



Document Title:

INTEGRATED BUSINESS MANAGEMENT SYSTEM MANUAL

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* Denotes change from previous revision, *changes are in italics*.

SECTION 1 – SCOPE*** SECTION 1.1 – SCOPE**

ATI *Specialty Alloys and Components and ATI Primary Titanium Operations* has developed and implemented an Integrated Business Management System (IBMS) to protect our employees, assets and the environment, to demonstrate *our* ability to consistently provide product that meets customer, statutory, and regulatory requirements, and to address satisfaction of interested parties through the effective application of the IBMS, including continual improvement and the prevention of nonconformity. The IBMS currently encompasses system requirements of the following functional groups: Quality, Environmental, Health & Safety. *Other organizations may be included through lower level documentation without a revision to this Manual.*

The Manual is divided into sections modeled on the organization structure of ISO's Directive Annex SL. Sections are further divided into several subsections representing main IBMS elements or activities. Each subsection has a general policy statement expressing the commitment to implement the basic principles of the pertinent IBMS element or activity and a reference to the controlling second-tier Business Control Instruction (BCI) for that element.

This Manual presents the IBMS structure to our customers and other interested parties in order to inform them of specific controls implemented at ATI to ensure compliance, conformance and continual improvement. The Manual and associated third-party accreditation certificates can be found at the following website:

<https://www.atimetals.com/businesses/atispecialtyalloysandcomponents/tools>



* **SECTION 1.2 – INDEX**

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SECTION 4 – CONTEXT OF THE ORGANIZATION

* SECTION 4.1 – UNDERSTANDING THE ORGANIZATION AND ITS CONTEXT

ATI is one of the largest and most diversified specialty materials and components producers in the world. ATI Specialty Alloys and Components and ATI Primary Titanium Operations are business units within the ATI corporate structure. Our major markets are aerospace & defense, medical, electrical energy, oil & gas, and chemical process industry.

Our Vision

Building the World's Best Specialty Materials Company

Our Commitment

Creating Long-Term Value Through Relentless Innovation

Our Core Values

- Integrity
- *Teamwork* and Respect
- Innovation
- *Accountability*
- *Safety and Sustainability*

Our Principles

- Being the Best at Creating *Long-Term Sustainable Value for Strategic Customers and Shareholders*
- Delivering *Compound-Annual Profitable Growth in Diversified Global Markets*
- Leveraging our Technical and Manufacturing Leadership and Capabilities
- Continuously Improve All Aspects of Our Business With Focus on *Safety, Quality, Cost, and Sustainability*
- Attract, Develop, Challenge and Create Opportunities for Talented and Diverse People Who Share a Commitment to Our Values

Our Purpose

We create materials to protect lives and improve our future.

ATI has determined a nonexclusive list of relevant external and internal factors to our purpose, strategic direction, and ability to achieve the intended results of the IBMS includes the following:

External Factors

- Competition
- Customer Decisions
- Financial Markets
- Regulatory Environment
- Available Labor Resources
- Economic Influences
- Supplier Viability
- Political Influences
- *Availability of Resources*

Internal Factors

- Asset Management
- Talent Management
- Financial Resources
- Execution of Plan
- Culture
- Technology
- Work Environment
- Risk Identification
- Procedures



* **SECTION 4.2 – UNDERSTANDING THE NEEDS AND EXPECTATIONS OF INTERESTED PARTIES**

ATI has identified a nonexclusive list of Interested Parties as follows:

- Customers
- Regulatory Bodies
- Employees
- ATI Corporate
- Labor Organizations
- Government (City, State, Federal)
- Investors
- *Shareholders*
- Suppliers
- Neighbors
- Special Interest Groups

These Interested Parties have expectations that ATI will comply with applicable laws, regulations, contracts, standards, and specifications.

* **SECTION 4.3 – DETERMINING THE SCOPE OF THE IBMS**

In consideration of the organization and its context, and understanding the needs and expectations of interested parties, the IBMS is designed to comply with national and international standards, such as:

Quality Standards: ISO 9001, AS9100, ISO 17025, MIL-I-45208, MIL-Q-9858, 10 CFR 50 Appendix B, ASME NCA-3800, ASME NQA-1, 10 CFR Part 21, 21 CFR Part 820, and PED 2014/68/EU

Environmental Standards: ISO 14001

Health & Safety Standards: OHSAS 18001 and ISO 45001

Asset Management Standards: ISO 55001

ATI's scope of manufacturing process capabilities include extractive metallurgy, melting, product conversion, subcontractor control, forging, rotary forging, rolling, heat treating, machining, drawing, extrusion, pilgering, corrosion testing, nondestructive testing, analytical laboratory testing, mechanical and metallographic testing, continuous material identification and traceability, product inspection, certification and shipping of reactive and refractory metals plus specialty chemicals.

The facility locations applicable to the IBMS include:

ATI Specialty Alloys and Components Business Unit

ATI Millersburg Operations

1600 Old Salem Road NE – Central Headquarters for administration of IBMS-1
1200 Old Salem Road NE
2951 Front Avenue
Albany, OR 97321

ATI Huntsville Operations

7400 Highway 20 West
Huntsville, AL 35806

ATI Albany Operations

530 34th Avenue SW
425 34th Avenue SW
Albany, OR 97322

ATI Primary Titanium Operations Business Unit

ATI Richland Operations

3101 Kingsgate Way
Richland, WA 99354

ATI Richland Operations (Warehouse)

2455 Battelle Blvd Suite B
Richland, WA 99354

The name ATI, when used in this document and other controlled documents, is understood to apply to these facility locations from both business units.

IBMS-1 has been drafted to be relevant to the nature of our organization, products, and customer, statutory, and regulatory requirements. For this reason, those requirements of ISO 9001 and AS9100 that do not apply are excluded from the scope of the IBMS, as identified below:

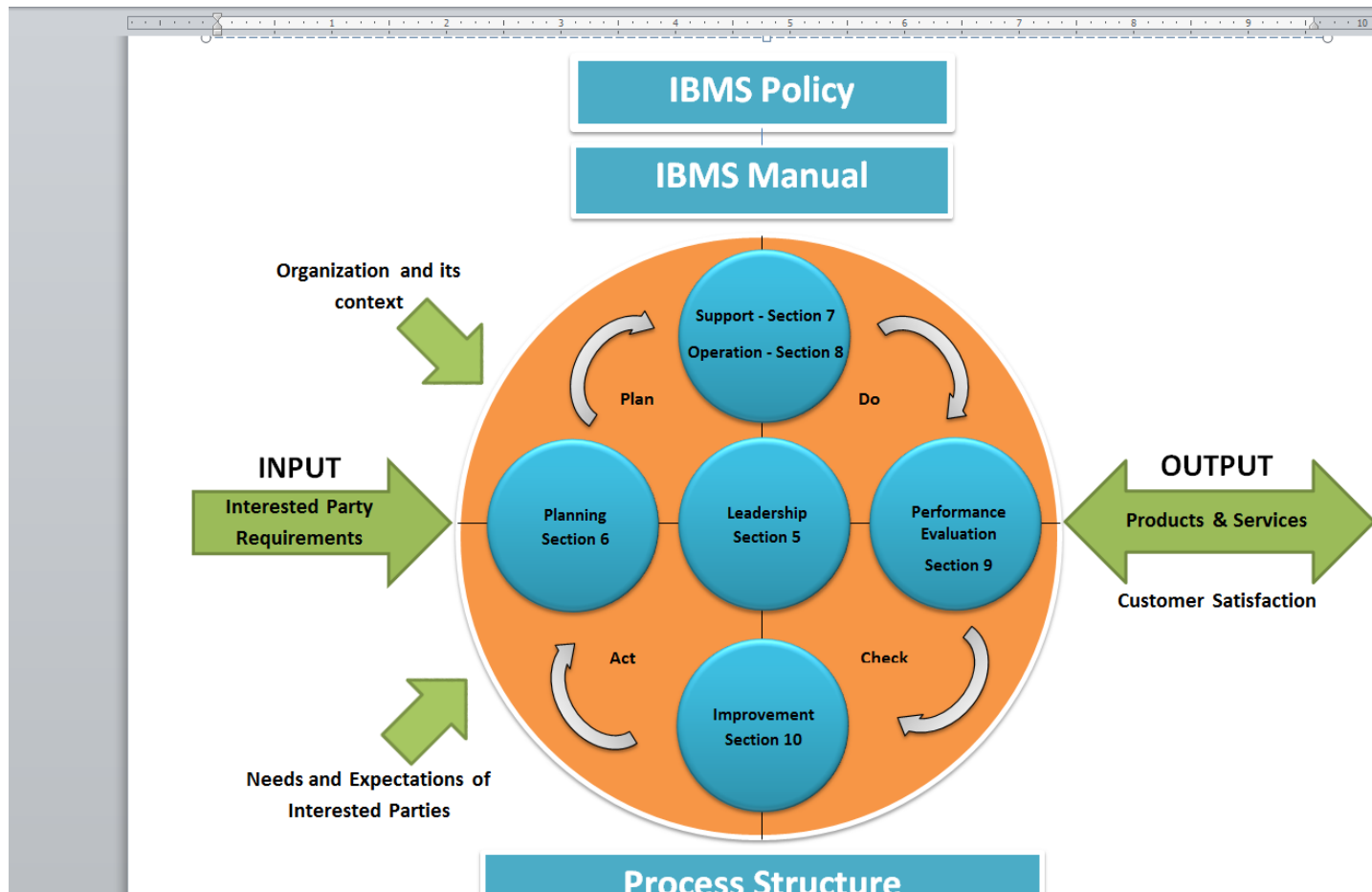
1. ISO 9001 and AS9100 Section 8.3, Design and Development of Product and Services, including all subsections: ATI does not design or develop products. The customer specifies the principal product characteristics. Our engineering activities are limited to developing methods and means of production and fabrication.
2. AS9100 Section 8.5.5.f, g, and h for Post-Delivery Activities: these are not specified as a requirement to any products sold by or contained within the contracts received by ATI.

Reference Documents: BCI-00-02 Quality System Program for NCA-3800

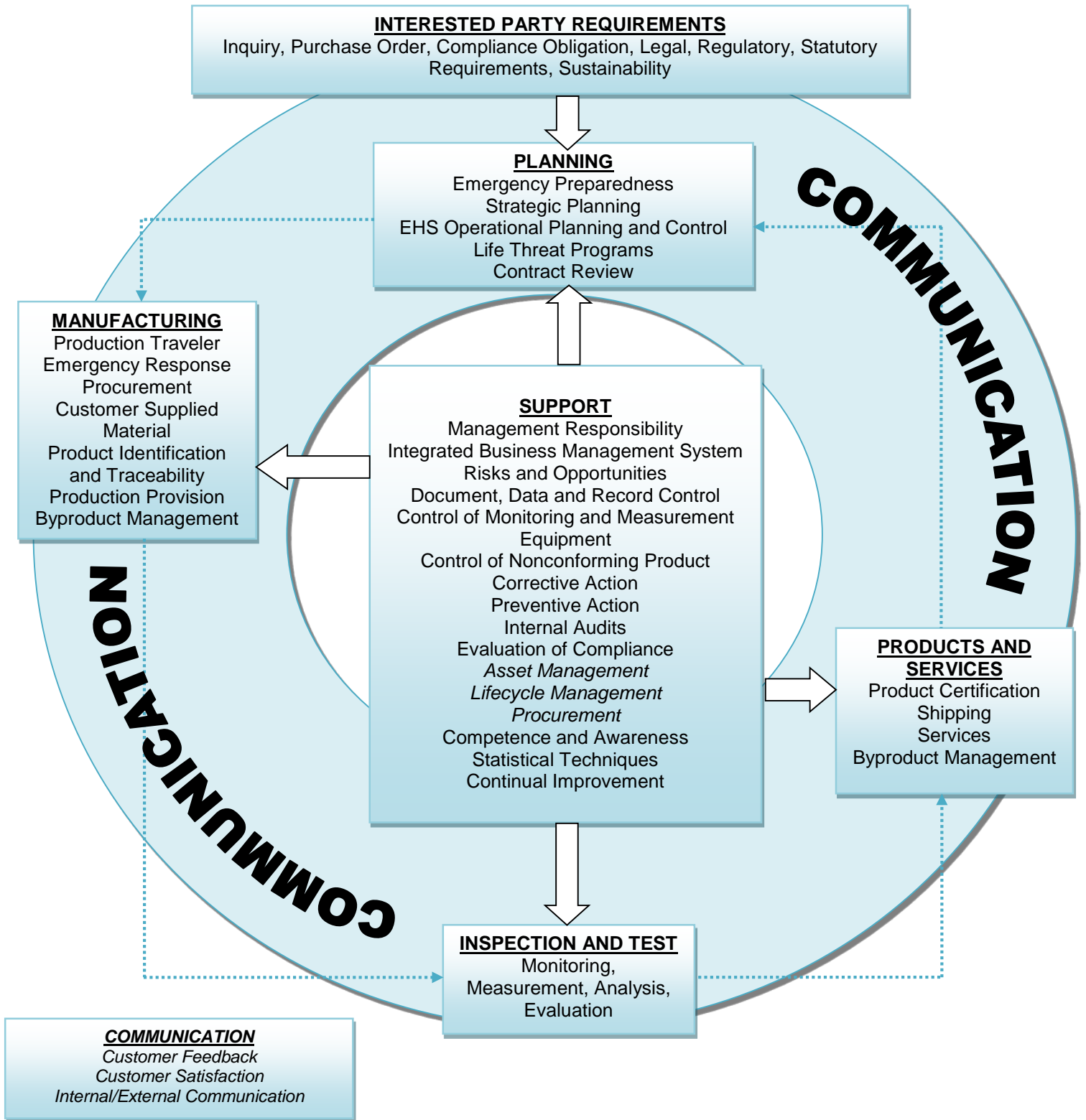
SECTION 4.4 – IBMS AND ITS PROCESSES

The IBMS structure defines the processes to establish, implement, maintain, and continually improve the system. ATI implements a Plan-Do-Check-Act (PDCA) cycle to improve IBMS process interactions.

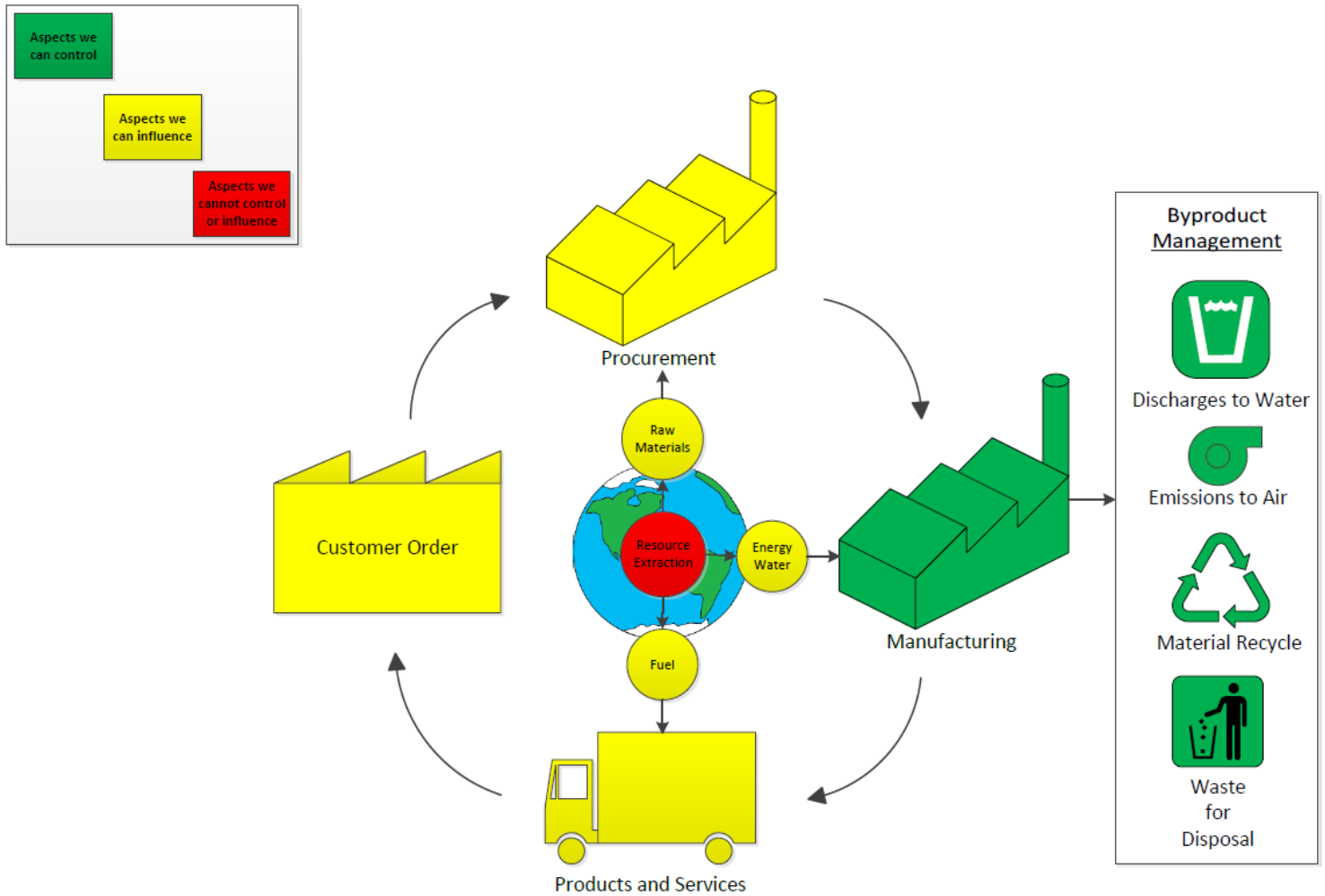
Figure 1 – PDCA Cycle for IBMS



* Figure 2 – IBMS Process Interaction Map



* Figure 3 – Lifecycle Consideration for IBMS Processes



Reference Documents: BCI-08-10 EHS Operational Planning and Control, *BCI-04-02 IBMS Process Diagrams*



SECTION 5 - LEADERSHIP

* SECTION 5.1.1 – Leadership and Commitment

ATI's Top Management is ultimately responsible for establishing, implementing, maintaining, leading, promoting, and continually improving the IBMS. Top Management commitment is demonstrated by establishing, *and fulfilling*, the IBMS Policy and Objectives; conducting management reviews of the IBMS; ensuring the availability of necessary resources in concert with the strategic direction of the organization; *promoting risk-based thinking and a process approach to problem solving and continual improvement. Top Management shall communicate the importance of fulfilling the IBMS Objectives and the relevance of the IBMS Policy to the organization.*

Reference Documents: BCI-09-01 Management Review

* SECTION 5.1.2 – Customer Focus

An objective of the ATI IBMS is to focus our organization on the customer; and in particular, on customer satisfaction. The key to achieving high customer satisfaction is understanding customer requirements, and a capability to consistently fulfill these requirements in regards to product conformity, delivery terms, and expectations. *Key indicators are tracked to monitor these objectives.*

Reference Documents: BCI-06-01 Objectives, BCI-08-08 Contract Review, BCI-08-09 Quality Planning, BCI-08-33 Customer Feedback, BCI-09-01 Management Review, BCI-10-01 Continual Improvement, BCI-10-06 Return Material Authorization.

* SECTION 5.2 – IBMS POLICY

"We are committed to continually improving our integrated business management system and processes, while managing risk and meeting all applicable compliance obligations.

Our responsibility is to protect our employees, customers, assets and the environment, while providing products and services of the highest quality consistent with customer and other requirements."

The IBMS Policy is established and communicated by Top Management to provide the framework for establishing objectives and direction for continual improvement. It is made available via communications within the organization to employees at all levels of the organization, and externally through access to this document.

Reference Documents: BCI-09-01 Management Review, *BCI-05-02 Integrated Business Management System (IBMS) Policy Definition*, BCI-10-01 Continual Improvement.

SECTION 5.3 – ORGANIZATIONAL ROLES, RESPONSIBILITY, AUTHORITIES

ATI departmental functions and their interrelation within the organization are defined and communicated in documented procedures.

The Company President has appointed the Director of Quality and Director of EHS as the management representatives responsible for establishment and maintenance of their functional requirements in the IBMS, for reporting to Top Management on the performance of the IBMS, and to resolve Management System issues.

The Quality department is independent of production and is authorized to halt production or shipment for



any reason relating to deficiencies in quality. The Director of Quality shall have unrestricted access to Top Management.

Risks and opportunities regarding the IBMS are communicated internally through distribution of pertinent documents, meetings, training and awareness programs, and management reviews. Management shall ensure that personnel have access to, and are aware of, relevant IBMS documentation and changes.

Reference Documents: BCI-04-01 Authorized Representatives, BCI-05-01 Organization Structure and Responsibilities, BCI-07-02 Awareness Training, BCI-07-03 Competence Training, BCI-07-04 Documented Information, BCI-09-01 Management Review.

* **SECTION 5.4 – PARTICIPATION AND CONSULTATION**

Worker participation and consultation within *the Management System is emphasized by Top Management to all employees at all applicable levels and functions within the organization*. Workers include those contractors performing work on-site, as well as active employees of the organization. Time, training and resources for participation are provided, and obstacles or barriers to participation have been removed, or minimized when they cannot be removed.

Reference Documents: *BCI-05-03 Participation and Consultation*, BCI-06-02 Actions to Address Risks and Opportunities, BCI-07-02 Awareness Training, BCI-07-03 Competence Training, BCI-08-04 Control of Externally Provided On-Site Services, BCI-08-04 Addendum 1 On-Site Contractors, *BCI-08-04 Addendum 2 ATI SA and C IBMS Program Requirements for Externally Provided On-Site Services*, BCI-08-10 Operational Planning and Control, BCI-08-13 Management of Change, BCI-08-14 Risk Analysis and Abatement Process, BCI-08-16 Emergency Preparedness and Response, BCI-09-02 Internal Audit, BCI-10-01 Continual Improvement, BCI-10-02 Corrective Actions, BCI-10-03 Preventive Actions, BCI-10-04 Nonconformity.

SECTION 6 - PLANNING

* **SECTION 6.1 – ACTIONS TO ADDRESS RISKS AND OPPORTUNITIES**

Organizational context, interested parties, compliance obligations, and scope are considered when planning for the Management System, as well as the associated *hazard identification*, risks and opportunities that are presented when considering these issues and requirements. Risks are mitigated to prevent, reduce or eliminate undesirable effects, while opportunities are exploited for the benefit of the organization. Risks and opportunities are communicated to Top Management, and the achievement of these mitigations or exploitations are documented.

Reference Documents: BCI-06-01 Objectives, BCI-06-02 Risks and Opportunities, BCI-08-08 Contract Review, BCI-08-09 Quality Planning, *BCI-08-10 EHS Operational Planning and Control*, *BCI-08-19 Product Handling and Preservation*, BCI-09-01 Management Review, BCI-10-01 Continual Improvement.

* **SECTION 6.2 – OBJECTIVES AND PLANNING TO ACHIEVE THEM**

IBMS Objectives are established by Top Management to support and implement the IBMS Policy and continual improvement at relevant functions within the organization. IBMS planning includes identification and determination of processes (including any exclusions of ISO 9001 and AS9100 requirements), *lifecycle management*, priorities for continual improvement, and resources needed to achieve Objectives and to maintain and improve the IBMS. IBMS processes are periodically reviewed and updated to maintain the integrity of the IBMS during organizational and other changes. Worker participation is achieved through the use of specific, measurable, attainable, realistic and timely goals,



which are related to Top Management's communication of organizational objectives to *relevant stakeholders*.

Reference Documents: BCI-06-01 Objectives, BCI-06-02 Risks and Opportunities, BCI-07-02 Awareness Training, BCI-07-03 Competence Training, BCI-08-08 Contract Review, BCI-08-09 Quality Planning, *BCI-08-10 EHS Operational Planning and Control*, BCI-09-01 Management Review, BCI-10-01 Continual Improvement.

* **SECTION 6.3 – PLANNING FOR, AND MANAGEMENT OF, CHANGE**

Changes to the IBMS are carried out in a planned manner, and are controlled to either mitigate or eliminate negative consequences to the identified context, scope and policy of the management system. Changes are planned, implemented, controlled *and communicated* to mitigate impact upon the IBMS *and relevant interested parties*, including: the execution of new products, processes or services; changes to existing work processes, procedures, equipment and organizational structure; legal and regulatory obligations; changes in knowledge, *acquired internally and externally*, or information about hazards related to the IBMS; and developments in knowledge, *acquired internally and externally*, or applicable technology. Management shall ensure that personnel have access to, and are aware of, relevant Management System documentation and instruction changes. When required, persons authorized to approve production changes are identified.

Reference Documents: BCI-06-02 Risks and Opportunities, BCI-06-04 Validation Program, BCI-07-02 Awareness Training, BCI-07-03 Competence Training, BCI-07-04 Documented Information, BCI-07-06 Records, BCI-07-08 Maintenance of Infrastructure and Process Equipment, BCI-08-01 Material Supplier Evaluation, BCI-08-01 Addendum 1 Material Suppliers, BCI-08-01 Addendum 2 ATI SA&C IBMS Program Requirements for Material Suppliers, BCI-08-02 Service Subcontractor Evaluation, BCI-08-02 Addendum 1 Approved Service Subcontractors, BCI-08-02 Addendum 2 ATI SA&C IBMS Program Requirements for Service and Conversion Subcontractors, BCI-08-03 Calibration Subcontractor Evaluation, BCI-08-03 Addendum 1 Approved Calibration Subcontractors, BCI-08-03 Addendum 2 ATI SA&C IBMS Program Requirements for Calibration Vendors, BCI-08-06 Product Substitution and Counterfeit Parts, BCI-08-07 Chemical Assessment, BCI-08-08 Contract Review, BCI-08-09 Quality Planning, BCI-08-10 Operational Planning and Control, BCI-08-13 Management of Change, BCI-08-14 Risk Analysis and Abatement Process, BCI-08-15 Process Change Request System, BCI-08-15 Addendum 1 PCR Committee List, BCI-08-16 Emergency Preparedness and Response, BCI-08-17 Configuration Management and Change Control, BCI-08-23 Production Traveler, BCI-08-25 Release Points, BCI-08-28 Final Inspections, BCI-08-32 Retests and Invalidations, BCI-08-36 Vendor Supplier Performance, BCI-10-01 Continual Improvement.

SECTION 7 - SUPPORT

* **SECTION 7.1 - RESOURCES**

ATI *Top Management* is committed to provide adequate resources for the implementation, *maintenance* and improvement of the IBMS, and for addressing customer satisfaction.

ATI identifies personnel training needs, provides required training, and evaluates the effectiveness of the training provided for personnel performing work affecting conformity to product requirements. Personnel assigned to perform specific tasks, operations, and processes are qualified on the basis of appropriate education, experience, or training. Employees are made aware of the relevance and importance of their activities and how they contribute to the achievement of IBMS objectives. Records of personnel qualifications and training are maintained.



Suitable infrastructure, facilities and work environment are provided as required to achieve conformity. This includes planning, provision, and maintenance of employee facilities, workspaces, equipment, *management of assets*, and supporting services.

Appropriate measuring and monitoring equipment is maintained and selected to ensure that measurement capability is consistent with the measurement requirements. Equipment used for assuring conformity is calibrated or verified using calibration standards traceable to the national standard. Calibration status of measuring equipment is identified with calibration stickers. Measuring equipment is properly maintained, and its placement and use are controlled.

Reference Documents: BCI-04-01 Authorized Representatives, BCI-05-01 Organization Structure and Responsibilities, BCI-07-02 Awareness Training, BCI-07-03 Competence Training, BCI-07-04 Documented Information, BCI-07-06 Records, BCI-07-07 Calibration System, BCI-07-08 Maintenance of Infrastructure and Process Equipment, BCI-07-09 Personnel Vision Qualification, BCI-07-10 Qualification and Certification of Visual/Dimensional Inspection Personnel, BCI-07-11 Training and Qualification of Special Process Furnace Operators, BCI-07-12 Qualification and Certification of Nondestructive Testing Personnel, *BCI-08-10 EHS Operational Planning and Control*, *BCI-08-19 Product Handling and Preservation*, BCI-08-22 Product Identification and Traceability, BCI-08-23 Production Traveler, BCI-08-27 Furnace Surveys and Qualification, BCI-08-29 Control of Computerized Inspection Systems, BCI-08-33 Customer Feedback, BCI-09-01 Management Review, BCI-10-06 Return Material Authorization, IS 8.001.01 Information Systems Department Charter, General Safety Rules.

* **SECTION 7.2 – COMPETENCE**

*ATI has defined objectives, responsibilities, and a method for competence evaluation for persons working under the IBMS. Competence builds upon the foundation of employee *experience, education and organizational awareness training, and includes the ability to identify hazards relevant to their duties. Organizational knowledge is captured in training, in written documentation, and retained by the organization.**

Reference Documents: BCI-07-02 Awareness Training, BCI-07-03 Competence Training, BCI-07-09 Personnel Vision Qualification, BCI-07-10 Qualification and Certification of Visual/Dimensional Inspection Personnel, BCI-07-11 Training and Qualification of Special Process Furnace Operators, BCI-07-12 Qualification and Certification of Nondestructive Testing Personnel, *BCI-08-10 EHS Operational Planning and Control*.

* **SECTION 7.3 – AWARENESS**

ATI has defined the requirements and responsibilities for awareness training that affects the performance and effectiveness of persons working under the IBMS.

Awareness of the consequences of actions upon product quality and the success of the organization, including the consequence of deliberate malpractice, are communicated to employees on a regular basis.

Awareness training is a core requirement in building competence in job duties.

Reference Documents: BCI-07-01 Communication, BCI-07-02 Awareness Training, BCI-07-03 Competence Training, BCI-07-09 Personnel Vision Qualification, BCI-07-10 Qualification and Certification of Visual/Dimensional Inspection Personnel, BCI-07-11 Training and Qualification of Special Process Furnace Operators, BCI-07-12 Qualification and Certification of Nondestructive Testing Personnel, BCI-08-34 Deliberate Malpractice Prevention, Detection and Reporting.



* SECTION 7.4 – COMMUNICATION

Relevant information regarding the IBMS is communicated internally through distribution or posting of pertinent documents *or messages*, meetings, training and awareness programs, and Management Review.

Arrangements for communication with customers and other interested parties relating to *continual improvement*, product information, order handling, *compliance obligations* and customer or interested party feedback and complaints are defined. Where applicable *and appropriate*, *operational*, *environmental*, *health or safety procedures and instructions* for these activities are established, implemented and communicated to internal and external interested parties.

The timing of such communications is determined based on business need, compliance obligation, and takes into account interested party expectations.

Communications with regard to realization of customer orders are defined and any incomplete or conflicting requirements are resolved in writing before acceptance.

Reference Documents: BCI-04-01 Authorized Representatives, BCI-05-01 Organization Structure and Responsibilities, *BCI-05-02 Integrated Business Management System (IBMS) Policy Definition*, BCI-07-01 Communication, BCI-07-02 Awareness Training, BCI-07-03 Competence Training, BCI-07-04 Documented Information, BCI-07-06 Records, BCI-08-08 Contract Review, BCI-08-10 EHS Operational Planning and Control, BCI-08-16 Emergency Preparedness and Response, BCI-08-35 Customer Communication, BCI-09-01 Management Review, *BCI-10-01 Continual Improvement*.

* SECTION 7.5 – DOCUMENTED INFORMATION

Scope of the IBMS documentation is defined. Establishment and revision of documents and their distribution are controlled. New documents and revisions are reviewed and approved prior to issue, and are identified with respect to their revision level. *Relevant* documents are *made* available to employees, customers, statutory, and regulatory authorities *as appropriate*. Obsolete documents are removed from points of use. Training is performed on relevant documents and changes.

ATI utilizes a four-tier documentation structure as follows:

- Level 1 – IBMS Manual;
- Level 2 – Business Control Instructions;
- Level 3 – *Job Instructions and Policies*
- Level 4 – *Forms and Templates*

IBMS records are identified and indexed to facilitate their retrieval, and are stored in a suitable environment to minimize deterioration. *Minimum IBMS record retention is defined and retention is equivalent to customer, interested party and compliance requirements.*

Reference Documents: BCI-07-02 Awareness Training, BCI-07-03 Competence Training, BCI-07-04 Documented Information, BCI-07-04 Addendum 1 Document Approval List, BCI-07-06 Records, BCI-07-06 Addendum 1 List of Records with Retention Time and Control Responsibility, BCI-07-15 Standards for Working Documents, BCI-07-16 Control of Electronic Signatures, BCI-07-17 Industry Standards, BCI-08-17 Configuration Management and Change Control.



SECTION 8 - OPERATION

* SECTION 8.1 – OPERATIONAL PLANNING AND CONTROL

Consistent with a lifecycle perspective, IBMS processes are established, implemented, controlled and maintained to support the achievement of the objectives, assess hazards, manage the risks, and exploit the opportunities identified within the organization's scope and context.

Planning to take action to address environmental compliance obligations and significant environmental aspects includes determination of compliance obligations, determination of environmental aspects, evaluation of degree of impact of environmental aspects, relative risk of the impact, assessment of suitability of existing controls, and establishment of additional controls as needed. *Planning for environmental impacts, positive and negative, is accomplished through controls.*

Planning to take action to address health and safety hazards, risks, and opportunities includes the proactive determination of compliance obligations; proactive and ongoing identification and evaluation of the hazard and degree of risk inherent to the organization's scope; assessment of suitability of controls; and establishments of controls as needed. The process for elimination of hazards and reducing risk takes into account the hierarchy of controls and the participation and consolation of non-managerial workers and other relevant interested parties.

Planning of product realization within the Quality Management System processes includes determination of quality requirements for products, development of required processes and process documentation, and establishment of product verification, validation programs, and establishment of resources. Product realization is accomplished by project management, risk management, configuration management, and control of work transfers. The processes also define the prevention of the use of counterfeit and suspect counterfeit parts, and requirements for records necessary to demonstrate process and product conformity.

Customer orders are reviewed to ensure that product and order requirements are defined and can be met, and to resolve any incomplete or conflicting requirements in writing before acceptance. Order amendments and changes are likewise reviewed and are communicated to all relevant functions. Order reviews are recorded and are retained.

Products and services are not released until all planned arrangements have been completed, and the product and service requirements of the contract have been verified to have been achieved. Retained documented information will provide evidence that the products and services meet the defined requirements of the contract, and all documented information required to accompany products and services are provided in compliance with the contract.

Nonconforming product outputs, whether internally or externally generated, are identified and controlled to prevent their unintended use or delivery.

Reference Documents: BCI-06-04 Validation Program, BCI-07-04 Documented Information, BCI-07-06 Records, BCI-07-08 Maintenance of Infrastructure and Process Equipment, BCI-08-01 Material Supplier Evaluation, BCI-08-01 Addendum 1 Material Suppliers, BCI-08-01 Addendum 2 ATI SA&C IBMS Program Requirements for Material Suppliers, BCI-08-02 Service Subcontractor Evaluation, BCI-08-02 Addendum 1 Approved Service Subcontractors, BCI-08-02 Addendum 2 ATI SA&C IBMS Program Requirements for Service and Conversion Subcontractors, BCI-08-03 Calibration Subcontractor Evaluation, BCI-08-03 Addendum 1 Approved Calibration Subcontractors, BCI-08-03 Addendum 2 ATI SA&C IBMS Program Requirements for Calibration Vendors, BCI-08-04 Control of Externally Provided On-Site Services, BCI-08-04 Addendum 1 On-Site Contractors, *BCI-08-04 Addendum 2 ATI SA and C*



IBMS Program Requirements for Externally Provided On-Site Services, BCI-08-06 Product Substitution and Counterfeit Parts, BCI-08-08 Contract Review, BCI-08-09 Quality Planning, BCI-08-10 Operational Planning and Control, BCI-08-14 Risk Analysis and Abatement Process, BCI-08-15 Process Change Request System, BCI-08-15 Addendum 1 PCR Committee List, BCI-08-16 Emergency Preparedness and Response, BCI-08-17 Configuration Management and Change Control, BCI-08-19 Product Handling and Preservation, BCI-08-20 Cross Contamination Prevention System, BCI-08-22 Product Identification and Traceability, BCI-08-23 Production Traveler, BCI-08-25 Release Points, BCI-08-28 Final Inspections, BCI-08-32 Retests and Invalidations, BCI-08-35 Customer Communication, BCI-08-36 Vendor Supplier Performance, BCI-08-37 Confined Space Safety, BCI-08-37 Addendum 1 Approved Confined Space Signs, BCI-08-38 Elevated Work and Fall Protection, BCI-08-38 Addendum 1 Scaffolding Requirements, BCI-10-04 Nonconformity, BCI-10-05 Observation Tracker.

* SECTION 8.2 – EMERGENCY PREPAREDNESS

ATI has established, identified, implemented and maintained the process(es) needed to prepare for and respond to potential emergency situations in accordance with identified risks related to environmental aspects, compliance obligations, the scope and the context of the organization, and the risks associated with the normal, abnormal, and emergency operations of the organization. *Relevant interested parties*, employees and on-site visitors are made aware of the planned emergency response, available first aid, and the relevant information for checking and executing the Emergency Action Plan.

Reference Documents: BCI-08-10 Operational Planning and Control, BCI-08-16 Emergency Preparedness and Response.

SECTION 8.3 – DESIGN AND DEVELOPMENT

Not applicable within the scope and context of the organization - See Section 4.3

* SECTION 8.4 – CONTROL OF EXTERNALLY PROVIDED PROCESSES, PRODUCTS AND SERVICES

Consistent with the lifecycle perspective of its products, ATI evaluates its suppliers (both external and on-site) and procures materials and services only from those that can satisfy appropriate IBMS, customer, statutory, and regulatory requirements consistent with the type and extent of control required and defined within the IBMS. Risks to the organization and the IBMS are evaluated and mitigated prior to suppliers performing work. Work is controlled by purchasing documents which clearly and completely describe ordered products, processes and services, including relevant IBMS requirements. Performance of suppliers (both external and on-site) is monitored and evaluated. Procurement documents are reviewed and approved as appropriate prior to release. Procured products are verified before they are used or shipped.

Reference Documents: BCI-08-01 Material Supplier Evaluation, BCI-08-01 Addendum 1 Material Suppliers, BCI-08-01 Addendum 2 ATI SA&C IBMS Program Requirements for Material Suppliers, BCI-08-02 Service Subcontractor Evaluation, BCI-08-02 Addendum 1 Approved Service Subcontractors, BCI-08-02 Addendum 2 ATI SA&C IBMS Program Requirements for Service and Conversion Subcontractors, BCI-08-03 Calibration Subcontractor Evaluation, BCI-08-03 Addendum 1 Approved Calibration Subcontractors, BCI-08-03 Addendum 2 ATI SA&C IBMS Program Requirements for Calibration Vendors, BCI-08-04 Control of Externally Provided On-Site Services, BCI-08-04 Addendum 1 On-Site Contractors, *BCI-08-04 Addendum 2 ATI SA and C IBMS Program Requirements for Externally Provided On-Site Services*, BCI-08-06 Product Substitution and Counterfeit Parts, BCI-08-07 Chemical Assessment, BCI-08-10 Operational Planning and Control, BCI-08-16 Emergency Preparedness and Response, BCI-08-36 Vendor Supplier Performance.



* **SECTION 8.5 – PRODUCTION AND SERVICE PROVISION**

Product and process information, and appropriate Instructions are established, and are communicated to relevant personnel. Planning shall consider the processes and mitigation of risk to manage critical items, process controls, special processes, and inspection points. Operations and production processes are monitored and controlled, and are validated where appropriate. Machines and equipment used in production and for monitoring and measurement activities are maintained. When required, critical equipment or tooling in storage shall have periodic checks. Methods for product release and delivery are defined.

Materials, components, parts, subassemblies, and finished products are identified. When required, traceability of materials and processes is recorded and maintained. Inspection and test status of product is identified to ensure that only product that has passed the required inspections is used, installed, or dispatched.

Customer-supplied products are controlled in the same manner as are purchased products. Customer-owned tools, equipment, software, or other property are marked to indicate ownership. Loss, damage, or unsuitability of a customer's product is recorded and reported to the customer.

Appropriate handling, storage, and preservation methods are implemented to prevent product damage or deterioration. Receipt and dispatch to and from storage areas are controlled. The condition of products in stock is regularly assessed. Product packaging materials and methods are specified and controlled.

Reference Documents: BCI-06-04 Validation Program, BCI-07-04 Documented Information, BCI-07-08 Maintenance of Infrastructure and Process Equipment, BCI-08-01 Material Supplier Evaluation, BCI-08-01 Addendum 1 Material Suppliers, BCI-08-01 Addendum 2 ATI SA&C IBMS Program Requirements for Material Suppliers, BCI-08-02 Service Subcontractor Evaluation, BCI-08-02 Addendum 1 Approved Service Subcontractors, BCI-08-02 Addendum 2 ATI SA&C IBMS Program Requirements for Service and Conversion Subcontractors, BCI-08-03 Calibration Subcontractor Evaluation, BCI-08-03 Addendum 1 Approved Calibration Subcontractors, BCI-08-03 Addendum 2 ATI SA&C IBMS Program Requirements for Calibration Vendors, BCI-08-04 Control of Externally Provided On-Site Services, BCI-08-04 Addendum 1 On-Site Contractors, *BCI-08-04 Addendum 2 ATI SA and C IBMS Program Requirements for Externally Provided On-Site Services*, BCI-08-05 Commercial Grade Dedication, BCI-08-08 Contract Review, BCI-08-09 Quality Planning, BCI-08-11 Customer-Supplied Product, BCI-08-12 Quality Inspections-Receiving, BCI-08-15 Process Change Request System, BCI-08-15 Addendum 1 PCR Committee List, BCI-08-18 General Control of Detrimental and Contact Materials, BCI-08-18 Addendum 1 Approved Contact Materials, BCI-08-18 Addendum 2 Approved Subcontractor Contact Materials, BCI-08-19 Product Handling and Preservation, BCI-08-21 Storage Areas, BCI-08-22 Product Identification and Traceability, BCI-08-23 Production Traveler, BCI-08-24 Inspection and Test Status, BCI-08-26 Special Processes, BCI-08-28 Final Inspections, BCI-08-30 Packaging, BCI-08-31 Shipping and Delivery, BCI-08-36 Vendor Supplier Performance, BCI-10-04 Nonconformity, BCI-10-05 Observation Tracker.

SECTION 8.5.5 – Post-Delivery Activities

Post-delivery activities are limited to those related to life-cycle considerations, contractual obligations, customer feedback, and queries related to problems detected after delivery. When problems are detected after delivery, ATI will take appropriate action, including investigation and reporting, to resolve the problems, within the agreed-upon terms and conditions of the original contractual obligations.

Reference Documents: BCI-08-10 Operational Planning and Control, BCI-08-33 Customer Feedback, BCI-08-35 Customer Communication, BCI-10-02 Corrective Actions, BCI-10-04 Nonconformity, BCI-10-



06 Return Material Authorization, BCI-10-07 Reporting of Defects and Noncompliance.

SECTION 9 – PERFORMANCE EVALUATION

*** SECTION 9.1 – MONITORING, MEASUREMENT, ANALYSIS AND EVALUATION**

ATI collects, compiles, and analyzes information and data required for evaluating the suitability and effectiveness of the IBMS and for identifying opportunities for continual improvement. *IBMS processes are monitored to ensure that they achieve the organization's planned results.*

Reference Documents: BCI-06-03 Statistical Techniques, BCI-08-10 Operational Planning and Control, BCI-08-33 Customer Feedback, BCI-09-01 Management Review, BCI-09-02 Internal Audit, BCI-09-05 Evaluation of Compliance, BCI-10-01 Continual Improvement, BCI-10-02 Corrective Actions, BCI-10-03 Preventive Actions, BCI-10-04 Nonconformity, BCI-10-06 Return Material Authorization.

SECTION 9.1.1 – Customer Satisfaction

Customer satisfaction is a principal objective of the IBMS, and the level of customer satisfaction is an important measure of the effectiveness of the Management System. Customer satisfaction is measured by collecting and analyzing direct customer feedback, and by measuring secondary indicators of customer satisfaction. Customer satisfaction data is used by the Top Management to identify opportunities and priorities for improvement.

Relevant product characteristics are measured through inspections, tests, and other product verification activities, as specified in Quality Plans. If planned results are not achieved, appropriate action shall be taken. Evidence of product conformity is recorded. Products are released for delivery only after all specified activities have been satisfactorily completed and verified.

Reference Documents: BCI-08-08 Contract Review, BCI-08-09 Quality Planning, BCI-08-24 Inspection and Test Status, BCI-08-25 Release Points, BCI-08-28 Final Inspections, BCI-08-30 Packaging, BCI-08-33 Customer Feedback, BCI-10-02 Corrective Actions, BCI-10-04 Nonconformity, BCI-10-06 Return Material Authorization, BCI-10-07 Reporting of Defects and Noncompliance.

SECTION 9.1.2 – Evaluation of Compliance

Environmental, Health and Safety compliance is a principal objective of the IBMS, and the level of compliance with applicable, relevant, and appropriate regulations is an important measure of its effectiveness. ATI has established, implemented, and maintains a process to evaluate compliance with applicable legal, regulatory, compliance and other Environmental and Safety obligations.

Reference Documents: BCI-08-10 Operational Planning and Control, BCI-09-05 Evaluation of Compliance, BCI-10-02 Corrective Actions, BCI-10-03 Preventive Actions, BCI-10-04 Nonconformity, BCI-10-05 Observation Tracker.

SECTION 9.2 – INTERNAL AUDIT

All activities and areas relevant to the IBMS are audited at least once per certification cycle, to ensure conformance with the identified obligations and verify effective implementation and maintenance of the Management System. Activities and areas relevant to product quality are audited at least once per year.

Audits are scheduled on the basis of the status and importance of the activity, and the area's relative impact upon the risk to the achievement of organizational obligations. Internal auditors are independent



of those having direct responsibility for the audited activity. Identified nonconforming conditions are brought to the attention of the responsible managers and corrective actions are implemented in response to audit findings.

Reference Documents: BCI-09-01 Management Review, BCI-09-02 Internal Audit, BCI-09-03 Lead Auditor Competencies, BCI-09-04 Internal Auditor Competencies, BCI-10-02 Corrective Actions, BCI-10-03 Preventive Actions, BCI-10-04 Nonconformity, BCI-10-05 Observation Tracker.

* **SECTION 9.3 – MANAGEMENT REVIEW**

ATI Top Management conducts reviews of the IBMS, at least annually, to ensure its continuing suitability, adequacy, effectiveness, *adequacy of resources to establish, implement maintain and achieve intended organizational objectives and continual improvement*, and alignment with the strategic direction of the organization.

Reference Documents: BCI-09-01 Management Review.

SECTION 10 – IMPROVEMENT

SECTION 10.1 – GENERAL

ATI identifies opportunities for improvement and implements the necessary actions to achieve those improvements which are critical to the effective implementation of the IBMS.

Reference Documents: BCI-08-15 Process Change Request System, BCI-08-15 Addendum 1 PCR Committee List, BCI-09-01 Management Review, BCI-09-02 Internal Audit, BCI-10-01 Continual Improvement, BCI-10-02 Corrective Actions, BCI-10-03 Preventive Actions, BCI-10-04 Nonconformity.

* **SECTION 10.2 – NONCONFORMITY AND CORRECTIVE ACTION**

Unintended outcomes, including those from adverse environmental impacts, safety and health incidents, *IBMS nonconformance* and nonconforming product, are identified, documented, and evaluated.

Causes of identified nonconformities are investigated and, where appropriate, corrective actions are implemented to ensure that nonconformities do not recur. Preventive actions are implemented to eliminate the causes of potential nonconformities. Corrective and preventive actions taken are recorded, and are followed up to ensure that they have been properly implemented and that they are effective.

Nonconforming product is segregated as appropriate to prevent unintended use or shipment. Repaired or reworked products are reinspected. *Appropriate actions are taken when product nonconformity is identified after delivery or when complaints are received from interested parties.*

Reference Documents: *BCI-08-25 Release Points*, BCI-08-28 Final Inspection, BCI-10-02 Corrective Actions, BCI-10-03 Preventive Actions, BCI-10-04 Nonconformity, BCI-10-05 Observation Tracker, BCI-10-07 Reporting of Defects and Noncompliance.

* **SECTION 10.3 – CONTINUAL IMPROVEMENT**

ATI Top Management deploys *a philosophy of participation in continual improvement activities throughout the entire organization. These activities ensure the continued suitability, adequacy, effectiveness of, and resources necessary for, enhancement of the IBMS.* The improvement effort is driven by the IBMS Policy and Objectives. Improvement opportunities are identified by analyzing performance data and information, *and through consultation with interested parties.* Improvement



projects are *also* defined and implemented through the system of corrective and preventive actions and management review actions.

Reference Documents: *BCI-06-02 Risks and Opportunities*, *BCI-07-01 Communication*, *BCI-07-06 Records*, *BCI-09-01 Management Review*, *BCI-10-01 Continual Improvement*, *BCI-10-02 Corrective Actions*, *BCI-10-03 Preventive Actions*, *BCI-10-04 Nonconformity*, *BCI-10-05 Observation Tracker*.



Revision History			
Revision	Date	Remarks	By
1	10/3/2017	<ul style="list-style-type: none"> Section 4.2: Added ATI Corporate. Figures 2 and 3: Revised per PAR 88-2017. Section 6.3: Added BCI-08-01 Addendum 2, BCI-08-02 Addendum 2, and BCI-08-03 Addendum 2. Section 7.1: Added references to BCI-04-01 and BCI-05-01 per PAR 28-2017. Section 7.5: Removed Templates from description of Level 4 documents. Section 8.1: Added BCI-08-01 Addendum 2, BCI-08-02 Addendum 2, and BCI-08-03 Addendum 2. Section 8.5: Added BCI-08-01 Addendum 2, BCI-08-02 Addendum 2, BCI-08-03 Addendum 2, and BCI-08-18 Addendum 2. Section 9.3: Revised to reflect wording in BCI-09-01. Section 10.2: Moved the third paragraph of 10.2 up from the incorrect location in 10.3. 	N. Mak C. Dorn
2	8/2/2019	<ul style="list-style-type: none"> Updated approvers per organizational change, hyperlinked Index to Sections. Section 1.1: Changes marked in italics. Revision based on maintenance and effectiveness review by IBMS Team. Section 1.2: Added Revision History to Index. Section 4.1: Updated to reflect Corporate Vision revision, acknowledge resources as an external factor, add Purpose Statement. Section 4.2: Added Shareholders. Section 4.3: Updated ATI Huntsville Operations to removed facility addresses that are no longer occupied by ATI. Figure 2: Updated figure in conjunction with BCI-04-02 publication. Figure 3: Updated figure in conjunction with BCI-04-02 publication. Section 5.1.1: Changes marked in italics. Revision based on maintenance and effectiveness review by IBMS Team. Section 5.1.2: Changes marked in italics. Revision based on maintenance and effectiveness review by IBMS Team. Section 5.2: Added reference BCI-05-02. Section 5.4 Changes marked in italics. Revision based on maintenance and effectiveness review by IBMS Team. Added reference BCI-05-03. Added BCI-08-04 Add 2 per PAR 116-2018. Section 6.1: Added reference BCI-08-10, BCI-08-19. 	B. Herb L. Metz IBMS Team



- Section 6.2: Changes marked in italics. Revision based on maintenance and effectiveness review by IBMS Team. Added reference BCI-08-10.
- Section 6.3: Changes marked in italics. Revision based on maintenance and effectiveness review by IBMS Team.
- Section 7.1: Changes marked in italics. Revision based on maintenance and effectiveness review by IBMS Team. Added reference BCI-08-10, BCI-08-19.
- Section 7.2: Changes marked in italics. Revision based on maintenance and effectiveness review by IBMS Team. Added reference BCI-08-10.
- Section 7.3: Changes marked in italics. Revision based on maintenance and effectiveness review by IBMS Team.
- Section 7.4: Changes marked in italics. Revision based on maintenance and effectiveness review by IBMS Team. Added reference BCI-05-02, BCI-10-01.
- Section 7.5: Changes marked in italics. Revision based on maintenance and effectiveness review by IBMS Team. Updated document types per revision to BCI-07-04. Deleted reference BCI-07-05 per PAR 116-2018.
- Section 8.1: Changes marked in italics. Revision based on maintenance and effectiveness review by IBMS Team. Added BCI-08-04 Add 2 per PAR 116-2018. Added reference BCI-08-37, BCI-08-37 Addendum 1, BCI-08-38, BCI-08-38 Addendum 1.
- Section 8.2: Changes marked in italics. Revision based on maintenance and effectiveness review by IBMS Team.
- Section 8.4: Added BCI-08-04 Add 2 per PAR 116-2018.
- Section 8.5: Added BCI-08-04 Add 2 per PAR 116-2018.
- Section 9.1: Changes marked in italics. Revision based on maintenance and effectiveness review by IBMS Team.
- Section 9.3: Changes marked in italics. Revision based on maintenance and effectiveness review by IBMS Team.
- Section 10.2: Changes marked in italics. Revision based on maintenance and effectiveness review by IBMS Team. Added reference BCI-08-25.
- Section 10.3: Changes marked in italics. Revision based on maintenance and effectiveness review by IBMS Team. Added reference BCI-06-02, BCI-07-06.