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MCO-I INTEGRATED MANAGEMENT SYSTEM MANUAL

Established: November 13, 2017

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MITSUBISHI HEAVY INDUSTRIES COMPRESSOR CORPORATION

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0. Introduction

Mitsubishi Heavy Industries Compressor International (MCO-I) developed and implemented an integrated Quality, Information Security, Environmental and Occupational Health and Safety Management System in order to document the company's best business practices, better satisfy the requirements and expectations of its customers, enhance its environmental performance, ensure secure information and systems management, support and promote good health and safety practices and improve the overall management of the company.

To understand our organization and context, MCO-I determined external and internal issues relevant to and affecting its ability to achieve intended results of this Integrated Management System (IMS).

MCO-I meets the requirements of the international standard ISO 9001:2015. The system addresses the design, development, production, installation, and servicing of customer products. It incorporates the process approach where consistent and predictable results are achieved more effectively and efficiently when activities are understood and managed as interrelated processes.

MCO-I meets the requirements of international standard ISO 14001:2015. The system addresses the management of environmental aspects, compliance obligations, the actions to address risks and opportunities. The management of the interactive processes provides for the achievement of continual improvement and focus on efforts leading to the prevention of undesirable outcomes.

MCO-I meets the requirements of the international standard of ISO 45001:2018. The system addresses the MCO-I policy commitments to comply with applicable legal requirements, to the prevention of injury and ill health and to continual improvement.

MCO-I meets the requirements of the international standard ISO 27001:2013. The system addresses the Information Security commitments to provide secure business systems the preserve the confidentiality, integrity and availability of information by applying a risk management process therefore giving confidence to interested parties that the risks are adequately managed.

Process based thinking is applied in this IMS and its processes utilizing a "Plan-Do-Check-Act" methodology and focus on "Risk-Based Thinking" driving to the prevention of undesirable outcomes.

The manual describes the IMS, delineates authorities, interrelationships and responsibilities of the personnel responsible within the system. The manual also provides the documented information with procedures or references for all activities comprising the management system that ensures the compliance to the requirements of the standards.

This manual is used internally to guide the company's employees through the various requirements of the quality, information security, environmental, and health and safety standards that must be met and maintained in order to ensure good health and safety, environmental performance, customer satisfaction, secure data and systems, continual improvement and provide the necessary instructions that create an empowered work force.

This manual is used externally to introduce our Integrated Management System to our customers and other external organizations or interested parties. The manual is also used to familiarize them with the controls we use to assure the integrity of the management system is maintained and focused on customer satisfaction, environmental performance, good health and safety, data security and continuous improvement. The IMS manual is approved by top management.

MCO-I President: _____ Date NOV. 13, 2017

Koji Otsuki（大槻 晃嗣）

1. Purpose and Scope of the Integrated Management System

The Mitsubishi Heavy Industries Compressor International (MCO-I) site campus is located in Pearland, TX. MCO-I is committed to providing and continuously improving our high quality products and services. We create and maintain robust health, safety and environmental management systems and practices. We operate with state-of-the-art information technology systems to ensure reliability and information security. We maintain robust relationships with our internal and external customers and seek to meet or exceed their expectations. (Ref A.Table 4-1)

This manual explains how MCO-I's activities are conducted and outlines documentation and procedures that fulfil the requirements of Quality Management System (ISO 9001:2015), Environmental Management System (ISO 14001:2015), Occupational Health and Safety Management Systems (ISO 45001:2018) and Information Security (ISO 27001: 2013). Department managers located at MCO-I have the responsibility to align their department with this business-wide Integrated Management System (IMS) manual, the MCO-I Policy and MCO-I Business Objectives. This IMS manual covers general information on Quality, Environmental, Information Security, Health and Safety standard operating procedures and applies to all MCO-I employees as assigned. (Ref A.Table 4-2)

MCO-I's scope is design services, production, packaging, part storage, repair and on-site advisory support for turbomachinery parts and equipment products. The scope of the MCO-I Integrated Management System (MCO-I IMS) includes all processes that produce or obtain products, perform repairs and overhauls, or provide service support to its customers as well as those that support compliance of our systems and personnel in a safe, environmentally responsible way where information technology systems and intellectual property are safe-guarded. MCO-I's scope of responsibility ends when the customer or contractor takes responsibility for performing on site work, with MCO-I Technical Field Advisors (TFA's) then providing only technical field guidance. TFA's comply with all on site protocols per applicable standards or customer requirements.

MCO-I Business Integration Scope

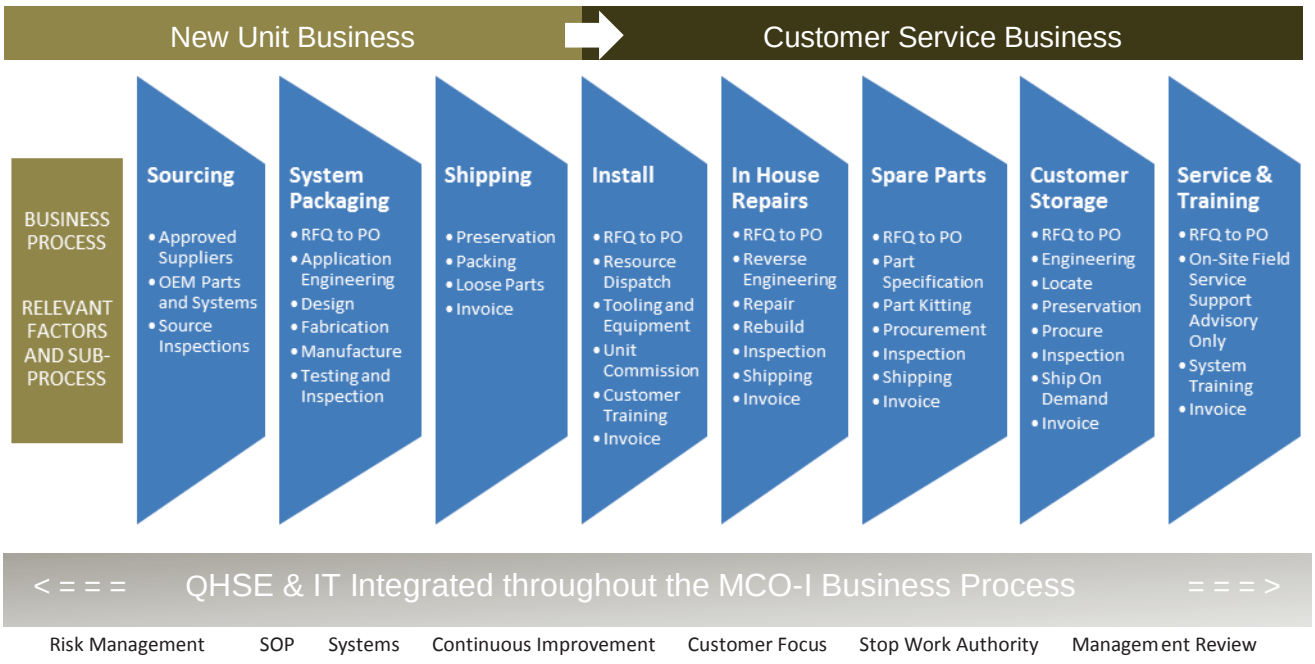


Figure 1 - MCO I Business Integration Scope

2. MCO-I Corporate Beliefs

2.1 Vision

- MCO-I strives to be the premiere choice for turbomachinery products and services in North America

2.2 Values

- Integrity
- Social Responsibility
- Harmony

2.3 Our Mission

- Deliver best-in-class customer experience
- Adopt global solutions through local presence
- Honor our values of integrity, social responsibility and harmony

2.4 MCO-I IMS Policy

MCO-I provides outstanding products and services that meet customer expectations and requirements. We operate with passionate focus on health, safety, quality, environmental responsibility, and optimized information systems. We foster a culture of teamwork, compliance and continual improvement. The MCO-I team is committed to compliance with our Integrated Management System and will ensure its ongoing effectiveness.

MCO-I employees have an instilled culture of compliance, cooperation and continual improvement communicated through our Vision, Values, Mission, Policy Statement, Objectives, Team Principles and Tenets. Top management ensures adequate resource and leadership is in place to support health, safety, environmental, quality and information technology security initiatives as well as ensure compliance with regulatory requirements. Top management is committed to providing safe and healthy working conditions for the prevention of illness, reduction of risks and elimination of known hazards. Top management is committed to consulting with and involving all workers in development of the IMS. Furthermore, top management is committed to sound environmental stewardship through pollution prevention, waste minimization, and conservation of natural resources. Top management also ensures MCO-I employees and anyone working under MCO-I direction are aware of our business compliance requirements.

MCO-I IMS Objectives:

- *Safety – Establish safety programs fostering employee ownership and involvement. Drive standardized safety equipment and practices and a robust, risk-based CAPA tracking program.*
- *Quality – Deliver high-value, on-time and compliant products; engage customers and develop measures for improvement opportunities; track and drive defects and opportunities through a robust, risk-based CAPA tracking program.*
- *Environmental – Maintain all local, federal and corporate compliance and reporting requirements through employee awareness, preventive measures, risk-based management and oversight.*
- *Information Technology – Standardize, drive uptime and usage, data security, and risk-based continual improvement in support of Information Technology systems.*

2.5 Business Objectives

MCO-I management believes it is important to establish business objectives at the beginning of each year to meet targeted business obligations and to drive continual improvement within their disciplines. Objectives are consistent with strategic business direction, relevant customer and project needs, and industry requirements and regulations. Objectives are documented and communicated to top management and MCO-I employees.

2.6 Tenets and Guiding Principles

As part of our One Team culture, MCO-I management provides tenets and guiding principles to encourage best practice in all aspects of our business. These tenets are shared with all MCO-I employees and are available to our customers.

MCO-I Team Principles

- Leadership: Always lead by example.
- Positive Approach: Focus on issue, process or behavior.
- Teamwork: Practice skills to encourage, listen, challenge, commit and deliver.
- Relationships: Foster positive relationships with customers and co-workers.
- Improvement: Drive compliance and continual improvement in every aspect of the business.

MCO-I Safety Tenets

- Stop Work: If safety is in question, report it.
- Know Your Job: Wear designated PPE.
- Take 5: Organize and plan your work.
- Right Tool for the Job: Use correct and certified tools.
- Recognize and Report: Eliminate, guard or identify hazards.

MCO-I Quality Tenets

- Stop Work: If quality is in question, report it.
- Don't Accept or Pass Defects: Check quality before work; verify after.
- Process Compliance: Use only calibrated tools and equipment; only use certified suppliers.
- System Compliance: Use formal quality and document control systems to capture data and information. Use standard process and ensure compliance. Track and trend to drive continual improvement.
- Product Compliance: Ensure customer requirements, industry standards and engineering specifications are followed.

MCO-I Environmental Tenets

- Stop Work: Prevent pollution. Protect the environment.
- Know your Waste Streams: Store and dispose of waste properly.
- Monitor and minimize: Be mindful of impacts to air, land and water.
- Reduce, Reuse and Recycle: Minimize waste production throughout daily processes.
- Recognize and Report: Eliminate, guard or control concerns.

MCO-I Information Security Tenets

- Stop Work: Protect information. Prevent data loss. Verify source and recipient.
- Prevent Access: Never share your password. Keep your PC locked when unattended.
- Protect Information: Never leave confidential information unattended.
- Report Information Security Risks: Report suspicious emails, virus threats or IT systems misuse.
- Avoid Data Loss: Always back-up information to the network drive.

For IT requests, email: helpdesk@mhicompressor.com

3. References and Definitions

3.1 References

For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document including any amendment(s) applies.

- **ISO 9001:2015,** Quality Management Systems, Fifth Edition 2015-09-15
- **ISO / IEC 27001:2013,** Information Security Management Systems, Second Edition 2013-10-01
- **ISO 14001:2015,** Environmental Management Systems, Third Edition 2015-09-15
- **ISO 45001:2018,** Occupational Health and Safety Management Systems, First Edition

Terms and definitions

3.2.1 Terms related to organization and leadership (1/2)

No.	Terms	Definitions
1	Management system	Set of interrelated or interacting elements of an organization to establish policies, objectives, and processes.
2	Integrated management system	The collection of health, safety, environmental, quality and information security management systems used to identify discipline influences, fulfill compliance obligations, and address risks and opportunities
3	MCO-I policy	Intentions and direction of an organization related to health, safety, quality, environmental and information security performance, as formally expressed by its top management
4	Organization	Person or group who has its own functions with responsibilities, authorities, and relationships to achieve its objectives
5	Quality assurance department	Person or group who assures quality of products
6	Corporate secretary	Board contact, legal counsel and risk management
7	Procurement department	Supplier management
8	Engineering	Engineering & Design: • Application Engineering Support • Reverse Engineering • Project Management • Packaging Design • Customer Support • Root Cause Analysis • Drawing Creation and Control

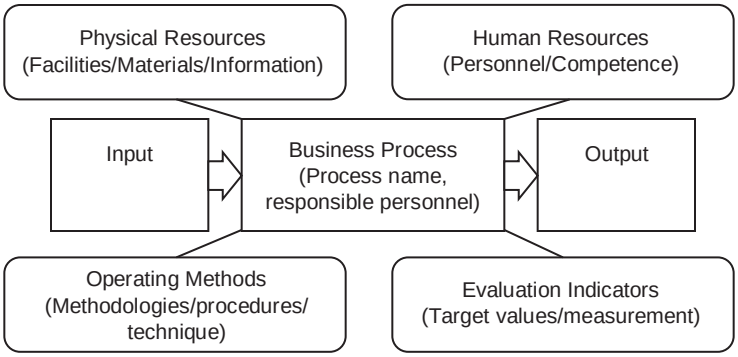
(2/2)

No.	Terms	Definitions
9	Sales department	Marketing Communications Project Coordination New Units Division Customer Service Division • Parts & Service • Technical Service and Asset Management • Training
10	Manufacturing / Production / Warehouse department	Storage and Spare Parts manufacturing In House Repairs New Unit Assembly Machining of Compressor and Steam Turbine components Welding Cleaning, Blasting and Painting Rotor balancing Planning and Production Control Facilities Logistics
11	QHSE & Systems	Support for: • Quality • Health & Safety • Environmental • Information Security
12	Relevant Mitsubishi Company Relationships	MHI (Mitsubishi Heavy Industries) MHI-A O&G (Americas - wholly owned subsidiary of MHI) MCO (Mitsubishi Heavy Industries Compressor Corporation) is a wholly owned subsidiary of MHI MC-A (Mitsubishi Corporation – Americas) MCO-I (70% owned by MCO / 30% by MC-A)
13	Interested party	Person or organization that can affect, be affected by, or perceive itself to be affected by a decision or activity
14	MCO-I top management	The president who directs and controls MCO-I at the highest level of the Company The officers, vice presidents and directors that report directly to the president.
15	IMS Area Specific Committee	Meeting body created to report, discuss, determine key issues for health, safety, quality, environmental, or information security activities
16	IMS Support	Persons responsible for IMS document management and control.
17	Departmental manager	Person who oversees activities in a cost center or functional department of the Company which include health, safety, environmental, quality and information security responsibilities for its team members
18	Integrated Management Representative - IMR	Person who coordinates IMS activities for a particular ISO Standard; there is one for each standard: Quality, Environmental, Health, Safety, IT
19	Departmental IMS promoter	Person who coordinates IMS activities in each department of the Company

3.2.2 Terms related to planning

No.	Terms	Definitions
1	Environment	Surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelationships (natural and business environments) Note 1: “Surroundings” can extend from within an organization to the local, regional and global system. 2: “Surroundings” can be described in terms of biodiversity, ecosystems, climate or other characteristics. A natural environment as well as a business environment can be included.
2	Environmental aspect	Element of an organization’s activities or products or services that interacts or can interact with the environment
3	Environmental condition	State of characteristics of the environment as determined at a certain point in time
4	Environmental impact	Change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization’s environmental aspects
5	Objective	Result to be achieved
6	IMS health, safety, quality, environmental and information security objective	Safety, health, quality, environmental and information security objective set by MCO-I consistent with its MCO-I policy
7	Prevention of pollution	Use of processes, practices, techniques, materials, products, services or energy to avoid, reduce or control (separately or in combination) the creation, emission or discharge of any type of pollutant or waste, in order to reduce adverse environmental impacts
8	Requirement	Need or expectation that is stated, generally implied or obligatory
9	Compliance obligations	Legal requirements that an organization has to comply with and other requirements that an organization has to or choose to comply with
10	Risk	Effect of uncertainty
11	Risk and opportunities	Potential adverse effects (threats) and potential beneficial effects (opportunities)

3.2.3 Terms related to support and operation

No.	Terms	Definitions
1	Competence	Ability to apply knowledge and skills to achieve intended results
2	Documented information	Information required to be controlled and maintained by an organization and the medium on which it is contained
3	Life cycle	Consecutive and interlinked stages of a product (or service) system, from raw material acquisition or generation from natural resources to final disposal
4	Outsource (verb)	Make an arrangement where an external organization performs part of an organization's function or process
5	Process	Set of interrelated or interacting activities which transforms inputs into outputs
6	Establish, implement, and maintain processes (verb)	The most important concept in this *Manual* and set of consistent activities to achieve intended outcomes including enhancement of environmental performance Process transforming an input into an output, which specifies a procedure and control elements for physical resources, human resources, operating methods, and evaluation indicators related to and necessary for the process to ensure appropriate and effective operation and control of related processes as a whole 
7	TFA (Technical Field Advisors)	Highly skilled MCO-I field service personnel who advise customer on-site functions including overhauls, new equipment installations, or other contracted services. TFA has authority to make recommendations but not take any physical action.

3.2.4 Terms related to performance evaluation and improvement

No.	Terms	Definitions
1	Audit	Systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria (requirements) are fulfilled
2	Conformity	Fulfilment of a requirement
3	Nonconformity	Non-fulfilment of a requirement
4	Corrective action	Action to eliminate the cause of a nonconformity and to prevent recurrence
5	Correction	Temporary corrective action to eliminate a nonconformity identified
6	Continual improvement	Recurring activity to enhance performance
7	Effectiveness	Extent to which planned activities are realized and planned results achieved
8	Indicator	Measurable representation of the condition or status of operations, management or conditions
9	Monitoring	Determining the status of a system, a process, or an activity
10	Measurement	Process to determine a value
11	Performance	Measurable result Performance can relate either to quantitative or qualitative findings
12	Environmental performance	Performance related to the management of environmental aspects
13	Intended outcome	What an organization should achieve by implementing its integrated management system The minimum intended outcomes include: • enhancement of health, safety, quality, information security and environmental performance, • fulfillment of compliance obligations, • achievement of objectives, • evidence of continual improvement activities, and • a common language and unifying culture
14	KPIs (Key Performance Indicators)	Key Performance Indicators – These are considered to be a subset of business or process indicators that if controlled, steer other metrics in the right direction or they are metrics deemed by the business to be critical to the growth strategy and performance of the company.

4. Context of MCO-I

Company Background - Products and Services

About MCO-I

Mitsubishi Heavy Industries Compressor International Corporation (MCO-I) was established in the United States in October 2012 as a group company of Mitsubishi Heavy Industries, Ltd. (MHI). Mitsubishi Heavy Industries Compressor Corporation (MCO), a wholly-owned subsidiary of MHI in Hiroshima, Japan, holds a 70% stake with Mitsubishi Corporation (Americas) as a 30% joint venture partner. MCO-I is one of the world's largest manufacturers of process compressors and mechanical drive steam turbines. We are dedicated to providing advanced technology machinery and after-sales service to a variety of industries in the Americas.

Products & Services

- Mitsubishi compressor
- Mitsubishi mechanical drive steam turbine
- Footprint replacement
- OEM spare parts supply
- Field Service (advisory only)
- Horizontal and vertical rotor storage
- Packaging and assembly
- Reverse engineering
- Training services
- Repair and refurbishment
- Asset Management

Turbomachinery manufactured by Mitsubishi Heavy Industries Compressor Corporation (MCO) is used in gas and petrochemical industries. Specifically, these products include compressors, which compress gas at production facilities, and steam turbines which drive the compressor. These products are active in energy and petrochemical industry fields all over the world. The rotors MCO produces range up to diameters of over 2 meters and weights exceeding 10 tons. MCO possess the world-leading design and production technologies that are needed to ensure high-speed and stable operation of these rotors.

The MCO-I facility, Pearland Works, integrates the systems built by MCO into packages, then sells and provides aftermarket parts and services to the end users. The facility houses state-of-the art rotor storage and asset management for planned and emergency applications. Engineering services as well as on-site repair and rebuild services are also part of MCO-I customer offerings.

Industry Applications

MCO-I products and services are used in a broad range of fields, ranging from energy and transportation to petrochemical fields, which support the infrastructure of society. Compressors and Turbines products play a variety of roles, from drilling at oil and natural gas wellheads to the final production and transport processes which bring benefit to our everyday lives. In order to meet the needs for the fluid compression and expansion that is required by these processes, MCO offers turbomachinery products and services delivering high performance, high reliability, and good cost performance.

4.1 MCO-I and its context

MCO-I monitors the markets and business capability needs that are strategic to its growth and that may prevent meeting target objectives. Strategic business plans are developed and reviewed with both branches of support from headquarters, MHI and MCO, to confirm direction. Internal and external factors are reviewed.

Internal and External Issues

Area	Source	MCO-I Issues (Internal and External)	Lead Depts	Review Covered
Machine	**Internal**	Capital Procurement, Installation, Building Expansion	Mfg	Production & Service
Personnel	**Internal**	Staffing Levels, Training, Review, Performance Management, Hiring/Firing, Engagement	HR, Mfg, QHSE	Production & Service, Dept Staffs
Work Environment	**Internal**	Ergonomics, Aging Workforce, Housekeeping, Aspects and Impacts	Mfg, HR, HSE	Production & Services, Functional
Material	**Internal**	Non-Approved Suppliers, No India / China Content Applications	Pro, Quality	Dept Staffs, Functional
Method	**Internal**	SOP's and ITP's not fully developed for new business applications	Mfg, Qualty, Eng	Functional
Tooling	**Internal**	Procuring and maintaining adequate calibrated tooling availaibility	Mfg, Quality	Functional
Customer	External	New Business, Customer Service, Issue Resolution	Sales, Serv, Eng	Board, Officer, Town Hall
Competitive	External	How to grow Market Share; Single Source Suppliers	Sales , Procurement	Functional Staffs
Regulatory	External	TCEQ, EPA, Avetta, ISN, Corporate, EEOC, Regulatory, Texas WorkForce Commission	HSE, HR	Reporting and Functional Deep Dive
Legal	External	Employment Practices, Litigation - client or customer, Non-Complete, Privacy and Confidentiality Agreements	HR, Gen Coun	Special Bi-Annual All Hands
Technological	External	Still in implementation mode for ERP; US technology application opportunities to replace dated MCO processes	IT, Mfg	Initiative and Project Review
Market	External	Bookings Rate and Customer Base: Limited to North and South America	Sales	Officer Staff, Department Staff
Cultural	External	Japanese and US Harmonization, Prior Business Best Practice Integration	HR, Mfg	Functional Deep Dive
Social	External	Religious Beliefs, Expectant Mothers, Right to Carry	HR	Functional Deep Dive
Political	External	Tarriffs, Embargos	Procurement	Functional Deep Dive
Economic	External	Need Development Support: Greater Houston Partnership, Workforce Solutions, TWC, Pearland Chamber of Commerce	Sales, HR	Functional Deep Dive
International	External	Visas, Travel, Security and Protection, Health Coverage	HR	Dept Staff
Domestic	External	H1B Visa to Permanent Residency	HR	Dept Staff
Regional	External	Inclement Weather Preparation, Response and Continued Operation	HSE , Facilities	Officer Staff
Local	External	Competitors are in same locale - retention and recruiting pressure	HR	Functional Deep Dive
Corporate Synergies	External	Growth into Small Compressor Packaging and Manufacturing, ISO and IT Standardization, Global Mfg Compliance	Mfg, QHSE	Board, Officer, Town Hall

Cascaded objectives are then passed to the operations for planning, execution and deployment. Standing Operational Reviews are conducted for review of business performance. Standing Management Reviews are held for review of the IMS and its effectiveness. Risk is assessed at numerous levels of the business with targeted actions taken to ensure a culture of compliance and continual improvement.

At minimum, MCO-I provides updates, reviews progress and performance as follows:

MCO-I Team Rhythms

Standing Review	Freq.	General Content (includes Internal and External Issues and Actions where appropriate)	Attendees
Production & Service	2-5 Days / Week (W)	Schedule and Attainment, Project Updates, Constraints, Safety, Quality, Resource, Training, Visitors	All Execution Depts
Department Staffs	W or Monthly(M)	Initiatives, Communications, KPIs, Trends and Actions	Functional Staffs
Officer Staffs	W	Manufacturing, CSB, NUB, General and QHSE Performance	Officers
Functional Deep Dives / Continuous Improvement	W or Annual/R	Non Conformances, Opportunities, Trends, Human or Other Resource Needs, Actions	Select Depts
Initiatives and Project Reviews	W or A/R	Customer and commercial requirements, Schedule, Parts Availability, Resource Planning, Logistics, Inspections	Cross-Functional: Commercial & Execution Depts
Town Halls	Multiple Times / A	Business Updates, Special Initiatives, Visitors	All Associates
Board Meetings	Quarterly	Sales, Bookings, Profit, Cash Flow, Asset Management, Resource Planning, Strategic Initiatives	Officers / Board Members
Topic Specific	A/R	Bi-Annual Corporate Compliance Legal Training	All Associates
Employee Committees (non-union)	M	Select initiatives supporting QHSE, HR or other areas	Volunteer Associates
All Personnel with Manager	Bi-Annual	Performance Assessments vs. Objectives; Teamwork	All Associates
Corporate Synchronizations	A/R	MCO vs MCO-I joint initiatives	MCO & MCO-I Functional Counterparts
Management Reviews	1 / Year	Follow MCO-I Standard Template	Officers and Managers

4.2 Needs and expectations of interested parties

- MCO-I recognizes we have a unique set of interested parties whose needs change and develop over time. To ensure that our products and processes meet all relevant requirements, we identify and assess the potential impact of any relevant needs and expectations that may be elicited from interested parties.
- Where it is appropriate and to ensure alignment to deliver to our interested parties, we convert their relevant needs and expectations into requirements which become inputs to our IMS and our product and service designs.
- Reference Annual Communication Plan for interested parties and compliance guide.

4.3 Scope of the integrated management system

This manual is available to all interested parties that request this or any sub part. The scope of the IMS shall be as specified in Section 1 in consideration of the following items:

- External and internal issues referred to in Section 4.1
- Compliance obligations referred to in Section 4.2
- Business functions and physical boundaries of MCO-I
- Activities, products, and services of MCO-I
- MCO-I's limit of authority and ability to exercise control and influence as shown in sourcing and the MCO-I Business Integration Scope.

See the following attachments for reference:

- Attached Fig. 4-1: Company's Organizational Chart Relating to IMS Manual
- Attached Fig. 4-2: Integrated Management System Diagram

4.4 Integrated management system and its processes

MCO-I establishes, maintains, and implements this IMS documentation system based on the requirements of ISO 9001, ISO 14001, ISO 45001 and ISO 27001.
To achieve the intended outcomes including enhancement of its health, safety, quality, environmental and information security performance, the Company, in accordance with the requirements of this *Manual*, makes sure to:

(1) establish, implement, maintain, and continually improve the IMS including the necessary processes and their interactions:

Attached Fig. 4-2	Integrated Management System Diagram
Attached Table 4-2	List of Applicable SOP's
Attached Table 4-3	Process Control and Risk Assessment Plan for IMS: Quality

(2) consider knowledge gained in Sections 4.1 and 4.2 when establishing and maintaining IMS,

(3) follow conventions of documentation control as prescribed by **Management of SOP Documentation, (SOP-3-091-2020-S),**

(4) utilize IMS documentation including:

- IMS Manual
- Standard Operating Procedures
- Work Instructions
- Forms
- Systems
- Drawings
- Organization Charts
- Limits of Authority
- Risk Registers
- CAPA logs
- Action Plans

(5) Documents may also be supplemented by corporate (MHI/MC/MCO), customer or project-specific documents to satisfy client requirements and relevant project specifications.

5. Leadership

5.1 Leadership and commitment

Top management demonstrates leadership and commitment by:

- taking accountability for the effectiveness of the IMS, including the prevention of work related injury and ill health as well as the provision of safe and healthy workplaces and activities;
- establishing the MCO-I Policy including health, safety, quality, environmental and information security objectives which are compatible with the Company's strategic direction and context;
- integrating IMS requirements into Company's business processes;
- ensuring that the resources needed for the IMS are available;
- communicating the importance of MCO-I values and effective health, safety, quality, environmental and information security management and conformance to the IMS requirements;
- ensuring that the IMS achieves its intended outcomes;
- directing and supporting persons to contribute to the effectiveness of the IMS;
- promoting continual improvement;
- utilizing process approach and applying and promoting risk-based thinking; and
- supporting the roles of the Company's management to demonstrate their leadership as it applies to their areas of responsibility;
- developing, leading and promoting an organizational culture that supports the intended outcomes of the IMS;
- ensuring a workplace free from reprisals for employees when reporting incidents, hazards, risks and opportunities;
- ensuring the developed process(es) accounts for consultation and participation of workers;
- considering the need for committees that are relevant to the function of the IMS and providing support for their functioning.

Top management ensures a focus on customer in order to:

- Ensure customer and applicable statutory and regulatory requirements are determined, understood and met
- Risks and opportunities that can affect product and services conformity as well as customer satisfaction are determined and addressed
- A continuous focus on enhancing customer satisfaction is maintained

5.2 MCO-I policy

MCO-I's IMS policy is stated in section 2.4. This policy is shared with all MCO-I employees and is the foundation of this IMS, supported by top management, shared with customers and reviewed in all management reviews.

5.3 Organizational roles, responsibilities and authorities

Organizational roles, responsibilities, and authorities are defined to ensure that the IMS is implemented. Figure 2 shows the Company's IMS organization chart.

(1) MCO-I top management:

- Carry out the requirements specified in Section 5.1.
- Conduct the management review of the Company's IMS activities.

- Develop measures relating to enhancing the corporate value of the Company.
- Appoints health, safety, quality, environment and information security leaders as the Integrated Management Representative ("IMR") for their area of expertise.
- Preside at the respective Integrated Systems Committees ("IMS") as committee chair

(2) Integrated management system representative (IMR):

- Direct and control the Company's health, safety, quality, environmental and information security activities on behalf of the president and stand in for the Company IMS Committee chair
- Solicit support for area-specific related statutory matters including internal MCO/MHI support, third party organizations or standards organizations representatives as required
- Manage reporting and Company's health, safety, quality, environmental and information security activities including the IMS
- Develop action plan related to enhancing the corporate value of the Company
- Monitor departments under the umbrella organization and coordinate with internal audits

(2) IMS System Support – Provide support to IMRs, Divisions and Departments for all matters related to the IMS including documentation creation, control and auditing.

5.4 Consultation and participation of workers

MCO-I established a process for consultation and participation of workers at applicable levels and functions. Worker representatives exist in the development, planning, implementation, performance evaluation and actions for improvement of the IMS. Consultation and participation of Workers (SOP-3-121-2140-S) defines the participation programs established for non-managerial workers at MCO-I.

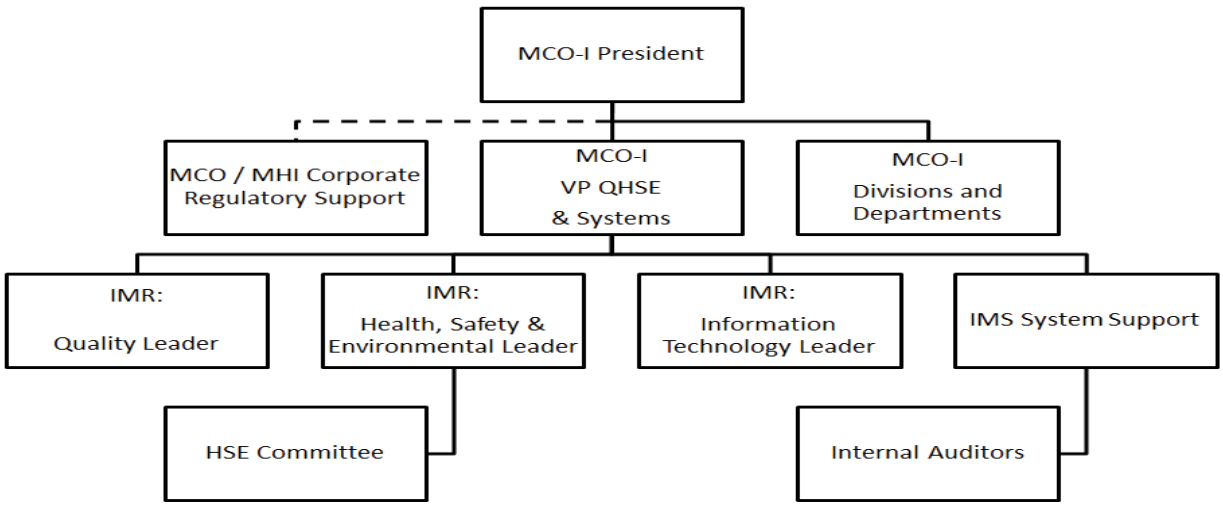


Figure 2- Company's Integrated Management System Organization Chart

6. Planning

6.1 Actions to address risks and opportunities

- Planning process
  - MCO-I routinely evaluates risks and opportunities to achieve the outcomes of the IMS, to reduce potential of undesired effects and to achieve continual improvement.
- Departments and IMRs consider
  - external and internal issues referred to in Section 4.1;
  - requirements referred to in Section 4.2; and
  - the scope of the IMS.
- IMRs create action plans and identify KPIs, maintain and routinely review these to drive initiatives and actions and confirm effectiveness.
- IMRs and departments create tracking and monitoring to ensure compliance and continual improvement of KPIs.
- MCO-I evaluates relative risk criteria and assigns actions as noted below:

Applicable Standard	Identification	Assessment Methods	Risk and Opportunity Examples	Action Examples
ISO 9001	Products and Services	1_IMS Risk Register (Sample Table 4-3), 2_Project Risk Reviews, 3_Functional Defect Data Analysis	Business Process Risk, Project Concerns, Resource Constraints / Product and Process Defects (NCR's), New Technologies	Define Mitigation Actions, Provide Standard Training / Verify Top Critical Drivers and Likelihood, Assign Owners, Determine CAPA or Opportunity, Follow-up for Effectiveness
ISO 14001	Environmental Aspects and Compliance Obligations	Risk Register Review / Continuous Assessment of Impacts by EHS	New Employees, Language Barriers Leading to Spillage, Changes to EPA regulations, Hurricane flooding	Provide Standard Training, Verify Top Critical Drivers and Likelihood, Assign Owners, Determine CAPA, Follow-up for Effectiveness
ISO 45001	Safety Hazards and Compliance Obligations	Risk Register Review / Continuous Assessment by EHS	New Employees, OSHA Requirement Gaps, Customer Property, Field Risks	Create Emergency Response Plans, Provide Standard Training, Verify Top Critical Drivers and Likelihood, Assign Owners, Determine CAPA, Follow-up for Effectiveness
ISO 27001	Information Technology Security	Risk Register Review / Continuous Assessment by IT	Data Security Breach or Loss, Natural Disasters, Data Storage Limitations, New Technologies	Provide Standard Training, Verify Top Critical Drivers and Likelihood, Assign Owners, Determine CAPA, Follow-up for Effectiveness

- Potential emergency situations: IMRs will anticipate and determine potential emergency situations, and devise planning to prevent, respond or contain these.

  - Supporting procedures are located in Attached Table 4-2.
  - Supporting training is located in the E-learning library.
  - Departments and the IMR will also retain documented information of compliance obligations as environmental, safety and IT records.

6.2 IMS objectives and planning to achieve

The MCO-I management team drives an annual process to determine appropriate objectives the business and for each function within the business.

The SMART method is encouraged to make sure that objectives are:

- **S**pecific (simple, sensible, significant).
- **M**easurable (meaningful, motivating).
- **A**chievable (agreed, attainable).
- **R**elevant (reasonable, realistic and resourced, results-based).
- **T**ime bound (time-based, time limited, time/cost limited, timely, time-sensitive)

Objectives follow board and executive review and approval process, followed by cascading of objectives to the rest of MCO-I and inclusion of key KPIs into tracking mechanisms. Regular status reviews are conducted and actions are determined when KPIs are trending unfavorably. The business is kept informed of critical KPI performance through town hall meetings and other communication methods.

Specific annual objectives for Quality, Health, Safety, Environmental and IT are cascaded and tracked on run charts and reported monthly for

- Quality
- Environmental
- Health
- Safety
- Information Security

Department managers and IMRs conduct regular performance reviews in their areas.

6.3 Planning for change

Changes to the IMS: MCO-I document owners, IMRs and top management may request and implement changes as they apply to product, services, quality, health, safety, environmental and information security changes by following proper authorizations. Significant changes may also be proposed during Management Reviews. Before undertaking, these should be confirmed as adequate, suitable, and effective. There should also be a purpose for the change, it should not degrade the integrity of the IMS, there must be resources available to assign and there must be an owner to verify that the change is made and managed going forward.

Management of Change (MOC): For issues that may present high or unknown organizational risk or challenges, there is the MOC process. The process is initiated on Share Point and allows any change to be evaluated at the correct level of review. Anyone in MCO-I can submit the request. The MOC request is reviewed by their manager and if considered outside the scope of their team, is escalated. It is given a rating of Tier 1 (QHSE review) or Tier 2 (Senior Management review). The changes are evaluated, risk-rated and tracked in the system until mitigated.

7. Support

7.1 Resources

MCO-I top management determines and provides the resources needed for the establishment, implementation, maintenance and continual improvement of the IMS.

7.2 Competence

Competence management is used to acquire and verify the necessary abilities of workers doing work which affects MCO-I health, safety, environmental, quality and information security performance and its ability to fulfil its compliance obligations. MCO-I's criteria for specification, selection and on-going development of resource is as follows:

Discipline	**Job Requirements**	**Experience and Education**	**Selection and Evaluation Criteria**	**Internal Development**
Who Drives:	IMR or Department	IMR or Department	Lead and Support Personnel	Committee and Support Personnel
Environmental Support	ISO 14001, EPA Compliance, SOP Compliance, Record keeping, Develop Annual Plan and Risk Register	Aspects and Impacts Identification and Management, Oil & Gas Heavy Industry Experience, Hazardous Field Environments, Members of Professional Organizations, Technical Degree Programs	Job description competence evaluation, drug and background checks, Skills in excess of minimum requirements, Attention to detail, Compliance and control charting	KPI Tracking; Preventive Systems, E-Learning SOP's, Job Descriptions, OJT, Seminars and internal trainings as prescribed by IMR, Emergency Response Personnel Training, HSE Committee, Performance Review Process
Information Technology Security	ISO 27001, MCO Corporate IT Compliance, Record Keeping, Develop Annual Plan and Risk Register	IT Platforms Knowledge, SAP, Team Center, Servers, Cloud Storage, Hardware Support, SharePoint	Job description competence evaluation, drug and background checks, Skills in excess of minimum requirements, Attention to detail, Compliance and control charting	All Users: E-Learning SOP's, Seminars and internal trainings as prescribed by IMR, Performance Review Process
Quality Support	ISO 9001, API Compliance, Continual Improvement, Record Keeping, Develop Annual Plan and Risk Register	Lean Tools, DMAIC process understanding, Formal Quality Systems, Members of Professional Organizations, Technical Degree Programs	Job description competence evaluation, drug and background checks, Skills in excess of minimum requirements, Attention to detail, Compliance and control charting	KPI and Formal Tracking Systems, E-Learning SOP's, Job Descriptions, OJT, MCO Service Technical TFR Training, Emergency Response Personnel Training, Performance Review Process
Safety Support	ISO 45001, OSHA Compliance, Record Keeping, Develop Annual Plan and Risk Register	Prior Safety Leadership Role, Oil & Gas Heavy Industry Experience, Hazardous Field Environments, Members of Professional Organizations, Technical Degree Programs	Job description competence evaluation, drug and background checks, Skills in excess of minimum requirements, Attention to detail, Compliance and control charting	HSE Committee Members and Safety System Support: Preventive Systems, E-Learning SOP's, Job Descriptions, OJT, Seminars and internal trainings as prescribed by IMR, Emergency Response Personnel Training, Performance Review Process

- Top management picks competent leaders, approves target objectives and ensures adequate resources are provided to meet the intended outcome of the IMS. Competence in position is measured by individual contributions to the programs, compliance in reporting and results, participation in auditing, and corrective and preventive actions that minimize risks of unintended outcomes.

- Department managers and IMRs review and select team members for support personnel opportunities they deem competent. They also determine trainings and frequencies to be administered to these and all other employees as part of IMS program awareness. Department managers and IMRs provide education and OJT on applicable health, safety, quality, information security and laws and regulations to their practitioners who evaluate compliance obligations.

- General required trainings for the IMS are created by the IMRs and administered using the E-learning system which includes testing competence as part of the training.

- SOP's can be administered over the E-learning system or by OJT. Supervisors maintain competency training records in coordination with Human Resources.

- Department and the IMR will set forth emergency response competency and necessary training plans in individual emergency response procedures or manuals.

- Internal auditors require certification and may be internal or third party as coordinated by the IMS Support and the IMR. Internal audits are conducted per the internal audit procedure: **Internal Audit, (SOP-3-091-2023-S).**

7.3 Awareness

Department managers and the IMRs ensure that workers doing work under the department (i.e., workers covered in the scope of this *Manual* as well as representatives of in-plant contractors) are aware of the following requirements of general health, safety, environmental, quality and information technology security education through training and daily work:

Requirements of general IMS education

- **MCO-I policy**
- **Outline of the Company's IMS** – Share Point Portal Access
- Significant environmental **aspects** and related actual or potential environmental **impacts** associated with their work
- **Employee contribution** to the effectiveness of the IMS, including the benefits of enhanced health, safety, environmental, quality and information security performance
- **Implications** of not conforming with the IMS requirements, including not fulfilling the Company's compliance obligations
- **Benefits** of following IMS to health, safety, quality, environmental and information security

7.4 Communication

7.4.1 General

IMRs establish, implement, and maintain the process needed for internal and external communications relevant to the IMS.

- The IMRs ensure Annual Communication Plans are created (see chart below). Department managers will develop their own communication plans as appropriate to the IMS including:
  - Information to communicate
  - Timing of communication
  - Recipient of communication
  - Method of communication
  - Party who communicates

- When developing their communication plan, Departments and the IMRs take into account their compliance obligations; and ensure that information communicated is consistent with information generated within the IMS, and is reliable.

- Persons who communicate and recipients of communication retain documented information as evidence of their communications as appropriate. A communication plan includes whether or not communications should be documented.

Annual Communication Plan (Minimum)

Recipient of Communication	Party who Communicates	Timing	Information	Method	Compliance Obligations	Record Required
Internal						
Company HSE Committee members	IMR – Environmental, Safety	M	- FY EHS objectives, action plan, status - Activity vs previous Yr - Any other important EHS topics	Company HSE Committee / E-Mail and SharePoint Update of Monthly Action Plan Report	—	Yes
Officers	President and Officers	W	Strategic initiatives and objective performance reviews	Reports, discussion	Corporate	Yes
President and Staff	VP QHSE and IMRs	Q	Management Reviews (Quality, Safety, Environmental, IT)	Record Update on Share Point, Presentation, Discussion	—	Yes
President and Staff	All MCO-I Employees	Q	Town Hall – State of the business	Verbal, presentation		No
Department staffs	Department leaders	As Req	Performance review / customer deliverables	Reports, issues, verbal updates and discussion	—	No
Departmental practitioners	Practitioner	As Req	Preventive Checks & Monitoring	Tracking Tools and Logs	—	Yes
Senior Staff	IMR - Environmental	M	Observations from Senior Staff Walk / Updated CAPA log	E-Mail	—	Option
Applicable department members	IMR – Safety, Environmental, Quality	As Req	Monthly Learning OSHA Topics and other trainings	E-Learning	—	Yes
All MCO-I	MIC – NY Legal	A Req; 2xA Opt	Code of Conduct Compliance	Face to Face	Corporate	Yes
All MCO-I	Respective Departments	As Req	Assigned SOP's	E-Learning		Option
External						
Registrar	IMRs	Y	Certification and Compliance Audits	Certified Auditors	ISO Standards	Yes
3rd Party Auditor	IMRs	Y	Internal Audit Assessments	Formal internal audit	ISO Standards	Yes
KDDI and Seccuris	IT Director	Y in Q1	Vulnerability Assessment Report	Email	Yes	Yes
MHI Auditors	IT Director	Y in Q3	CLC and PEFR Assessment	Email	Yes	Yes
MAS Auditors	IT Director	Y in Q3	SAP role review	Email	Yes	Yes
OSHA	HSE Coordinator	Y	OSHA 300 Log and Summary	Web Portal Interface	Yes	Yes
3rd Party Certification Services	QHSE Specialist	AR	Safety, Insurance, Quality Status – Pre-Requisite to Work	Web Portal Interface	Yes	Live Record
Pearland City Public Works	Facilities / HSE Coordinator	Y	Wastewater Survey	Email	Yes	Yes
MCO	HSE Coordinator	Y	Environmental Data Input Sheet	Email	Yes	Yes
MHI Environmental Committee	CSR group	Yin May	CSR report and corporate website	(1) Domain data (2) CSR Committee Approval (3) Print / website	ΔResponse UN Global Compact	Yes
MHI Environmental Committee	IMR - Environmental	Y in Jun	GHG emissions (Scope 1 to 3)	(1) Collection of data by each Domain (2) Approval from EMR (3) Print / website	—	Option
MCO	VP Mfg	M	Mfg Performance	Web Conference	No	Yes
Oasis	HR Mgr./Generalist	W	Payroll/Benefits	Web portal/phone calls	Yes	Yes
MC/MHI	HR Manager	Q	Training lists/status	Email/Spreadsheets	Yes	Yes
Dept. of Labor	HR/Oasis	Y	Headcount/employee data	Oasis	Yes	Yes
Customers	MCO-I Sales	As Req	NPS, Ads, Tech Support, Orders	Web, E-Mail, ERP	No	Yes

7.4.2 Internal communication

Department managers at each level and function of the Company communicate information by means of meetings, systems, training sessions, and internal notification emails or in any other ways based on their annual communication plans and whenever necessary. This is to ensure that the internal communication enables workers doing work under direction of MCO-I are compliant and contribute to continual improvement.

Respective IMRs internally communicate the following information to departmental HSE committee members and practitioners based on its communication schedule:

- FY safety, quality, IT and environmental objectives, initiatives and KPIs in Action Plans
- Action Plan status updates
- Other information relevant to the IMS

Respective IMR will, whenever necessary, internally communicate the following information to departmental HSE committee members and practitioners or, as appropriate, to all employees:

- Information relevant to the Safety, Environmental Quality or IT management as well as changes to the IMS including changes to the MCO-I policy and this *Manual*
- When a new employee is assigned to MCO-I, HR will assign a regimen of training to include safety, environmental, quality and information technology security training as an onboarding process, as a rule, within a month after the employment to raise his or her awareness of environmental, safety, quality and information security activities and considerations. Department specific training for safety, quality, environmental and information security may also be required and will be provided by the department.
- Departmental HSE committee members and practitioners will internally communicate information within their departments in response to internal communication from the IMR.

7.4.3 External communication

MCO-I communicates externally to a variety of interested parties to give and receive information required to run and grow the business. Individuals are trained and authorized to act as agents of the company and are expected to follow all compliance guidelines and corporate beliefs during these exchanges,

Communications may include but are not limited to:

- Customers
- Certifying Bodies / Governmental Agencies
- Corporate Headquarters
- Institutions
- Press

Means of communications may include but are not limited to:

- Verbal / Phone Call / Face to face
- E-mail / Text
- ERP Systems
- Web Conferences
- Reports

Topics vary based on interested party relationship to MCO-I. Records maintained if required.

7.5 Documented information

7.5.1 General

Departments and IMS Support control documents as follows:

(1) Information to be documented

(a) Documented information required by this *Manual as shown in Attached Table 4-2: List of Applicable SOP and Records*

(b) Documented information determined by Departments and the IMRs as being necessary for the effectiveness of the IMS.

(2) Extent of documented information

Departments and the IMRs determine the extent of documented information, considering the following points:

- size of an organization and its type of activities, processes, products and services;
- need to demonstrate fulfilment of compliance obligations
- complexity of processes and their interactions
- competence of workers doing work under MCO-I's control

7.5.2 Creating and updating

When creating and updating documented information in accordance with the **Management of SOP Document (SOP-3-091-2020-S),** Departments and IMS Support ensure appropriate:

- identification and description (document number and title);
- format (language, software version, or graphics) and media (paper or electronic); and
- review and approval for suitability and adequacy.

7.5.3 Control of documented information

(1) Control of documented information - IMS Support controls documented information in accordance with the Management of SOP Documentation procedure:

- is available and suitable for use, where and when it is needed;
- is adequately protected from loss of confidentiality, improper use, or loss of integrity.
- if outside the IMS or Share Point portal, each department will create and maintain its own document control register and document record register to prevent failure in controlling documented information if the following documents are stored in different files or storage places:
    - Documented information to be maintained by each department
    - Records to be kept by each department

(2) Activities for control of documented information - Departments and the IMS Support will establish their own guidelines to ensure that the following activities are addressed:

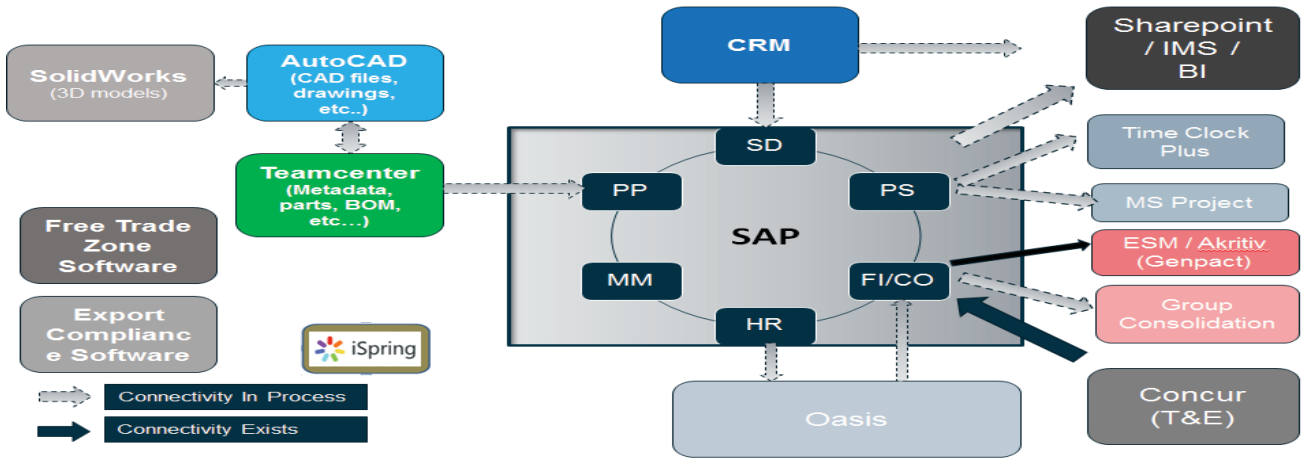
- Distribution, access, retrieval, and use
- Storage and preservation, including preservation of legibility
- Control of changes (e.g., version control)
- Retention
- Obsolete document is archived from the latest documented information.

(3) If Departments and the IMS Support determine documented information of external origin to be necessary for the planning and operation of the IMS, the documented information will be identified as such, as appropriate, and controlled.

Internal & External Document Control Systems:

Type	Documents	Control System
Sales Business, Projects	Customer Data, Project Details	CRM
Project Management	Customer Specifications, Project Planning	Project Folders M:Drive / SharePoint Links
QHSE & All	Standard Operating Procedures, Regulatory Requirements & Certification	SharePoint / SharePoint Links
Engineering, Technical	CAD Drawings, Metadata, Customer Prints, Inspection Test Plans	Team Center
Manufacturing	BOM, Costing, Sales Orders, PO's	SAP
Procurement	Supplier Records	SAP, SharePoint
All Other	Records and Evidence	SharePoint Portal

IT Systems Landscape:



8. Operation

8.1 Operational planning and control

MCO-I plans, implement and control the processes needed to meet requirements of its products and services and the intended outcomes of the IMS by:

- establishing requirements;
- determining criteria for the processes and acceptance;
- determining resources needed to achieve conformity to requirements;
- implementing control of the processes in accordance with the criteria;
- determining, maintaining, retaining documented information to demonstrate conformance;
- controlling planned changes using management of change form, ECN or other system-controlled change, and review the consequences of unintended changes;
- taking actions to mitigate any adverse effects, as necessary;
- where work involves multi-employer workplaces, coordinate relative parts of this IMS management system with the other organization; and
- ensuring outsourced processes are controlled and compliant to this IMS per 8.4.1.
- ensuring life cycle perspective considered in the design and development process for products and services per Table 8-1 Operational Planning and Control.

Regarding Hazards and Risks to E, H&S, MCO-I approaches with the following controls order:

1. identify the hazard
2. eliminate the hazard
3. substitute less hazardous material, process or equipment
4. apply engineering controls
5. apply administrative controls
6. prescribe use of PPE

Cross Reference for Sections 8.2-8.7: Requirement / Evidence

	9001	14001	45001	27001
8.2	Requirements for products and services / MCO-I Sales (SOP-3-050-2077-S)	Emergency preparedness and response / Emergency Action Plan (SOP-3-023-2005-S)	Emergency preparedness and response / Emergency Action Plan (SOP-3-023-2005-S)	Information security risk assessments conducted at regular intervals / IT Risk Assessment / IT Portal
8.3	Design and development of products and services / Design Process (SOP-3-061-2029-S)			Information security risk treatment plan is executed / IT Action Plan / IT Portal
8.4	Control of externally provided processes and services / Supplier Quality Mgmt Plan (SOP-3-091-2037-S)			
8.5	Production and service provision / MCO-I Sales (SOP-3-050-2077-S)			
8.6	Release of products and services / MCO-I Sales (SOP-3-050-2077-S)			
8.7	Control of non-conforming outputs / Nonconformance Reporting (SOP-3-091-2022-S)			

8.2 Requirements for products and services

8.2.1 Customer communication

MCO-I communication with customers includes:

- information relating to products and services;
- enquiries, contracts or orders, including changes;
- customer feedback for products and services, including customer complaints;
- handling or controlling customer property;
- specific requirements for contingency actions, when relevant.

8.2.2 Determining the requirements for products and services

Customer requirements for products and services include:

- applicable statutory and regulatory requirements;
- requirements considered necessary by MCO-I
- performance claims for products and services that can be met by MCO-I
- specific technical or commercial requirements

8.2.3 Review of the requirements for products and services

8.2.3.1 MCO-I confirms its ability to meet the requirements for products and services to be offered to customers. Reviews are conducted prior to committing to supply products and services that include:

- customer requirements, including delivery and post-delivery activity requirements;
- non-customer requirements necessary for the specified or intended use, when known;
- requirements specified by the MCO-I;
- statutory and regulatory requirements applicable to the products and services;
- contract or order requirements differing from those previously expressed.

MCO-I makes every effort to ensure that contract or order requirements differing from those previously defined are resolved. The customer's requirements are confirmed by MCO-I before acceptance, when the customer does not provide a documented statement of their requirements.

8.2.3.2 MCO-I retains documented information, as applicable:

- on the results of the review;
- on any new requirements for the products and services.

8.2.4 Changes to requirements for products and services

MCO-I ensures relevant documented information is amended, and that relevant persons are made aware of the changed requirements, when the requirements for products and services are changed.

8.3 Design and development of products and services

8.3.1 General

MCO-I maintains a design and development process that is appropriate to ensure the subsequent provision of products and services.

8.3.2 Design and development planning

In determining the stages and controls for design and development, MCO-I considers:

- nature, duration and complexity of the design and development activities;

- required process stages, including applicable design and development reviews;
- required design and development verification and validation activities;
- responsibilities and authorities involved in the design and development process;
- internal and external resource needs for design and development of products and services;
- need to control interfaces between persons involved in the design and development process;
- need for involvement of customers and users in the design and development process;
- requirements for subsequent provision of products and services;
- level of control expected for the design and development process by customers and other
- relevant interested parties; and
- documented information to demonstrate design and development requirements are met.

8.3.3 Design and development inputs

MCO-I determines the requirements essential for the specific types of products and services to be designed and developed. MCO-I considers:

- functional and performance requirements;
- information derived from previous similar design and development activities;
- statutory and regulatory requirements;
- standards or codes of practice that MCO-I has committed to implement;
- potential consequences of failure due to the nature of the products and services.

Additionally, MCO-I ensures

- Inputs are adequate for design and development purposes, complete and unambiguous.
- Conflicting design and development inputs are resolved.
- documented information is retained on design and development inputs.

8.3.4 Design and development controls

MCO-I applies controls to the design and development process to ensure that:

- results to be achieved are defined;
- reviews are conducted to evaluate the ability of the results of design and development to meet requirements;
- verification activities are conducted to ensure that the design and development outputs meet the input requirements;
- validation activities are conducted to ensure that the resulting products and services meet the requirements for the specified application or intended use;
- any necessary actions are taken on problems determined during the reviews, or verification and validation activities;
- documented information of these activities is retained.

*Design and development reviews, verification and validation have distinct purposes. They can be conducted separately or in any combination, as is suitable for the products and services of MCO-I.

8.3.5 Design and development outputs

MCO-I ensures that design and development outputs:

- meet the input requirements;
- are adequate for the subsequent processes for the provision of products and services;
- include or reference monitoring and measuring requirements, as appropriate, and acceptance criteria;
- specify the characteristics of the products and services that are essential for their intended purpose and their safe and proper provision.

MCO-I retains documented information on design and development outputs.

8.3.6 Design and development changes

MCO-I identifies, reviews and controls changes made during, or subsequent to, the design and development of products and services, to the extent necessary to ensure that there is no adverse impact on conformity to requirements.

MCO-I retains documented information on:

- design and development changes;
- results of reviews;
- authorization of the changes;
- actions taken to prevent adverse impacts; and
- intellectual property (IP) clearance for non-OEM work.

8.4 Control of externally provided processes, products and services

8.4.1 General

MCO-I ensures that externally provided processes, products and services conform to IMS requirements. MCO-I determines the controls to be applied to externally provided processes, products and services when:

- products and services from external providers are intended for incorporation into MCO-I's own products and services;
- products and services are provided directly to the customer(s) by external providers on behalf of MCO-I;
- a process, or part of a process, is provided by an external provider as a result of a decision by MCO-I.

MCO-I determines and applies criteria for the evaluation, selection, and monitoring of performance of external providers, based on their ability to provide processes or products and services in accordance with requirements.

MCO-I retains documented information of these activities and any necessary actions arising from the evaluations.

8.4.2 Type and extent of control

MCO-I ensures that externally provided processes, products and services do not adversely affect MCO-I's ability to consistently deliver conforming products and services to its customers.

MCO-I:

- ensures that externally provided processes remain within the control of its quality management system;
- defines both the controls that it intends to apply to an external provider and those it intends to apply to the resulting output;
- takes into consideration:
    - the potential impact of the externally provided processes, products and services on the organization's ability to consistently meet customer and applicable statutory and regulatory requirements;
    - the effectiveness of the controls applied by the external provider;
- determines the verification, or other activities, necessary to ensure that the externally provided processes, products and services meet requirements.

8.4.3 Information for external providers

MCO-I ensures the adequacy of requirements prior to their communication to the external provider.

MCO-I communicates to external providers its requirements for:

- the processes, products and services to be provided;
- the approval of:
  - products and services;
  - methods, processes and equipment;
  - the release of products and services;
- competence, including any required qualification of persons;
- the external providers' interactions with MCO-I;
- control and monitoring of the external providers' performance to be applied by MCO-I;
- verification or validation activities that MCO-I, or its customer, intends to perform at the external providers' premises.

8.5 Production and service provision

8.5.1 Control of production and service provision

MCO-I implements production and service provisions under controlled conditions.
Controlled conditions include, as applicable:

- availability of documented information that defines:
  - the characteristics of the products to be produced, the services to be provided, or the activities to be performed;
  - the results to be achieved;
- availability and use of suitable monitoring and measuring resources;
- implementation of monitoring and measurement activities at appropriate stages to verify that criteria for control of processes or outputs, and acceptance criteria for products and services, have been met;
- use of suitable infrastructure and environment for the operation of processes;
- appointment of competent persons, including any required qualification;
- validation, and periodic revalidation, of the ability to achieve planned results of the processes for production and service provision, where the resulting output cannot be verified by subsequent monitoring or measurement;
- implementation of actions to prevent human error;
- implementation of release, delivery and post-delivery activities.

8.5.2 Identification and traceability

MCO-I:

- uses suitable means to identify outputs when it is necessary to ensure the conformity of products and services.
- identifies the status of outputs with respect to monitoring and measurement requirements throughout production and service provision.
- controls the unique identification of the outputs when traceability is a requirement, and shall retain the documented information necessary to enable traceability.

8.5.3 Property belonging to customers or external providers

- MCO-I exercises care with property belonging to customers or external providers while it is under MCO-I's control or being used by MCO-I.
- MCO-I identifies, verifies, protects and safeguard customers' or external providers' property provided for use or incorporation into the products and services.
- When the property of a customer or external provider is lost, damaged or otherwise found to be unsuitable for use, MCO-I report this to the customer or external provider and retains documented information on what has occurred.

* A customer's or external provider's property can include materials, components, tools and equipment, premises, intellectual property and personal data.

8.5.4 Preservation

MCO-I preserve the outputs during production and service provision, to the extent necessary to ensure conformity to requirements.

* Preservation can include identification, handling, contamination control, packaging, storage, transmission or transportation, and protection.

8.5.5 Post-delivery activities

MCO-I meets requirements for post-delivery activities associated with the products and services.
In determining the extent of post-delivery activities that are required, MCO-I considers:

- statutory and regulatory requirements;
- the potential undesired consequences associated with its products and services;
- the nature, use and intended lifetime of its products and services;
- customer requirements;
- customer feedback.

* Post-delivery activities can include actions under warranty provisions, contractual obligations such as maintenance services, and supplementary services such as recycling or final disposal.

8.5.6 Control of changes

- MCO-I reviews and controls changes for production or service provision, to the extent necessary to ensure continuing conformity with requirements.
- MCO-I retains documented information describing the results of the review of changes, the person(s) authorizing the change, and any necessary actions arising from the review.

8.6 Release of products and services

- MCO-I implements planned arrangements, at appropriate stages, to verify that the product and service requirements have been met.
- The release of products and services to the customer do not proceed until the planned arrangements have been satisfactorily completed, unless otherwise approved by a relevant authority and, as applicable, by the customer.
- MCO-I retains documented information on the release of products and services. The
- documented information includes:
    - o evidence of conformity with the acceptance criteria;
    - o traceability to the person(s) authorizing the release.

8.7 Control of nonconforming outputs

8.7.1 MCO-I ensures that outputs that do not conform to their requirements are identified and controlled to prevent their unintended use or delivery.

MCO-I takes appropriate action based on the nature of the nonconformity and its effect on the conformity of products and services. This also applies to nonconforming products and services detected after delivery of products, during or after the provision of services.

MCO-I deals with nonconforming outputs in one or more of the following ways:

- correction;
- segregation, containment, return or suspension of provision of products and services;
- informing the customer;
- obtaining authorization for acceptance under concession.

Conformity to the requirements are verified when nonconforming outputs are corrected.

8.7.2 MCO-I retain documented information that:

- describes the nonconformity;
- describes the actions taken;
- describes any concessions obtained;
- identifies the authority deciding the action in respect of the nonconformity.

9. Performance evaluation

9.1 Monitoring, measurement, analysis, and evaluation

9.1.1 General

(1) Actions

Departments and the IMR determine:

(a) what needs to be monitored and measured and the affect or inclusion in business KPIs;

(b) the methods for monitoring, measurement, analysis and evaluation, as applicable, to ensure valid results;

(c) the criteria against which MCO-I will evaluate its performance, and appropriate indicators;

(d) when the monitoring and measuring will be performed;

(e) when the results from monitoring and measurement will be analyzed and evaluated.

Departments and the IMRs retain the recorded results from the monitoring, measurement, analysis, and evaluation of the performance.

(2) Calibration, use, and maintenance of monitoring and measurement equipment

Departments and the IMR ensure that calibrated or verified monitoring and measurement equipment is used and maintained, as appropriate, for performance evaluation.

(3) Effectiveness evaluation

When performing activities such as a routine follow-up of an action plan to achieve objectives and compliance evaluation, Departments and the IMR evaluate the effectiveness of the IMS including the operational processes needed to achieve the objectives in addition to progress toward achievement of the objectives (effectiveness of safety, environmental, quality or information technology performance).

Considerations:

- Product and service conformity
- Customer satisfaction – survey, meeting feedback, market share changes, warranty
- Was plan followed effectively
- Effectiveness of risk and opportunity actions
- Performance of external providers
- Delivery, cost or schedule impacts
- Need for IMS system improvements

The IMS Support and IMR undergo the review of effectiveness of safety, environmental, quality or information security performance and IMS for each fiscal year.

(4) Internal and external communication

Departments and the IMRs communicate relevant performance information both internally and externally, as specified in Section 7.4.

9.1.2 Evaluation of compliance

Departments and the IMR establish, implement and maintain the processes needed to evaluate fulfilment of their compliance obligations and retain the recorded results from the evaluation of compliance.

Departments and the IMR:

- determine the frequency that compliance will be evaluated;
- evaluate compliance and take action if needed;
- maintain knowledge and understanding of their compliance status.

9.2 Internal audit

9.2.1 General **Internal Audit (SOP-3-091-2023-S)**

The IMR and IMS System Support supports an internal audit program in order to provide information on whether:

- the Company's activities conform to:
  - its own requirements for its IMS;
  - the requirements of ISO International Standard
- the IMS is effectively implemented and maintained.

9.2.2 Internal audit program

(1) Establishment, implementation, and maintenance of internal audit program

When conducting periodic and special audits specified in the Internal Audit SOP**,** the IMR and IMS System Support provide an internal audit program which includes the frequency, methods, responsibilities, planning requirements and reporting of its internal audits.

The internal audit program and the IMR take into consideration the importance of safety, quality, environmental and information technology security processes concerned, changes affecting MCO-I, and the results of previous audits.

When conducting an internal audit, the IMR and IMS System Support:

- define the audit criteria and scope for each audit;
- select auditors and conduct audits to ensure objectivity and the impartiality of the audit process;
- ensure that the results of the audits are reported to relevant management.
- take appropriate corrections and corrective actions as soon as possible

(2) Internal audit record

The IMS System Support and audited department retain internal audit records as evidence of the implementation of the audit program and the audit results.

9.3 Management review

Purpose and conduct of management review

Top management reviews the Company's IMS, at planned intervals, to ensure its continuing suitability, adequacy, and effectiveness.

Management review considerations

- The status of actions from previous management reviews;
- Changes in external and internal issues that are relevant to the IMS;
    - (ii) the needs and expectations of interested parties, including compliance obligations;
    - (iii) its targeted key performance indicators;
    - (iv) risks and opportunities;
- The extent to which objectives have been achieved;
- Information on the Company's performance, including trends in:
- Nonconformities and corrective actions;
    - (ii) monitoring and measurement results;
    - (iii) fulfillment of its compliance obligations;
    - (iv) audit results;
    - (v) adequacy of resources;
    - (vi) relevant communications from interested parties, including complaints;
    - (vii) opportunities for continual improvement.
- Outputs of the management review include:
    - conclusions on the continuing suitability, adequacy, and effectiveness of the IMS;
    - decisions related to continual improvement opportunities;
    - decisions related to any need for changes to the IMS, including resources;
    - actions, if needed, when environmental objectives have not been achieved;
    - opportunities to improve integration of the IMS with other business processes, if needed;
    - (d) any implications for the strategic direction of MCO-I.
- IMS System Support retains management review records as evidence of management review results.

10. Improvement

10.1 General

Departments and the IMR implement necessary actions for opportunities for improvement from performance evaluation, internal audits, and management review results, in order to achieve the intended outcomes of its IMS. These may include:

- Products and services to meet current and future requirements
- Corrections or corrective actions
- Continual improvement
- Breakthrough changes
- Improvements to the IMS

10.2 Incident, nonconformity and corrective action

Root Cause Analysis_CAPA (SOP-3-091-2025-S)

When a non-conformity occurs, Departments and the IMR guide the correct system reporting, direct assignment for action and assign appropriate level of response.

10.2.1 Report, correction, and corrective action

Reporting of non-conformance for tracking and action utilize systems as follows:

- Quality — NCR System & CAPA Tracker
- Safety — Observation System / CAPA Tracker
- Environmental — Observation System / CAPA Tracker
- Information Security — Help Desk Ticket System

- Response to nonconformity
  - Evaluate and take appropriate action to control and correct it, deal with the consequences of the nonconformity, including mitigating adverse impacts:
    - Lower level risks require evaluation and correction or possibly no action
    - Mid-level risks require analysis, corrective and possibly preventive measures
    - High level risks require failure analysis with corresponding actions to prevent reoccurrence
- Evaluate the need for action to eliminate the causes of the nonconformity, in order that it does not recur or occur elsewhere, by:
  - reviewing the nonconformity;
  - determining the causes of the nonconformity;
  - determining if similar nonconformities exist, or could potentially occur
  - implementing any action needed;
  - review the effectiveness of any corrective action taken; and
  - making changes to the IMS if necessary.

- Corrective and preventive actions must be appropriate to the significance of the effects of the nonconformities encountered, including the environmental impacts. Departments and IMRs assign the correct level of response based on experience and risk.

10.2.2 Documented information

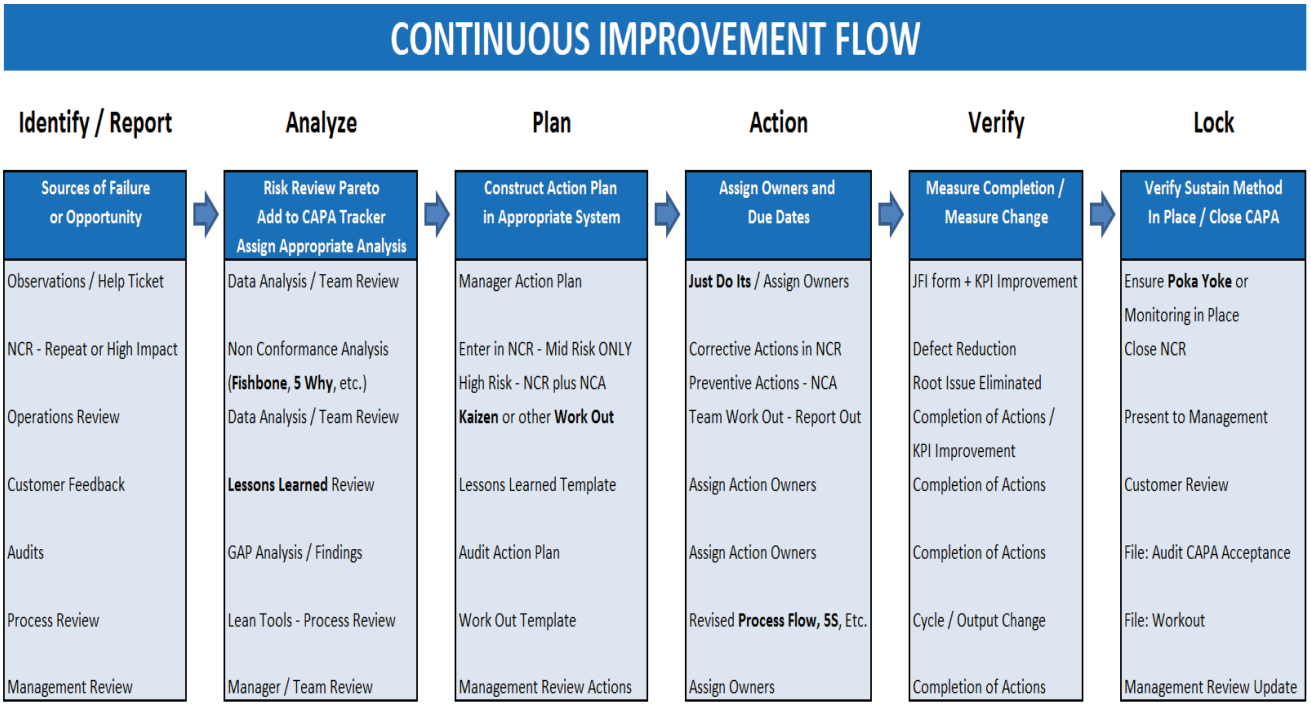
Departments and the IMR will retain documented information as evidence of the:

- nature of nonconformities and any subsequent actions taken; and
- results of any corrective action.

10.3 Continual improvement

The Company continually improves the suitability, adequacy, and effectiveness of the IMS, in order for everyone including officers and employees to enhance quality, safety, environmental and information security performance at every level of MCO-I.

Continous Improvement Flow



Common Continuous Improvement (CI) Tools

CAR – Corrective Action Request - Standard response defect analysis and action form in 8D steps: 1. team members, 2. problem statement, 3. containment, 4. root cause analysis, 5. corrective action, 6. preventive action, 7. effectiveness review, 8. Quality close.

NCA - Non Conformance Analysis - A formal defect analysis report using DMAIC or other engineering problem solving methodology.

Spreadsheet / Pareto – Data Analytics - Pareto means to apply a sortation of order so that largest contributors or opportunities can become area of focus for greatest impact of actions. Repeat sortations can lead to largest root cause or opportunity and therefore have the most impact to ensure continual improvement is achieved.

Fishbone (Ishikawa Diagram) - Method of mapping potential causes against a well stated problem on one page. Category areas (spines of fish) to brainstorm and list out contributors typically include: Machine, Method, Environment, Measurement, Persons or others if the problem has been narrowed down already. Multi-voting can be used to rule out and narrow most potential causes – further analysis may be required to verify actual root causes of defect.

5 Why - Chart showing the answers to asking "Why?" 5 times to drill to root cause starting with obvious issue – something did not work.

Lessons Learned - Structured or informal brainstorming of issues that occurred during an event or project. Common elements include constructing a timeline of events and then adding some rating system from bad to good of each event to see where systems, processes, etc. can be improved for next similar activity. To complete the process, an action log shows items found needing to be addressed are assigned, actions taken, and verified.

Kaizen / Workout - A 1-5 day focused team effort focused on breaking down a process, analyzing and redesigning the high impact areas, reassembling and putting back into production or service to validate results. A skilled facilitator is typically used and team members are given roles to play to keep the team on track. Scope is created at the front end to ensure focused effort and targeted results are defined.

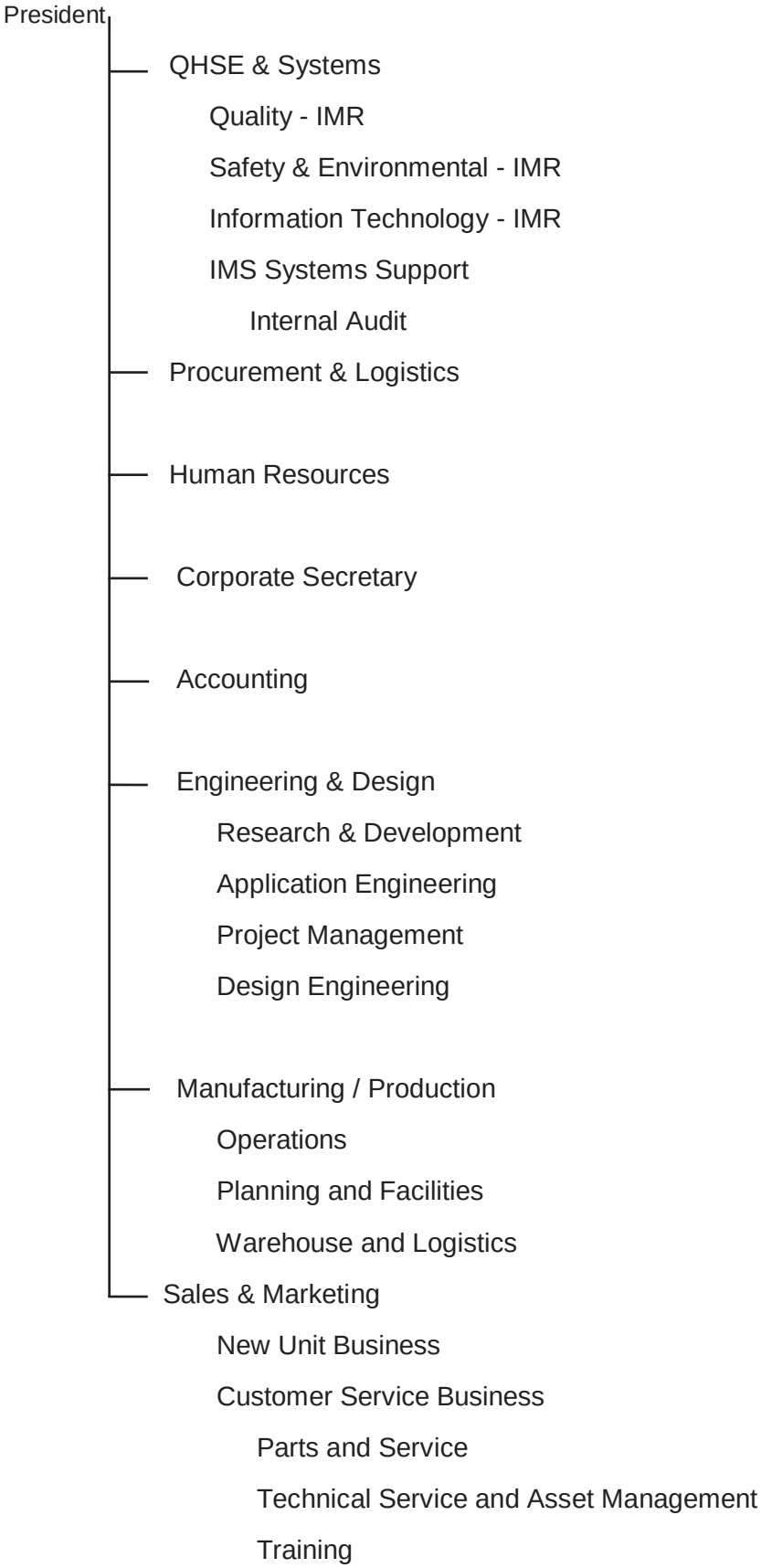
Just Do It - A one page form used to show "Before" and "After" images of a process or area. These are completed by anyone, and usually detail what is improved and by how much. Typically, these are focused on safety, 5S, Poka Yoke, etc.

Process Flow - A graphical, sequential mapping of a process that shows inputs, outputs, actions, interdependencies, decisions, persons assigned, etc. that achieve a business function.

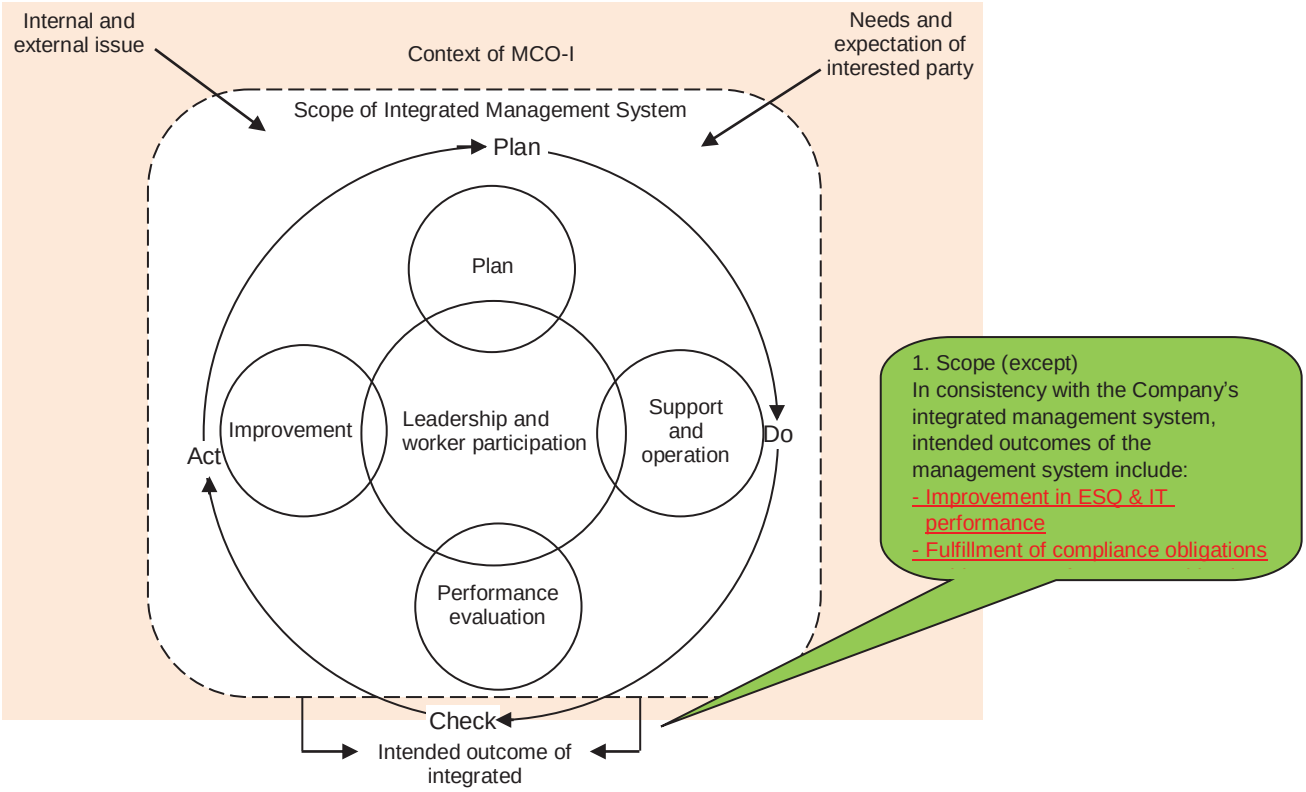
Poka-Yoke - To mistake proof something. This can be done mechanically or through a system to prevent defects. Example: adding a taper and key-way to make sure a gear can only go on one way.

Attached Fig. 4-1 MCO-I Organizational Chart Relating to IMS Manual

MCO-I Organization Chart



Attached Fig. 4-2: Integrated Management System Diagram



INPUTS	PROCESS	OUTPUTS
Customer Specifications	**Understand Customer Requirement**	**RFQ / Proposal**
Customer Order	**Review Order Received**	**Handover**
Requisition	**Procurement Management**	Purchase Products
Job Folder	**Move to Production**	Router
Router	**Repair / Modify Product or Complete Service**	Finished Project
Inspection forms	**Quality Management**	**Inspection Records**
Certificate of Conformance	**Pack and Ship Product**	**Bill of Lading**
	Invoice	Payment
	Customer Survey	**Customer Feedback**
Information Security Management		
Document Management		
HSSE Management		
Human Resources		

Attached Table 4-1: Interested Parties

For each standard, a minimum list of interested parties is identified and maintained by the respective IMR. Interested party registers for ISO 14001, ISO 27001 and ISO 45001 are on the MCO-I IMS system. Registers are reviewed at the respective management reviews and on an as needed basis.

See Annual Communication Plan in the communication section of this document for managing the IMS communication needs, addressing the what, when, with whom and how to communicate.

The chart below illustrates the interested parties for ISO 9001:

ISO 9001	Internal Customer	Needs and Expectation
	Owner, Shareholder	Profitability and Growth
	Employees	Shared value and security
	Contractors	Per project scope
	Management Team	Performance vs objectives and IMS
	Board of Directors	Profitability, growth and asset utilization
ISO 9001	**External Customer**	**Needs and Expectations**
	Customers	Compliance, Delivery, Reliability and Value
	Distributors and Retailers	Quality and Price
	Municipalities	Good corporate standing
	Suppliers	Beneficial Relationships
	US Government	Compliance to Foreign Trade Zone
	API	Compliance to API standards
	Registrar	Compliance to ISO standards
	MHI-A Q&G	Growth, Good Corporate Standing

Attached Table 4-2: List of Applicable SOPs and Records

Additional documented information is outlined in the SharePoint IMS document index.

	ISO Requirement No.	SOP No.	SOP Title	Responsibility
IMS SOPs				
	General	SOP-3-090-2017-S	MCO-I Integrated Management System (manual)	Quality
	General	SOP-3-023-2028-S	Employee Handbook	Human Resources
	General	SOP-3-047-2034-S	Supplier Manual	Procurement
	General	SOP-3-115-2104-S	Field Service – HSE Manual	Field Service
	5.3	SOP-3-004-4018-R	Authority Matrix	General
	6.1	SOP-3-121-2006-S	Stop Work Authority	QHSE (E-Learning)
	6.1	SOP-3-091-2079-S	Process Control and Risk Assessment	QHSE
	4.2, 9.1.2	SOP-3-093-2044-S	Customer Satisfaction	QHSE
	7.2, 7.3	SOP-3-024-2062-S	Competence Awareness & Training	HR
	9	SOP-3-091-2024-S	Management Review	QHSE & IT
	6.3, 6.1.2,8.1,8.1.3	SOP-3-091-2102-S	Management of Change	QHSE
	8.4.1	SOP-3-040-1013-P	Procurement Policy	Procurement
	6	SOP-3-120-4036-WF	Operational Planning and Control	HSE
	General	SOP-3-072-2154-S	Division of Work	Manufacturing
	General	SOP-3-067-2146-S	Division of Work	Engineering (CSB)
	General	SOP-3-090-2202-S	Division of Work	Quality
ISO 9001:2015				
	7.1.5	SOP-3-092-2018-S	Calibration Process	Quality
	7.5	SOP-3-091-2020-S	Management of SOP Documentation	Quality
	6	SOP-3-110-2097-S	Technical Risk Management	CSB
	8.51	SOP-3-072-2090-S, 2091	Production Cost Control/ Risk Assessment	Manufacturing/ Production
	8.5	SOP-3-072-4272-WF, 4270, 4285, 4286	Manufacturing process	Manufacturing/ Production
	8	SOP-3-066-2174-S	Engineering Deliverable Management	Engineering
	8.3	SOP-3-066-4120-WF	Internal Project Engineering Process	Engineering
	8.4.1	SOP-3-047-2027-S	Supplier Management	Procurement
	8, 10	SOP-3-091-2022-S	NCR Process	Quality
	9.2	SOP-3-091-2023-S	Internal Audit	Quality
	9, 10	SOP-3-091-2025-S	RCA_CAPA	Quality
	10	SOP-3-091-2026-S	Continuous Improvement	Quality
	8.4.1	SOP-3-077-2040-S	Logistics Management	Manufacturing/ Production
	8	SOP-3-050-2077-S	MCO-I Sales	Sales
	8.5.5	SOP-3-091-2035-S	Warranty Management	Quality
	8	SOP-3-115-4060-WF, 4061, 4062, 4309-11	Field Service process	Field Service
	8	SOP-3-111-4291-WF	Spare Parts Execution	CSB
		Sop-3-084-2004-S	Equipment Preventive Maintenance	Facility
ISO 14001:2015				
	10	SP PORTAL	HSE CAPA tracker	HSE
	6.1	SP PORTAL	Register Waste Streams	HSE
	6.1	SP PORTAL	Register of Compliance Obligations	HSE
	4	SP PORTAL	Register of Neighboring Companies	HSE
		SOP-3-123-2110-S	Storm Water PPP	HSE
		SOP-3-123-2065-S	Waste Management	HSE

	ISO Requirement No.	SOP No.	SOP Title	Responsibility
ISO 45001:2018				
	8	SOP-3-120-2066-S	Emergency Action Plan	HSE (E-Learn)
	7	SOP-3-121-2105-S	OSHA 12 – Regular Annual Training	HSE
	8	SOP-3-121-2175-S	Bloodborne Pathogens Program	HSE
	9.1	SOP-3-120-2061-S	Compliance Management	HSE
	8.1	SOP-3-121-2139-S	Control of Hazardous Energy	HSE
	8.1	SOP-3-121-2126-S	Lifting & Rigging Equipment	HSE
	8.1	SOP-3-121-2117-S	First Aid Procedure	HSE
	8.1	SOP-3-120-2125-S	Compressed Gas Cylinder Safe Use & Storage	HSE
	5.4	SOP-3-121-2140-S	Consultation and Participation of Workers	HSE
	5	SOP-3-121-2127-S	Security Protocol	HSE
	6.1	SOP-3-121-2059-S	Hazard Communication	HSE
	8.1	SOP-3-120-2008-S	Contractor Control	HSE
	6.1	SOP-3-121-2009-S	Fall Protection	HSE
ISO 27001:2013				
	4 - 8	SOP-3-100-1001-P	IT Security Policy	Information Technology

	ISO Requirement No.	SOP No.	SOP Title	Responsibility
IMS Records				
	7	**SOP-3-084-2004-S**	**Preventive Maintenance Records**	**Facility**
	6.1	**SP Home**	**Stop Work Authority Record**	**QHSE**
	7.2	**SOP-3-024-2062-S**	**Competence Records**	**HR, HSE**
	9.2.2	**SOP-3-091-2023-S**	**Internal Audit Records**	**QHSE, IT**
	9.3	**SOP-3-091-2024-S**	**Management Review Records**	**QHSE & IT**
ISO 9001:2015				
	6	**SP Portal**	**Process Control and Risk Assessment**	**Quality**
	7.1.5.1, 7.1.5.2	**SOP-3-092-2018-S**	**Calibration Records**	**Quality**
	7.5.3.2	**SP**	**Management of SOP Documentation**	**Quality**
	8.5.2	**SOP-3-094-2033-S**	**Receiving Inspection Records**	**Quality**
	8.53	**SOP-3-072-2090-S**	**Customer Property - Storage**	**Manufacturing/ Production**
	8.5.6	**Project Files**	**Change Records**	**Project Management**
	8.2.3.2,8.3.3 – 8.3.6	**SP Project Deliverables**	**Engineering Records**	**Engineering**
	8.4.1	**SOP-3-047-2027-S**	**Supplier Control Records**	**Procurement**
	8.6	**Project Files**	**Certificate of Completion Records**	**Quality, CSB**
	8.7.2	**SOP-3-091-2022-S**	**NCR Records**	**Quality**
	9.1.1	**SP Portal -Objectives**	**QMS Records**	**Quality**
	10.2.2	**SOP-3-091-2025-S**	**Corrective Action Records**	**Quality**
ISO 14001:2015				
	6, 9.1.1	**SOP-3-123-4112-R**	**EMS Workbook Record**	**HSE**
	7.4.1	**SP PORTAL**	**Communication Log**	**HSE**
	9.1.2	**SP PORTAL**	**Compliance Evaluation**	**HSE**
	10.2	**SP PORTAL**	**HSE Observation List**	**HSE**
ISO 45001:2018				
	8.2	**SP Portal –Bus. Rec.**	**Emergency Action Plan Records**	**HSE**
ISO 27001:2013				
	4 - 8	**SP Portal –Bus. Rec.**	**IT Security Records**	**Information Technology**

Attached Table 4-3: Process Control and Risk Assessment Plan for IMS

1. Form and Procedure Sample

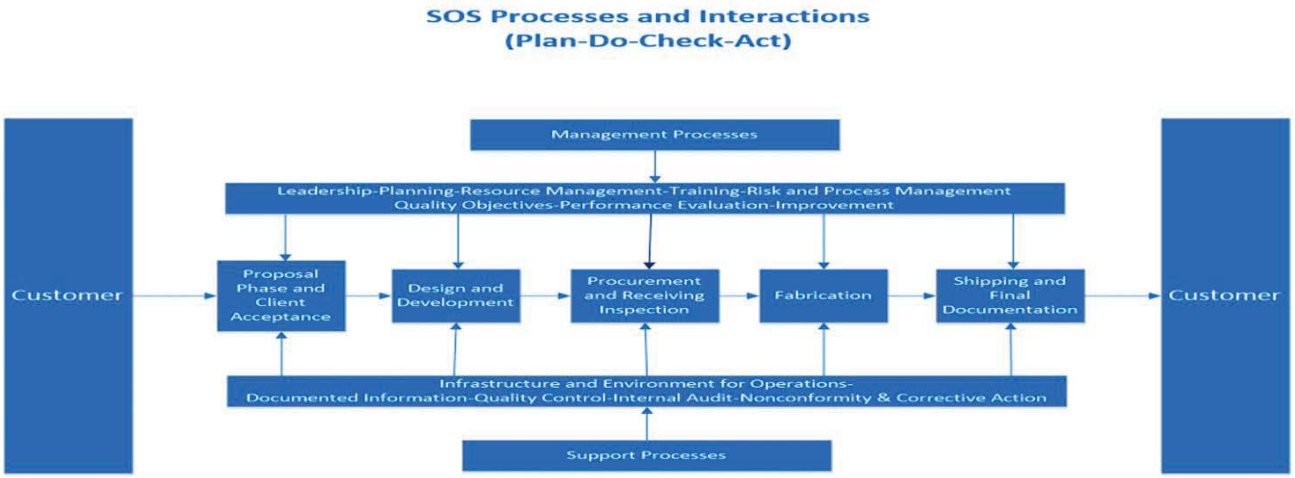
Process Control and Risk Assessment Plan

					Date (Orig.)	Prepared by:	Created by: QHSE			
Support Key Product and Service Processes					10-11-17	QHSE				
Process										
Step Number	**Process Name / Operation Description**	**Inputs Required**	**Outputs Expected**	**Methods to Ensure Effective Operation**	**Required Resources**	**Responsible Person / Group**	**Risk Score (1, 2 or 3)** **Risks Identified?**	**Identified Risks and Opportunities**	**Evaluation Method (How Risk is Managed)**	**Documented Information**

2. Score / Risk Criteria Example

1	Potential Low Impact on Customer Satisfaction, Form, Fit or Function
2	Potential Medium Impact on Customer Satisfaction, Form, Fit or Function
3	Potential High Impact on Customer Satisfaction, Form, Fit or Function

3. Processes and Interactions



Attached Table 5-1: Major Duties of Divisions and Departments

Divisions/Department	Major Duties
Integrated Management System Representatives (IMRs)	Duties related to environmental management system (1) Coordinating and maintaining QHSE & IT management system
Independent Auditor	Duties related to: ● internal audits of IMS processes and evidence of use ● evaluation of internal control relating to reliability of compliance, risk based management, continual improvement and system effectiveness
QHSE & Systems	Duties related to quality assurance and control: ➢ Managing nonconformities and driving continual improvement ➢ Coordinate quality assurance and control in repair, services, assembly, fabrication and machining of turbomachinery parts and equipment ● Health Safety and Environmental Planning programs and oversight ● Information Technology systems that focus on uptime and data security ● Information Technology systems that drive productivity through standardization and simplification
Corporate Governance	Accounting Department - Duties related to: ● Coordinating overall corporate financial management and reporting; ● Support business strategy such as: ➢ mid- and long-term business plans; ➢ market research and benchmarking; ➢ alliances and M&A study; and • P/O management, financial results, and cash flows • Statutory audits, construction cost, building expenses, cost accounting, and cash management Corporate Governance - Duties such as: • Liaison to Corporate Headquarters and MCO-I Board of Directors • Corporate Compliance and Risk Analysis; • Delegation of authority • Documentation and legal affairs; Human Resources: Duties including: • labor and personnel; development, hiring, firing, support • benefits administration
Procurement Department	Duties related to the following activities: ● Planning and coordinating material procurement operations ● Supplier management ● Strategic alignment of sources with business needs and growth
Sales and Marketing NUB and CSB	Marketing • Corporate communications such as public relations • Brochures, trade shows, articles, advertisement, press communications, videos Sales Department - Duties related to: • Profit and loss management • Short-term business plans; • Sales activities for inquires; Technical - Duties related to: ● Coordinating inquires; ● Providing technical proposals and services to customers; ● Conducting technical negotiations with customers; and ● Master plans including equipment selection and technological study ● Provide training and installation-related information Commercial – Duties related to: • Conducting commercial negotiations • Conducting contract negotiations • Receive PO; release invoicing & request for payment • Track commercial project execution • Controls and reports financials to controller

Divisions/Department	Major Duties
Production, Logistics and Facilities	Production Management Section - Duties related to the following activities: • Planning and construction of packaging systems Production Control Section – Coordinate the following activities: • Cost management • Cost estimate • Quality control • Schedule management • Development of manufactured processes and product • Process control Major Processes • Rotor Balancing and Repair • Machining • Weld and fabrication • Clean, Blast and Painting Assembling & Shop Test Section - Duties related to: • Assembly; • Commissioning; • Production and facility equipment introduction; • Equipment management and maintenance; and Preservation, Storage and Shipping Packing, shipment, import, and export Warehouse management Export controls
Engineering & Design	In House Engineering • Product planning; • Drawing and part number creation • Coordinating in-house design standards, internal and external engineering standards, and specifications; • Reverse engineering; • Engineering and detailed design for compression systems, equipment technologies, and piping structural technologies • Instrument & Electrical Engineering Section - Duties related to engineering and detailed design for instrumentation, electrical, and control technologies Application Engineering Group - Duties related to the following activities: • Providing engineering-related support for new sectors and inquiries about mega projects • Providing technical proposals to the Global Marketing & Sales Division • Providing technical assistance to the Global Marketing & Sales Division in relation to services • Providing assistance to the Global Marketing & Sales Division in developing master plans including equipment selection and technological study for inquiries Project Management Group - Duties related to: • Coordinating projects; and • Coordinating company-wide system development
Field Service (advisory only)	Technical Service Group - Duties related to the following activities: • Turnaround management • Customer training • Spare parts and service advisory • Customer asset management

Attached Table 5-2: Departmental Roles and Responsibilities

Section No.	Integrated Management Manual (SOP-3-090-2017-S)	President / Gen Counsel	Information Technology	QHSE	Procurement	Sales and Marketing	Design	Production / Service	Human Resources
4.1	Understanding MCO-I and its context	@	@	@	@	@	@	@	@
4.2	Needs and expectations of interested parties	@	@	@	@	@	@	@	@
4.3	Scope of the environmental management system	O	O	@	O	O	O	O	O
4.4	Integrated management system and its processes	O	O	@	O	O	O	O	O
5.1	Leadership and commitment	@	@	@	@	@	@	@	@
5.2	MCO-I policy	@	@	@	O	O	O	O	O
5.3	Organizational roles, responsibilities and authorities	@	O	@	O	O	O	O	@
6.1	Actions to address risks and opportunities	@	@	@	O	O	O	O	O
6.2	IMS objectives	@	@	@	O	O	O	O	O
6.2	IMS objectives and planning to achieve	@	@	@	O	O	O	O	O
6.3	Planning for change of the IMS	O	@	@	O	O	O	O	O
7.1	Resources	@	O	O	O	O	O	O	@
7.2	Competence	@	@	@	@	@	@	@	@
7.3	Awareness	@	@	@	@	@	@	@	@
7.4	Communication	@	@	@	@	@	@	@	@
7.5	Documented information	O	O	@	O	O	O	O	O
8.1	Operational planning and control	O	O	O	@	O	O	@	O
8.2	Requirements for products or services	O	O	O	O	@	O	O	O
8.3	Design and development of products or services	O	O	O	O	O	@	O	O
8.4	Control of externally provided processes and services	O	O	@	@	O	O	O	O
8.5	Production and service provision	O	O	O	O	O	O	@	O
8.6	Release of products or services	O	O	@	O	O	O	O	O
8.7	Control of non-conforming outputs	O	O	@	@	O	O	@	O
9.1	Monitoring, measurement, analysis and evaluation	O	O	@	O	O	O	@	O
9.2	Internal Audit	O	O	@	O	O	O	O	O
9.3	Management Review	O	@	@	O	O	O	O	O
10.1	General	O	@	@	@	@	@	@	@
10.2	Nonconformity and corrective action	O	O	@	O	O	O	O	O
10.3	Continual improvement	O	@	@	@	O	@	@	O

*Remarks:

@ denotes a responsible department.

O denotes a related department.

Attached Table 8-1: Operational Planning and Control – Lifecycle Perspective Consideration

Process	Consideration	Comment
Noise	When customer specifies noise acceptance limitation, suitable noise insulation will be furnished with the compressor and turbine to satisfy with the requirement.	NA
Gas / Steam Leak	1) Pressure containing parts should be designed / fabricated / tested to hold the pressure without leak. 2) When the pressure containing components are repaired, a hydrostatic pressure test shall be performed. 3) Compressor has seal system. When dry gas seal is applied, it has small leak. Monitoring system for leakage is provided for site operation and alarm/shutdown system will be applied according to the customer's requirement.	MCO-I oppose performing gas tests / leak tests in the shop, as it is quite dangerous given the entrained energy in the large volume of compressible gas required to perform pressure testing of components, giving rise to very serious health and safety concerns should a burst occur. Therefore, it is stipulated that only hydrostatic tests can be performed during the course of overhaul and repair work.
Machine Service Life	Equipment (including auxiliaries) design and construction per API standard is covered a minimum service life of 20 years and at least 5 years of uninterrupted operation.	NA
Personnel protection	Steam turbine has thermal protection for personnel protection. Thermal insulation for proper operation and personnel protection shall be provided by vendor. Exposed surfaces in personnel access shall not exceed a temperature of 60 degrees Celsius (140 degrees Fahrenheit). Turbine casing and components shall be insulated with removable blanket type insulation	NA

Revision History

Revision Number	Date	Reasons	Approved by	Reviewed by	Prepared by
Established	November 13, 2017	Newly established.	Otsuki	Rominger	Jamerson
1	Feb 21, 2018	Add Tenets. Add MOC process	Rominger	Moir	Jamerson
2	Mar 21, 2018	Add list of records. Update for ISO 45001 standard approved. Update Internal/External issues table; update management system diagram to show input and outputs	Rominger	Moir	Jamerson
3	Nov 16, 2018	Document review to ensure OH&S standard requirements are included. Added document names to Table 4-2	Rominger	Steffenauer	Jamerson
4	Nov 22, 2019	Clarify Field Service role as advisory in the scope of the IMS (p. 8, 10 &44). Add consideration for lifecycle perspective (p. 25 & 46)	Rominger	Rominger	Jamerson