be audited more frequently. This frequency is left to the discretion of the ISO Coordinator after considering previous audit history and previous audit findings. To date, there have been no unscheduled audits; however, MESA has allowed its outside consultant’s trainees to audit MESA’s Quality Management System.

A key part of the ISO 9001:2001 Quality Management System is process improvement. MESA uses a PLAN-DO-CHECK-ACT cycle as its basic Process Improvement Process (Figure 6-2).
MESA uses LEAN as its primary improvement methodology. To monitor performance and improvement, LEAN concepts are being adopted leading to elimination of waste and creation of flow by eliminating non-value added activities. LEAN concepts incorporate cross-departmental teams organizing processes in cooperative, innovative ways. It is a multi-step process that involves mentoring, facilitation, knowledge transfer, and joint implementation. LEAN concepts provide the flexibility to keep processes current with business needs. LEAN is MESA’s approach for involving employees in improving the work environment while also improving organizational performance.

6.1a(1) Key Value Creation Processes

The Quality System is designed to focus on those key processes that drive our business success. Key value creation services were determined through the development of the Strategic Plan. As major strategic goals were developed, a logical fall-out was the determination of key business processes to support MESA’s positions of excellence. MESA’s five value creation processes are Marketing, Sales, Manufacturing, CP services and Delivery. These processes either drive or are the source of MESA revenues and the reason MESA succeeds.

Marketing  The importance of marketing has significantly increased over the past five years as a direct result of the strategic planning process. A key example is the acquisition of customer and market knowledge, which has dramatically changed the way MESA approaches business. The marketing function creates value by identifying markets and trends, promoting the company image and messages, and measurement of customer satisfaction. Accurate data and analysis is critical to long-term business success; creating products/services that are valued by customers while providing profitable opportunities for MESA.

Sales  processes are driven by the annual Strategic Plan with key input coming from customer satisfaction survey data. The basic strategic direction will not change unless customer feedback redirects; however, objectives may be altered because of information received. For example, in the 2002 survey, customer feedback indicated the services that create value have changed during the three years since the last major survey. Core services such as product range, correct product and quantity are less differentiating to supplier relationships; while capabilities emphasizing account service and good communications are more differentiating in building supplier value. While MESA prides itself in good account service, the communications aspect was considered when the strategic plan was reviewed at the next Management Review. The Communication Plan is a direct result of this renewed emphasis. Key processes within MESA Sales are defined by procedures within the Quality System. An example of a key sales process within the Quality System is Contract Review. Contract Review is documented by the Sales Groups in customer sales records. Important information arising out of the Contract Review process is communicated to the Manufacturing and Administrative Groups through file notations, verbal exchange, and/or change orders.

The sales process creates value for MESA by playing the key role in communication with customers. Positive attitudes and exemplary service promote the building of long-lasting personal relationships often resulting in sole-source relationships. The sales process creates value for customers by offering them consistent pricing with industry leading service and quality. Technical assistance to customers in the sales process helps them in product application and selection. Key supplier relationships are enhanced by proper product recommendation and
promoting. Contributions to profitability and business success include profit margin optimization, new customer development, and existing customer retention.

**Manufacturing** MESA has identified the manufacturing processes key to company success. Manufacturing produces products tailored to customer specifications. Manufacturing processes create value for MESA by continual focus on efficiency, quality, and response. The ability of the production facility to deliver product faster than competition regularly (Figure 7.1-1 and 7.1-2, and 7.1-7) results in order placement with MESA. Improvement in efficiency results in lower costs and higher profitability.

**CP Services** Because the technology of cathodic protection as a method for corrosion control is well understood and developed, there has been little technical change in this field since the 1960’s. The design aspect of MESA’s business is generally limited to recommendation of anode type or design of groundbeds as part of an overall cathodic protection installation. These recommendations are made by professional engineers or experienced technicians within MESA who are highly qualified in cathodic protection design. The CP Services provided by MESA include technical services and installation of cathodic protection systems. Service capabilities include corrosion surveys, system design, installation, maintenance, and operations associated with cathodic protection. As a service to customers and an educational tool for the general public, MESA has a section on their website, *CP Design Center*, providing detailed technical information and design tools. This site, containing cathodic protection techniques, types of anodes and types of systems, is provided to aid customers in design. CP Services creates value for MESA by providing a comprehensive suite of CP services in addition to materials. The technical experience and capability add to MESA’s credibility as a manufacturer. Customers receive value through the available application expertise and the convenience of a one-stop operation.

**Delivery** Along with the actual delivery of product, invoicing the customer for product or services received is also included. Delivery of finished product is made through various carriers including MESA vehicles, customer pick-up or third-party carriers. Selection of carriers is based on experience and customer requirements. Product is delivered in accordance with customer specifications. The delivery process creates value for MESA through reliable, cost-effective, and timely service; reinforcing customer relationships. Delivery is important to business success by supporting MESA’s reputation of reliability and stability.

### 6.1a(2) Key Value Creation Process Requirements

The Quality Management System defines process requirements for key value creation processes. Requirements have been developed/refined over many years (Figure 6.1-1). Customer and supplier input provide information used in management of service and product offerings.

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<thead>
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<td>Sales</td>
<td>Regional Sales Managers</td>
<td><strong>SALES ORDERS</strong></td>
<td>RFQ, Order, trained people, hardware &amp; software tools</td>
<td>• Material Sales</td>
<td>7.3-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>COMMUNICATIONS</strong></td>
<td></td>
<td>• Price Parity</td>
<td>7.2-7</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>QUOTATIONS</strong></td>
<td></td>
<td>• “A” Customer retention</td>
<td>7.2.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>TARGETED SALES</strong></td>
<td></td>
<td>• # of A/B customers</td>
<td>On-site</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>IMPRINTED CURRENT ANODES</strong></td>
<td></td>
<td>• Opportunity close rate</td>
<td>On-site</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>SACRIFICAL ANODES</strong></td>
<td></td>
<td>• Major NCR rate</td>
<td>On-site</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>AGRA PRODUCTS</strong></td>
<td>Work Order, Quality standards, raw materials, suitable equipment</td>
<td>• Fabricated order cycle time</td>
<td>7.5-2</td>
</tr>
<tr>
<td></td>
<td>Plant Manager</td>
<td><strong>TECHNICAL SERVICES</strong></td>
<td>Work Release or Contract, specifications, materials, trained people,</td>
<td>• Non-fabric. Order cycle time</td>
<td>7.5-2</td>
</tr>
<tr>
<td></td>
<td>Regional Operations Managers</td>
<td><strong>CP SYSTEM INSTALLATION</strong></td>
<td>hardware &amp; software tools, suitable equipment</td>
<td>• Major NCR rate</td>
<td>7.5-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>CP SYSTEM MAINTENANCE</strong></td>
<td></td>
<td>• Key Customer retention</td>
<td>On-site</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>FIELD SERVICE SALES</strong></td>
<td></td>
<td>• Opportunity close rate</td>
<td>On-site</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>MAJOR NCR RATE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>KEY CUSTOMER RETENTION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>OPPORTUNITY CLOSE RATE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>ON-SITE CALL BACKS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>ON-SITE TECHNICAL SUPPORT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>ON-SITE TRAINING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 6.1-1 Value creation process descriptions, requirements, and measures
6.1a(3) Key Value Creation Process Design

Value creation processes are designed to achieve the desired results (Figure 6.1-1). Our five processes have been developed over many years of experience. ISO 9001 certification resulted in a complete analysis of key processes, with necessary changes made to meet key requirements, provide the required output, and achieve the related measures. New technology, organizational knowledge and the need for agility are incorporated into the processes through MESA’s Process Improvement Process with inputs from customers, suppliers and cross-functional teams. This systematic process incorporates cycle time, productivity, cost control, efficiency and effectiveness factors. Due to the regulatory nature of the CP industry, there has been little change in customer requirements or product design. The primary change has been that regulations are being extended to other areas of industry. For example, during the 1990’s, cathodic protection was federally mandated for underground storage tanks as a requirement for corrosion protection. That requirement has now been mandated for above ground storage tanks. MESA keeps abreast of regulatory requirements through technical society/trade association participation, industry publications and customer contact to insure any new market opportunities are targeted. Independent marketing consultants are also utilized for market research initiatives as a check and balance to verify information sources.

6.1a(4) Key Performance Measures

Value creation processes are assessed by defined measures (Figure 6.1-1). These measures are indicators for progress, and help identify opportunities for improvement. Key performance measures are tracked as part of the Monthly Report Card. Weekly monitoring at employee meetings keeps an on-going focus of the goals. Each department has initiated additional performance measures supporting the accomplishment of key process requirements. Day to day operation of processes are monitored by employee participants. Those activities are then monitored on Visual Performance Boards at the work cell. Customer, supplier, and partner inputs are used in managing processes via applicable drawings, specifications and contract requirements which are spelled out in detailed work instructions to Sales, Manufacturing, and CP Services.

6.1a(5) Inspection and Tests

Each process is analyzed to determine the inspections, tests, or audits necessary to achieve business goals. Only those inspections, tests and audit efforts necessary to meet quality and service targets as well as ISO certification requirements are conducted in order to minimize costs. Results of inspections, tests, audits, and reviews are shared with suppliers and customers, as appropriate, through a variety of communication methods including verbal, e-mail, and written. Defects, rework and warranty costs are prevented by requiring quality at the source. In-process inspections occur at appropriate points during each process to prevent work from advancing to the next stage or to delivery until the process participant has approved the release. Records of each inspection are maintained as Quality Records.

6.1a(6) Key Value Creation Process Improvement

MESA improves value creation processes as outlined in the Quality Management System utilizing audit results, analysis of data, Corrective and Preventive actions, and Management Reviews. MESA uses LEAN as its primary improvement methodology. These tools help reduce variability, improve product and services, and keep processes current with business needs and direction. The Quality Management System requires a Corrective Action to improve results when process results are below desired levels and a Preventive Action to sustain results that are above desired levels. Process improvements are documented using the Quality Management System recordkeeping and Kaizen Project summary reports. Improvement results are shared through recognition and informal exchanges in Monday Morning meetings and newsletters. MESA’s Performance Improvement System is described in P.2c(1).

6.2a(1) Key Support Processes

MESA’s key support processes are Financial/Accounting, Supply Chain Management, MIS, and Human Resources. Key support processes provide the resources required to meet the business goals identified in the Strategic Plan. Analysis and assessment of the support processes is an integral part of the Management Review process. These key support processes have developed over many years.

6.2a(2) Key Support Process Requirements

The Quality System defines process requirements for the key support processes (Figure 6.2-1). Requirements have been developed and refined over many years. Customer and supplier input, either through surveys or direct communications, provide information used in management of service and product offerings.

6.2a(3) Key Support Process Design

Support processes are designed to achieve the desired results. Most of these processes have been developed over many years of experience. Development of our Quality Management System and subsequent ISO 9001 certification resulted in a complete analysis of key processes. Changes were made to meet key requirements, provide the required output, and achieve the related measures. New technology, organizational knowledge and the need for agility are incorporated into the processes through MESA’s Process Improvement Process with inputs from customers, suppliers and cross-functional teams. This systematic process incorporates cycle time, productivity, cost control, efficiency and effectiveness factors.
6.2a(4) Key Support Process Performance Measures

Support processes are assessed by defined measures (Figure 6.2-1). These measures are the indicators to measure progress and determine the need for improvement. Key performance measures are tracked as part of the Monthly Report Card and are part of key performance measures identified in the MESA Strategic Plan. Additional measures for each process are currently under development. Each department has additional performance measures supporting key process requirements. Day to day operation of processes are monitored by process participants who have identified those daily activities that impact measured results. Those activities are then monitored on Visual Performance Boards at the work cell. These in-process measurements provide additional support in managing key processes. Customer, supplier and partner feedback is used as inputs to determine the need for improvement in the process. This feedback comes from the Quality Management System, surveys, and personal communications.

6.2a(5) Tests and Inspections

Each process is analyzed to determine the inspections, tests, or audits necessary to achieve business goals. Only those inspections, tests and audit efforts necessary to meet quality and service targets as well as ISO certification requirements are conducted in order to minimize costs. Results of inspections, tests, audits, and reviews are shared with suppliers and customers through a variety of communication methods including verbal, e-mail, and written. Defects and rework are prevented through root cause analysis, corrective actions, and preventive actions taken.

6.2a(6) Key Support Process Improvement

MESA improves support processes as outlined in the Quality Management System through audit results, analysis of data, Corrective and Preventive actions, and Management Reviews. These improvement methods help reduce variability, improve products and services, and keep processes current with business needs and direction. The Quality Management system requires a Corrective Action to improve results when process results are below desired levels and a Preventive Action to sustain results that are above desired levels. Process improvements are documented using Quality Management System recordkeeping and Kaizen Project reports. Results are shared through recognition and exchanges at Monday Morning meetings and newsletters. MESA’s Performance Improvement System is described in P.2c(1).

6.2b Operational Planning

MESA ensures adequate financial resources are available to support operations and for major new business investments through financing with banks, leasing companies, and equipment lenders. The needed resources are determined by the President and Controller based upon company financial performance, capital budgets and operation forecasts. MESA assesses the financial risks associated with current business operations and major business investments through the Strategic Planning SWOT analysis and discussions with insurance professionals.

MESA ensures continuity of operations in the event of an emergency through the Business Continuity Plan developed by the President.

<table>
<thead>
<tr>
<th>PROCESS</th>
<th>OWNER(S)</th>
<th>DESCRIPTION</th>
<th>REQUIREMENTS</th>
<th>MEASURES</th>
<th>FIGURE</th>
</tr>
</thead>
</table>
| Financial & Accounting  | Administrative Manager | • Reporting  
• Receivables  
• Payables  
• Lending | Accurate information, trained people, hardware/software tools | • Return on Equity  
• Receivable turns  
• Meet reporting deadlines | 7.3-1  
7.5-10 On-site |
| Supply Chain Management | Administrative Manager | • Procurement  
• Inventory control  
• Supplier qualification | Accurate information, trained people, hardware/software tools | • Key Supplier ON-TIME  
• Supplier Satisfaction  
• Inventory turns | On-site  
On-site 7.5-9 |
| MIS                     | Administrative Manager | • Hardware  
• Software  
• Website | Accurate information, trained people, hardware/software tools | • System uptime  
• Internal customer satisfaction | On-site  
On-site |
| Human Resources         | President & HR Specialist | • Hiring  
• Training  
• Compensation  
• Benefits  
• Environment | Accurate information, trained people, hardware/software tools | • Employee turnover  
• Voluntary turnover  
• Key position turnover  
• Lost Time Accidents  
• Employee Satisfaction  
• Annual training investment  
• Ethical incidents | 7.4-8  
7.4-8  
7.4-9  
7.4-10  
7.4-2/3  
7.6-3 |

Figure 6.2-1 Support process descriptions, requirements and measures
Category 7 – BUSINESS RESULTS

7.1 Product and Service Outcomes
7.1a. Product and Service Results

MESA measures On-Time shipments as a key service result with a 2006 goal that 97.5% of shipments will be shipped on-time. MESA performance has improved significantly since 1997, reaching world-class levels in comparison to Baldrige Award recipients (Figure 7.1-1).

Figure 7.1-1 ON-Time shipments improving to world-class

One of the core capabilities identified by customers in the customer satisfaction surveys is product delivered on time. MESA has a target of 75% of Tulsa shipments within three days. This target is a self-imposed delivery time by MESA to exceed customer expectations of On-Time delivery. In 1999 and 2000, that goal was met; however, the company fell short in 2001. As that target fell farther behind, an analysis of all operational processes concluded the manufacturing facility was nearing capacity. Expansion of the manufacturing facility was undertaken in 2001 and was completed in 2002. Performance improved significantly in 2003 and 2004, with declines in 2005 and 2006 that again signal capacity issues (Figure 7.1-2).

Figure 7.1-2 Shipments within 3 Days

MESA documents all customer complaints, problems, or issues as nonconformances (NCRs) and segments customer affected NCRs. Segmentation of NCRs defined as “major” began in 2002 with major NCRs defined as having a cost impact >$500 or indicative of a systemic problem. MESA considers major NCRs the best measure of customer complaints and compares these to the performance of past Baldrige Award recipients (Figure 7.1-3). Total customer affected NCRs peaked in 2004 and began a decline in 2005. This result is consistent with a growing definition of NCRs in the first few years of NCR system deployment and does reflect overall performance improvement.

Responding to customer inquiries is directly related to MESA’s strategic goal of Customer Service. MESA measures NCR occurrence during the sales process monthly.

Figure 7.1-3 External Customer Affected NCRs (AW Shucks) demonstrating improvement

Magnesium anodes production accounts for 30% of material revenues. A key quality issue related to magnesium anode production was identified in a Dec 02 Management Review as a potential threat. Quality problems with internationally sourced raw material were recognized in late 2002 and early 2003. These problems culminated in the development of a comprehensive quality assurance specification used as the basis for product acceptance. The program includes quarantine of truckload purchases for approximately
Along with ON-TIME shipments, order turnaround is another important product/service result. Measured by MESA’s third-party Customer Satisfaction Survey, MESA’s results are segmented by the three major customer types and benchmarked against the best competitor. Results show MESA improvement and advantage over its best competitor.

<table>
<thead>
<tr>
<th>Competitor</th>
<th>2003 Current Efficiency</th>
<th>2005 Current Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>MESA min.reqmt</td>
<td>50.0%</td>
<td>50%</td>
</tr>
<tr>
<td>A</td>
<td>49.3%</td>
<td>55.6%</td>
</tr>
<tr>
<td>B</td>
<td>41.6%</td>
<td>29.1%*</td>
</tr>
<tr>
<td>C</td>
<td>12.1%*</td>
<td>57.1%</td>
</tr>
<tr>
<td>D</td>
<td>11.0%*</td>
<td>16.2%*</td>
</tr>
<tr>
<td>E</td>
<td>4.8%*</td>
<td>55.4%</td>
</tr>
<tr>
<td>F</td>
<td>NA</td>
<td>55.1%</td>
</tr>
</tbody>
</table>

*denotes poor quality

Figure 7.1-5 Magnesium quality improvement

Along with ON-TIME shipments, order turnaround is another important product/service result. Measured by MESA’s third-party Customer Satisfaction Survey, MESA’s results are segmented by the three major customer types and benchmarked against the best competitor. Results show MESA improvement and advantage over its best competitor.

An additional measurement of product quality and service is obtained through MESA’s third-party Customer Satisfaction Survey. Overall MESA results are provided, along with segmented results for the three major customer types. MESA results are significantly better than the best competitor benchmark (Figure 7.1-6).

Figure 7.1-6 Product/service quality results from third-party Customer Satisfaction Survey

Figure 7.1-7 Order Turnaround measured by Customer Satisfaction Survey

MESA documents internal and external nonconformances (NCRs) through its ISO 9001:2000 program. A previous Baldrige site visit team identified NCR closure rate as an Opportunity for Improvement (OFI). MESA determined ten business days as an acceptable time for closing NCRs and began tracking closure rate against this goal. Closure rates for 2003 and 2004 were obtained by records review (Figure 7.1-8).

Figure 7.1-8 Improvement in NCR closure rate

7.2a Customer-Focused Results
7.2a(1) Customer Satisfaction

MESA retains an independent marketing research firm to conduct customer satisfaction surveys. Survey participants are important decision-makers responsible for evaluation, selection and working relationships with CP product and service suppliers. Surveys are designed to determine MESA’s position as a leading supplier and measure its performance in meeting customers’ requirements. Survey respondents are selected from MESA’s existing customer base. Surveys were conducted in 1999 and 2002, with an average of 77 respondents in each survey. Results for 2005 were derived from quarterly satisfaction surveys.
The third-party survey program incorporates recognition and preference attributes. From 1999 to 2002, MESA maintained its position as an industry leader. Respondents were asked to identify companies they believe are preferred suppliers - those they would choose to do business with due to the total quality of the relationship. MESA led in this attribute with over 94% of the respondents in 2002 associating MESA with this desirable quality (Figure 7.2-1).

Seventeen attributes, including eight value-creating attributes, are included in the quarterly performance surveys implemented in 2003. MESA’s performance against its best competitor show that MESA is maintaining and increasing its advantage in these eight value-creating attributes (Figure 7.2-2). Data provides trend information as well as comparative information.

MESA creates a Customer Satisfaction Index using data obtained by the third-party Customer Satisfaction Survey. This index constitutes the mean of the 17 attributes surveyed. Results are comparable to the ACSI Customer Satisfaction Index. Results for the 1999 through 2005 surveys are compared to the ACSI and best competitor (Figure 7.2-3).

No significant deviation in trend or results is seen in either segmentation; allowing MESA to maintain a consistent focus on strategic objectives.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Order Turnaround</td>
<td>+1.76</td>
<td>+0.89</td>
<td>+1.29</td>
<td>+1.87</td>
<td>+1.95</td>
<td>+1.23</td>
</tr>
<tr>
<td>Error-Free Delivery</td>
<td>+1.34</td>
<td>+1.16</td>
<td>+1.17</td>
<td>+1.10</td>
<td>+1.32</td>
<td>+1.11</td>
</tr>
<tr>
<td>Proactive, Regular Communication</td>
<td>+1.39</td>
<td>+1.33</td>
<td>+1.62</td>
<td>+2.53</td>
<td>+1.64</td>
<td>+2.04</td>
</tr>
<tr>
<td>Question/Problem Resolution</td>
<td>+1.56</td>
<td>+1.04</td>
<td>+1.52</td>
<td>+1.52</td>
<td>+1.43</td>
<td>+2.28</td>
</tr>
<tr>
<td>Voicemail, E-mail Response</td>
<td>+1.77</td>
<td>+0.95</td>
<td>+1.52</td>
<td>+2.00</td>
<td>+1.76</td>
<td>+1.68</td>
</tr>
<tr>
<td>Fair, Competitive Pricing</td>
<td>+0.90</td>
<td>+0.26</td>
<td>+0.40</td>
<td>+1.15</td>
<td>+0.74</td>
<td>+0.70</td>
</tr>
<tr>
<td>Competitive Credit Terms</td>
<td>+0.75</td>
<td>+0.27</td>
<td>+0.40</td>
<td>+0.60</td>
<td>+0.50</td>
<td>+1.90</td>
</tr>
<tr>
<td>Competitive Shipping</td>
<td>+0.89</td>
<td>+0.74</td>
<td>+0.08</td>
<td>+0.70</td>
<td>+0.55</td>
<td>+0.95</td>
</tr>
</tbody>
</table>

Figure 7.2-2 Eight value-creating attributes from third-party Customer Satisfaction Survey. (Positive values indicate relative advantage over best competitor)
7.2a(2) Customer-perceived Value

The third-party Customer Satisfaction Survey resulted in preparation of a Value Report Card and Value Map by the research firm. Results from the 2005 MESA Value Report Card (Figure 7.2-4) shows MESA far out ranks closest competition. Report Card results demonstrate MESA enjoys a significant competitive advantage for 17 of the 17 performance attributes surveyed. All major competitors were included in the 1999, 2002, and 2005 surveys. MESA scores are shown as grey bars.

Figure 7.2-4 2005 Value Report Card showing MESA advantage over best competitor in 17 performance attributes

Figure 7.2-5 MESA Value Map for 99/02/05 demonstrating superiority over three competitors

Analysis of survey data indicates that eight of the seventeen attributes create value for customers.

Product delivery services, account, and components of pricing: competitiveness, shipping costs, and credit terms drive relationship value.

MESA has a significant competitive advantage in all of the eight value creating attributes. Results demonstrate MESA performance is aligned with strategic objectives of being the industry quality and service leader, as opposed to the price leader.

The Value Map, based on statistical analysis of survey data, provides a comparison of MESA to three competitors for 1999, 2002, and 2005. MESA remained in the Superior Value Zone from 1999 through the 2005 survey for product and service quality. Primary competitors were identified by survey respondents as offering Poor to Fair Value (Figure 7.2-5).

The Customer Value Index resulting from the third-party survey provides a comparable result to the ACSI Customer Satisfaction Index. This index (Figure 7.2-6) is the mean of the eight value-creating attributes included in the quarterly satisfaction surveys. Results show MESA clearly outperforming its best competitor and the ACSI.
Three of the seventeen attributes surveyed in the third-party Customer Satisfaction Survey address pricing. These three attributes are averaged to produce a mean Price attribute which can be compared to best competitor (Figure 7.2-7). Attributes are scored on a scale of 0 to 10 with the higher performer holding an advantage in pricing. MESA’s goal is to remain at parity with competitors, while focusing on service and quality. Historical and current results indicate MESA has a slight advantage over competitors.

One of MESA’s five Strategic Goals is Relationships. Customer retention is one of MESA’s measures for this goal. Customer retention rate is critical in a mature market with limited growth opportunities. Key customers are segmented by material customers (MP) and service customers (MCC) and are generally defined as those customers over $100,000 in annual revenues. Results for both customer segments are provided in Figure 7.2-8 with a benchmark to a Baldrige recipient.

Since 1997, total sales from existing customers have grown from 70% to over 90%. This trend coupled with growth of total sales indicates MESA’s success toward its goal of developing long-term relationships.
In a small industry with limited competitor data, benchmark data is difficult to acquire. MESA acquires this data where available and benchmarks outside the industry. However, the primary analysis is based on MESA trend analysis. One of the key measures for MESA is overall profitability and the resulting direct impact to all employees. As previously described in Section 5, MESA shares financial success with employees through a profit-sharing program. 35% of pre-tax profits establish the profit share pool distributed to employees. Using 1999 as the base year, profit share pool growth dramatically exceeded sales growth except for 2004 and 2005; demonstrating that change initiatives have resulted in significant improvement to profitability (Figure 7.3-2). The 2004/5 decrease in profit growth is a result of up-front investment/upgrades in personnel, training, and equipment in anticipation of planned, significant growth.

7.3a(2) Market Performance

MESA experienced steady sales growth over a 25-year history (Figure 7.3-3). Because of the size of the CP industry and competitors, little public information regarding industry sales are available. All but one of the industry competitors are privately owned. CP industry estimates were prepared utilizing a variety of market data sources. MESA estimates the domestic cathodic protection market at between $250-$300 million per year, excluding cathodic protection related to offshore applications. The annual domestic CP materials market is estimated at $150 million, excluding CP related to offshore applications. This figure was verified in a US Federal Highways Administration Study, “Corrosion Costs and Preventive Strategies in the U.S.”, released in 2002, estimating the CP materials market at $146 million per year. Additional comparative information reflecting growth of the corrosion control market are two studies conducted in 1975 and 1998 estimating the total cost of corrosion in the U.S.

From market research data gathered by an independent market research company, the relative growth of this market can be compared to several other indicators reflective of MESA’s market. Statistics are available to compare MESA’s sales growth with these indicators. Comparisons with the U.S. Gross National Product, pipeline/distribution operator maintenance budgets, miles of pipelines, and Cost of Corrosion confirm MESA’s belief that the domestic CP industry is not a growth market. MESA’s conclusion is that sales growth is primarily a result of market share gains from competition. MESA’s sales growth in percentage, relative to these market indicators over the same period of time dramatically illustrates market share gains from competitors.
Market share growth from competitors in recent years is primarily a result of opportunities generated by poor performance of a key competitor. The majority of growth has occurred in the historically core regional markets of the Southwest and Midwest. New growth initiatives are focused in the Houston, Florida, and California offices to continue taking advantage of opportunities. With little published market data, quantifying market share growth is difficult; however, a comparison of annual sales to three primary competitors demonstrates a significantly higher growth rate for MESA since 1999 (Figures 7.3-5).

**7.4a Human Resource Results**

**7.4a(1) Work System Performance and effectiveness**

One of MESA’s strategic objectives includes development of human assets to continually improve performance effectiveness. MESA has a number of specific development programs and activities aimed at skill development, with high participation as an indicator of development efforts.

<table>
<thead>
<tr>
<th>2002 – 2006 EMPLOYEE DEVELOPMENT</th>
<th>MP</th>
<th>MCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Development Program</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Quality Award Examiner Training</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Cross-Training of Personnel</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>NACE International certification</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Operator Qualification certification</td>
<td>NA</td>
<td>75%</td>
</tr>
<tr>
<td>Improvement Team participation</td>
<td>35</td>
<td>15</td>
</tr>
<tr>
<td>Lunch &amp; Learn sessions (weekly)</td>
<td>20+</td>
<td>2</td>
</tr>
<tr>
<td>Sales skills</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Team Building Program</td>
<td>15</td>
<td>6</td>
</tr>
</tbody>
</table>

Despite MESA’s small size, it is important to note that employees still feel they have opportunities to learn and grow. This significantly higher than normal rating is due to the emphasis placed on training (Figure 7.4-4).

**7.4a(2) Employee Learning and Development**

MESA’s investment in training exceeds that of most companies. According to the American Society for Training & Development, their 2005 State of the Industry Report shows an average training investment of $820 per employee in 2003 increasing to $955 in 2004. MESA consistently invests more than this with significantly higher expenditures in 2002, 2003, 2004 and 2005 (Figure 7.4-2). Training expenditures in 2006 are projected at $1700 per employee. The 2006 Training Plan includes training for all employees.
NACE certification is a measure of the value MESA places on employee development. Results for employees engaged in providing CP Services demonstrate that MESA invests in employees (Figure 7.4-5). Seven employees in 2003 and one in 2004 were certified to the NACE CP-1 level. Three employees were certified to the CP-2 level in 2004. One certified to CP-3 in 2005, and two certified to CP-2 in 2005. The percentage of NACE-certified MESA employees is higher than any competitor.

In the important area of career development, industry-wide employee satisfaction surveys generally indicate approximately one-half of employees are satisfied with career development opportunities. Normative results indicate a response range from 49% to 65%, when asked four positive questions about career development (Figure 7.4-6). MESA responses ranged from 76% to 94%.

MESA evaluates effectiveness of training in a variety of ways including performance verification, examination, certification, participant feedback, and post-event critiques. A longer term training effectiveness measure is the direct, but lagging correlation between increased productivity and training (Figure 7.4-7). Using 1999 as a baseline, MESA increased training investment by 75%, resulting in 30% to 40% gains in overall productivity. A flattening of productivity increase was observed following 2001, the only year where training investment declined.

7.4a(3) Employee Satisfaction

A stable workforce is crucial to the long-term success of a company. MESA’s annual rate has declined to the 10% level with a very low turnover of highly valued, productive employees. Voluntary turnover rate has declined to 5% with turnover rate in key positions at 20% (Figure 7.4-8). The 2005 spike in key position turnover was the result of two involuntary terminations.

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MESA has conducted annual employee satisfaction surveys since 2001. The results of each survey have shown MESA to be a very good place to work when compared to both an industry norm and top ten percent. In 2004, a significant decline occurred in those employees categorized as “highly satisfied” (Figure 7.4-10). Although MESA’s results were still significantly above the norm, an analysis of results indicated that the most significant area of impact was Recognition and Rewards. As a result, MESA implemented improvement initiatives in recognition, compensation structure, and performance appraisal.

Importance or leverage is determined statistically from the survey data. In the top ten attributes having the highest leverage to employee satisfaction, MESA significantly outperforms the norm and is comparable to the top ten % of the database (Figure 7.4-11). Importance or leverage is determined statistically from the survey data. The area having the most impact on employee satisfaction in 2005 is Recognition/Rewards. MESA’s employees have a much higher satisfaction with recognition and rewards than industry norm (Figure 7.4-12). Responses ranged from 5% to 24% higher than norm for seven questions.

Gains were made in five of the ten attributes between the 2005 and 2006 surveys. These gains are attributed to management initiatives in the area of career development. Only one of the ten attributes (Job security) showed significant deterioration in 2005. Analysis of detailed segmented results (available on-site) by senior management revealed that the major decline occurred in the manufacturing group. Improvement opportunities were identified through a series of meetings with plant personnel. Improvement efforts were initiated in early 2006.

MESA tracks the response rate of the annual Satisfaction Survey as an indicator of employee interest and engagement. Response rate climbed to over 95% participation (Figure 7.4-13).

Figure 7.4-10 MESA satisfaction level significantly outperforms industry norm

Figure 7.4-11 Top Ten Employee Satisfaction Attributes with improvement in 5 of 10 areas

Figure 7.4-12 Recognition/Rewards results demonstrate MESA superior performance
A key contributor to employee satisfaction is communication. Communication results for MESA are 20% to 30% higher than industry norm (Figure 7.4-14) according to annual Employee Satisfaction surveys. A key result is 82% of MESA employees feel they can trust what MESA tells them compared to 57% for industry norm.

Figure 7.4-14 Communication results from Employee Satisfaction Survey significantly outperform norm

7.5a Organizational Effectiveness Results
7.5a(1) Key Value Creation Process Performance

MESA measures key value creating process performance at the work cell level and at the corporate level with a variety of metrics including cycle time, error rates, productivity, opportunities for improvement (OFIs), and quality award scoring band.

As a result of a LEAN improvement event in 2003, sales processing cycle time has become an ongoing performance measure of the Tulsa Sales Group. The event resulted in process improvement and establishment of targets. Sales orders are processed under two conditions: with purchasing involved and without (Figure 7.5-1). Performance targets are 1.5 hours without purchasing and 3.5 hours with purchasing. Monthly results demonstrate that MESA is achieving these performance targets.

The Manufacturing Group has established cycle time measures for fabricated and non-fabricated orders. An additional cycle time measurement is tracked for orders direct shipped to customers. Following deployment of measures in mid-2003, cycle time for fabricated orders decreased from 3.9 days to 2.7 days in 2004. In 2005, cycle time increased to 3 days due to capacity constraints, comparing favorably to a previous Baldrige recipient and the 75th percentile of the Industry Week 2005 census of manufacturers (Figure 7.5-2).

Figure 7.5-2 Manufacturing cycle times show improvement

MESA’s nonconformance measurement system was initiated in 1999 as part of ISO 9002 certification. MESA uses this process to document both internal and external nonconformances. Since initiation in 1999, the NCR process has matured and expanded significantly, making it somewhat difficult to track MESA’s improvement progress. Initially, the NCR process was focused on the Plant area, but grew as the system matured into Sales, Admin, and Field Operations. A good example is the growth of the process into the Field Operations groups. NCR rate is currently increasing in this area and is expected to continue increasing as the NCR process matures. Additionally, the definition of NCR has grown from obvious errors to minor problems that might indicate system or process problems. The revenue adjusted NCR rate (Figure 7.5-3) segmented by operating group peaked in 2003 and is declining. Declines are seen in all areas except field operations, where the NCR process is still maturing (Figure 7.5-3).

Figure 7.5-3 NCR rate declining from 2003 peak
As the definition of NCRs expanded, MESA segmented a category of NCRs as “major”. The definition of “major” is somewhat subjective but includes those NCRs with significant cost impact (> $500) and/or those that demonstrate a major system or process breakdown. Tracking of this category began in 2002, with incidence rate of major NCR dramatically decreased (Figure 7.5-4). These results clearly demonstrate the impact of MESA’s improvement efforts.

![Figure 7.5-4 Major NCR rate dramatically declining](image)

MESA’s productivity performance compares favorably with their largest competitors. The high ratio of this metric to competition is also indicative of the high employee satisfaction at MESA - satisfied employees are productive employees (Figure 7.4-10). In addition to a very favorable comparison to competition, MESA ranks in the top quartile of manufacturer respondents according to results of the “Census of Manufacturers” conducted by *Industry Week* magazine (Figure 7.5-5). Competitor No. 2 is the only competitor with a higher productivity due to its focus as a manufacturer/distributor while MESA’s is manufacturing and service. Competitor No. 2’s higher revenue/employee is primarily a result of gross margin differences between the two types of businesses.

![Figure 7.5-5 Productivity (Revenue/employee) comparing favorably to competition](image)

Cost of Quality at MESA is quantified through the NCR system and expressed as a percent of revenue (Figure 7.5-6). Although total NCRs have not dramatically declined due to the expanding NCR definition, major NCR rates dropped over 100% since 2002. MESA began quantifying nonconformance cost in 2003 resulting from an OFI identified through a Baldrige Quality Award site visit. MESA demonstrates superior results when compared to two previous Baldrige recipients, confirming the effectiveness of MESA’s Quality Management System.

![Figure 7.5-6 Cost of Nonconformance demonstrating quality results](image)

An indirect indicator of process performance is the number of OFI’s identified through previous Baldrige applications (Figure 7.5-7). MESA has a four-year Baldrige application history with OFIs declining from over 90 in 2002 to 52 in 2005. Comparison with other Baldrige recipients indicates MESA is approaching their results. Eight key themes and 52 OFI’s were identified from the 2005 site visit.

![Figure 7.5-7 Opportunities for Improvement (OFI)](image)

Another indirect indicator of process performance is the scoring band resulting from evaluation of Baldrige applications (Figure 7.5-8). MESA has a four-year history with scoring band improving from 2 to 5. A benchmark is the highest scoring band results for all application following Stage 1 review. Until 2005, the highest scoring band was Band 5. Anecdotal information from previous Baldrige recipients indicated that recipients typically fall in Scoring Band 5. 2003 and 2005 results indicate MESA’s performance is approaching world-class level.
7.5a(2) Other Key Process Performance

Many areas of organizational effectiveness have already been previously identified. Measures include 3-Day Shipments, On-Time Shipments, NCR rate, sales growth, cycle time, and cost of quality. MESA has identified three additional measures reflecting performance: inventory turnover, accounts receivable turns, and ISO audit results.

Inventory turns are an important measure of MESA’s efficiency in controlling cost of goods sold and investment in inventory. As evidenced by the high turn rate experienced by MESA in relation to industry standards and competition, we have been successful in managing inventory. MESA experienced a decline in 2003 due to magnesium anode quality issues, but anticipates reaching 11.5 turns per year in 2006, with a 5-year target of 12.5.

Accounts receivable average collection days are a good indicator of efficiency in balancing client relationships and needs with cash requirements for operating a business. Based on anecdotal information from competitors and customers, the typical experience is approximately 60 days from invoice to payment. With limited access to competitor results, a benchmark with a publicly owned competitor indicates a significant MESA advantage (Figure 7.5-10). MESA management clearly understands that flexibility with customers and sales growth is necessary for company success; however, accounts receivable is also critical to success.

In 1999, MESA became an ISO 9002 certified company. This is a tremendous commitment of time and resources - both financial and personnel - for a small manufacturing company. In the “2001 IW Census of Manufacturers’” only 50% were ISO certified. This number declined to 40% in the 2003 Census and back to 45% in 2005. MESA is committed to ISO, with more than eighteen successful external ISO audits since 2000 (Figure 7.5-11). MESA is the only ISO certified, North American, full-line cathodic protection provider. No major findings have been identified during any external or internal ISO audits. The increase of observations in 2004 and 2005 is related to the deployment of ISO to branch offices and field operations.

MESA uses LEAN as its primary improvement methodology. Basic LEAN training has been completed for Tulsa, Houston, and Florida based employees. This involves 8 hours of training in basic LEAN techniques.

Thirteen kaizen events have been completed since 2003, involving major production and operations functions. Follow-up events have occurred for most of these events. Major results for five events are provided in Figures 7.5-12, 7.5-13, 7.5-14, 7.5-15, 7.5-16. Three events are scheduled for 2006.

Magnesium Assembly Area Event
Project Goals: Eliminate waste and improve productivity

Waste Eliminated: walking, pushing carts, double handling, excessive motion, unbalance operations, looking for tools, waiting for inspection. Largest resulting investment: 2 roller conveyor lines to enable movement of raw materials without forklift intervention.
Figure 7.5-12 LEAN event results – Magnesium Area

Sales Order Entry Process Event
Project Goals: To improve consistency, quality and speed of the sales order processing sequence from customer contact to start of production.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Before</th>
<th>After</th>
<th>% improved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity, Units per mh</td>
<td>8</td>
<td>20</td>
<td>150%</td>
</tr>
<tr>
<td>Number people in work cell</td>
<td>5</td>
<td>4</td>
<td>20%</td>
</tr>
<tr>
<td>Travel dist., feet, per cart</td>
<td>618</td>
<td>362</td>
<td>94%</td>
</tr>
<tr>
<td>Cell thru-put time, min, avg</td>
<td>480</td>
<td>90</td>
<td>82%</td>
</tr>
<tr>
<td>WIP, typical, units</td>
<td>350</td>
<td>100</td>
<td>71%</td>
</tr>
<tr>
<td>Visual Controls</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

Sales Order Entry Process Event
Waste Eliminated: walking, multiple handling, redundant copies, checking orders, unclear work instructions, amendments and reprinting, errors. Major outcomes of this event included the development of two uniform product identification codes.

AGRA Assembly Area Event
Project Goal: To establish flow and eliminate waste for the AGRA test stations and junction box assembly areas.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Before</th>
<th>After</th>
<th>% improved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Lead Time, Hours</td>
<td>5.6</td>
<td>3.9</td>
<td>30%</td>
</tr>
<tr>
<td>Total Cycle Time, minutes</td>
<td>24</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Value added Ratio</td>
<td>7%</td>
<td>10%</td>
<td>43%</td>
</tr>
<tr>
<td>Error Rate, inquiries per day</td>
<td>12</td>
<td>6</td>
<td>50%</td>
</tr>
<tr>
<td>Orders in Process</td>
<td>30</td>
<td>20</td>
<td>33%</td>
</tr>
</tbody>
</table>

AGRA Assembly Area Event
Waste Eliminated: walking, multiple handling, redundant copies, checking orders, unclear work instructions, amendments and reprinting, errors. Major outcomes of this event included the development of two uniform product identification codes.

Impressed Current Area Event
Project Goals: To eliminate waste, streamline the build process, reduce fatigue, and reduce lead time.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Before</th>
<th>After</th>
<th>% improved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Footage traveled per unit, feet</td>
<td>1933</td>
<td>314</td>
<td>84%</td>
</tr>
<tr>
<td>WIP inventory, pieces</td>
<td>570</td>
<td>135</td>
<td>76%</td>
</tr>
<tr>
<td>Output, pieces/m-hr</td>
<td>5</td>
<td>8</td>
<td>60%</td>
</tr>
<tr>
<td>Lead Time, days (total, unexpedited)</td>
<td>8.5</td>
<td>2</td>
<td>76%</td>
</tr>
</tbody>
</table>

Impressed Current Area Event
Waste Eliminated: walking, pushing carts, double handling, excessive motion, unbalanced operations, looking for tools. This event resulted in a major physical redesign and layout.

Plan For Every Part Project Event
Project Goal: Develop a plan for every part (PFEP) used in the Magnesium Shop.

<table>
<thead>
<tr>
<th>Parameter – pallet locations</th>
<th>Before</th>
<th>After</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cartons</td>
<td>40</td>
<td>17</td>
<td>23</td>
</tr>
<tr>
<td>Paper Bags</td>
<td>18</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Cloth bags</td>
<td>14</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Total pallet locations</td>
<td>72</td>
<td>30</td>
<td>42</td>
</tr>
</tbody>
</table>

Figure 7.5-14 LEAN event results – AGRA Area

Figure 7.5-16 LEAN event results – PFEP in Mag Area

Cable Winding Flow Improvement Event
Project Goal: To eliminate waste and improve flow in Cable Winding.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Before</th>
<th>After</th>
<th>% improved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance traveled per unit, feet</td>
<td>1215</td>
<td>340</td>
<td>72%</td>
</tr>
<tr>
<td>WIP inventory, assy. pieces</td>
<td>110</td>
<td>30</td>
<td>80%</td>
</tr>
<tr>
<td>Output, pieces/man-hour</td>
<td>2</td>
<td>3 (est)</td>
<td>50%</td>
</tr>
<tr>
<td>Lead Time, hours (total, unexpedited)</td>
<td>10</td>
<td>2</td>
<td>80%</td>
</tr>
</tbody>
</table>

Figure 7.5-14 LEAN event results – Impressed Current

Cable Winding Flow Improvement Event
Project evolved into a combination improvement and 5-S event. Major results:
- Sorted unneeded items out of Cable Winding Area
- Determined types/sizes of visual storage
- Reorganized winding stations for better flow
- Added work order stand for standardization of information availability
- Designed #8 cable spool ramps and established lanes for other common sizes

Warehouse Storage Area 5-S Event
Project Goal: To clean up and reorganize the Block Building, Covered Storage, and Open Storage areas in a sustainable, standard fashion.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Before</th>
<th>After</th>
<th>% improved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity, Units per mh</td>
<td>8</td>
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<td>82%</td>
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<tr>
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<td>350</td>
<td>100</td>
<td>71%</td>
</tr>
<tr>
<td>Visual Controls</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

Warehouse Storage Area 5-S Event
Major results:
- Sorted unneeded items out of block building for disposal.
- Determined types/sizes of visual storage for needed items
- Determined Kanban/signaling system to replenish supplies and parts.
- Created layout map assigning responsibility for ongoing maintenance and cleanup
- Reorganized covered storage area
- Striped floors indicating storage, work, safety

MCC Warehouse and Work Area 5-S Event
Project Goal: To clean up and organize the MESA Corrosion truck bays and building to facilitate quicker and easier turnaround.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Before</th>
<th>After</th>
<th>% improved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity, Units per mh</td>
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<td>100</td>
<td>71%</td>
</tr>
<tr>
<td>Visual Controls</td>
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<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

MCC Warehouse and Work Area 5-S Event
Major results:
- Sorted unneeded items out of MCC for disposal.
- Determined types/sizes of visual storage for needed items
- Determined Kanban/signaling system to replenish supplies and parts.
- Cleaned truck bays and building
- Reorganized materials and parts storage for deep and shallow groundbed installations
7.6a Leadership and Social Responsibility Results
7.6a(1) Organizational Strategy and Action Plans

Organizational strategy results are measured by accomplishments in all six business result areas described in Category 7. Additional results specific to Category 7.6a(1) include Leadership and Planning, Strategic Initiative completion, and Revenue Planning.

The Employee Satisfaction Survey is a source for measurement of Leadership and Planning results. Employees are asked five questions indicating effectiveness of strategy and planning, including “I have confidence in the leadership of MESA” and “I agree with the direction the company is headed”. MESA’s results range from 20% to 38% higher than industry norm in all five areas (Figure 7.6-1) showing that MESA employees are very confident of the strategic direction and leadership of their company.

The effectiveness of MESA’s strategic planning process is measured by strategic initiatives and targets successfully achieved (Figure 7.6-2).

<table>
<thead>
<tr>
<th>Year</th>
<th>Strategic Initiatives/Targets</th>
<th>Achieved</th>
<th>In Progress</th>
<th>Not Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>30</td>
<td>22</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>1999</td>
<td>30</td>
<td>20</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>2000</td>
<td>34</td>
<td>27</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>2001</td>
<td>30</td>
<td>21</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>2002</td>
<td>33</td>
<td>29</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>2003</td>
<td>42</td>
<td>37</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>2004</td>
<td>24</td>
<td>14</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>2005</td>
<td>24</td>
<td>17</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

Figure 7.6-2 Strategic Initiative/Target Completion

7.6a(2) Ethical Behavior and Stakeholder Trust

Ethical behavior and trust is measured by employee confidence results (Figure 7.6-1) and ethical incidents (Figure 7.6-3). Incidents are categorized as major or minor and recorded in an ongoing log maintained by the President, who is responsible for investigating and resolving all incidents. Since deployment of the formal Standards of Conduct, one major ethical incident has occurred. Minor incidents include environmental issues and employee conduct. Conduct related incidents initially result in employee counseling, with additional discipline if required.

Customers also give high trust ratings to MESA through two major Customer Satisfaction Surveys (Figure 7.6-4) conducted in 1999 and 2002. Survey results, on a scale of 0 to 10, provide a superior comparison of MESA to its best competitor in 1999 and three competitors in 2002.

Corporate culture results from the Employee Satisfaction Survey (Figure 7.6-5) provide additional indicators of employee trust in MESA senior management, significantly outperforming industry norms.
7.6a(4) Regulatory and Legal Compliance

MESA’s performance in meeting its responsibilities to the public is tracked by regulatory reporting deadlines, incidents, and violations (Figure 7.6-6). MESA has met regulatory reporting guidelines and has provided all required OSHA and DOT training for affected employees. MESA has not experienced any incidents or accidents, which require reporting to OSHA or DOT.

7.6a(5) Organizational citizenship supporting Key communities

MESA’s performance in the area of organizational citizenship clearly demonstrates an involved and active workforce. Results indicate MESA has achieved one of its core values to “promote and support employee participation in community activities.” For such a small company, MESA has gone beyond the level of support experienced in much larger companies (Figure 7.6-7).

7.6a(3) Fiscal Accountability

Fiscal accountability includes reporting of results to a number of external government and corporate entities. MESA tracks its progress monthly in meeting regulatory reporting deadlines through a calendar maintained by the Administrative Department, with its goal being that all internal and external deadlines are met.
### 7.6a(4) Regulatory and Legal Compliance

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description</th>
<th>Requirement</th>
<th>Frequency</th>
<th>Timely &amp; Accurate</th>
<th>Audit</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA/ODEQ</td>
<td>Stormwater Pollution Prevention</td>
<td>Permit Filing</td>
<td>Annual</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Water Samples</td>
<td>Quarterly</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
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<tr>
<td></td>
<td></td>
<td>Inspection</td>
<td>Monthly</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
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<tr>
<td></td>
<td>Tier III Report</td>
<td>Report Filing</td>
<td>Annual</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
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<tr>
<td></td>
<td>Form R</td>
<td>Report Filing</td>
<td>Annual</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
</tr>
<tr>
<td>DOT</td>
<td>CDL Drivers</td>
<td>Driver Qualification Report</td>
<td>Annual</td>
<td>Yes</td>
<td>Yes</td>
<td>Minor findings, Retained rating of satisfactory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Driver Logs</td>
<td>Daily</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>DVIR</td>
<td>Daily</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operator Qualification</td>
<td>Qualified personnel</td>
<td>Ongoing</td>
<td>Yes</td>
<td>Yes</td>
<td>No findings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Certification Report</td>
<td>Annual</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Anti-Drug/Alcohol</td>
<td>Maintain policy</td>
<td>Ongoing</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Drug testing</td>
<td>Ongoing</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
</tr>
<tr>
<td>OSHA</td>
<td>Safety</td>
<td>OSHA 300 log</td>
<td>Ongoing</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
</tr>
<tr>
<td>DOL</td>
<td>401K Plan</td>
<td>Report Filing</td>
<td>Annual</td>
<td>Yes</td>
<td>Yes</td>
<td>No findings</td>
</tr>
</tbody>
</table>

Figure 7.6-6 Regulatory and legal compliance results

### 7.6a(5) Organizational citizenship supporting Key Communities

<table>
<thead>
<tr>
<th>Organization</th>
<th>Years Involved</th>
<th>2005 Investment</th>
<th>Employee Participants</th>
<th>Description of Service or Recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cystic Fibrosis Foundation</td>
<td>13</td>
<td>$15,000</td>
<td>5</td>
<td>Premier Corporate Sponsor &amp; 2 Chapter Presidents, Henry Zarrow Award in 2001 &amp; 2002</td>
</tr>
<tr>
<td>Tulsa Metropolitan Chamber of Commerce</td>
<td>18</td>
<td>$1,000</td>
<td>1</td>
<td>Small Business Council, Vice-Chairman, “Manufacturer of Year” in 1995</td>
</tr>
<tr>
<td>Oklahoma House of Representatives</td>
<td>4</td>
<td>Time</td>
<td>1</td>
<td>HR Manager served in Oklahoma House of Representatives</td>
</tr>
<tr>
<td>Oklahoma Small Business Commission</td>
<td>2</td>
<td>Time</td>
<td>1</td>
<td>President appointed to Commission in 99/00</td>
</tr>
<tr>
<td>Oklahoma Blood Institute</td>
<td>5</td>
<td>Blood</td>
<td>21</td>
<td>Blood donation drives</td>
</tr>
<tr>
<td>Food for Families</td>
<td>3</td>
<td>$4,350</td>
<td>50</td>
<td>Food donation drive, largest Tulsa per capita giver</td>
</tr>
<tr>
<td>NACE International</td>
<td>26</td>
<td>$5,000+</td>
<td>20</td>
<td>Gold Corporate Member, Distinguished Organization Award, Distinguished Service Awards (3), National Treasurer, BOD (1), NACE Instructor (1), NACE certifications (16), Officers @ Section Level (3), Officers @ Area Level (1), Officers @ National Level (1), Committees @ National Level (10)</td>
</tr>
<tr>
<td>NACE Foundation</td>
<td>4</td>
<td>$15,000</td>
<td>1</td>
<td>MESA President elected as 1st President of Foundation, In 2004 MESA makes $100K commitment</td>
</tr>
<tr>
<td>OU Underground Corrosion Short Course</td>
<td>21</td>
<td>Time</td>
<td>2</td>
<td>MESA Sales Manager on Board of Directors, Instructors (2)</td>
</tr>
<tr>
<td>Appalachian Underground Corrosion Short Course</td>
<td>11</td>
<td>Time</td>
<td>2</td>
<td>Florida Area Manager on Board of Directors, Instructors (2)</td>
</tr>
<tr>
<td>Kilgore College</td>
<td>3</td>
<td>Time</td>
<td>1</td>
<td>Houston Area Manager on Advisory Board</td>
</tr>
<tr>
<td>American Cancer Society</td>
<td>1</td>
<td>Time</td>
<td>9</td>
<td>Race Volunteers</td>
</tr>
<tr>
<td>Little Lighthouse</td>
<td>1</td>
<td>$1000</td>
<td>2</td>
<td>Sponsorship in 2002</td>
</tr>
<tr>
<td>Adopt A Family</td>
<td>2</td>
<td>$2000</td>
<td>&gt;30</td>
<td>Adopted one family (w/ 7 children) for Christmas</td>
</tr>
<tr>
<td>Down Syndrome Assoc.</td>
<td>1</td>
<td>$1000</td>
<td>1</td>
<td>Premier sponsor of 1st Buddy Walk in 2004</td>
</tr>
<tr>
<td>Tulsa People Magazine</td>
<td>1</td>
<td>NA</td>
<td>100%</td>
<td>Received Corporate Citizenship Award</td>
</tr>
</tbody>
</table>

Figure 7.6-7 Key Community Support Activities