EPC TERMINOLOGY

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1.0 GENERAL

This guide lists the standard definitions of terms commonly to be used in Badger.

The correct use of terminology applies to all departments within Badger.

The terminology is based on/derived from industrial standards and codes.

The following institutional abbreviations are used in this section:

- API • American Petroleum Institute
- ANSI • American National Standards Institute
- ASME • American Society of Mechanical Engineers
- ASTM • American Society for Testing and Materials
- AWS • American Welding Society
- BS • British Standards
- IAEA • International Atomic Energy Agency
- ISO • International Organization for Standardization
- NS • Norsk Standard

Where a definition is an exact duplication of the definition contained in the standard or code, a parenthetical reference to the code or standard is appended to the definition.

Where a definition is an equivalent in concept to the definition contained in the standard or code, but is not an exact duplication of the wording, the parenthetical reference includes an asterisk (*).

The order of precedence used in selecting the definitions contained herein was as follows:

ISO 8402/6215
ANSI-N45.2
ASME
BS-4778

2.0 ATTACHMENTS

1. Terminology. (26 sheets)

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Acceptable Quality Level (AQL)
- The AQL is the maximum percent defective (or the maximum number of defects per hundred units) that, for purposes of sampling inspection, can be considered satisfactory as a process average (ASQC std A2-1971 or ANSI std Z1.6-1971).

Acceptance
- An act of acknowledging that an activity or item has been reviewed per established requirements without noting any non-approved nonconformances. Acceptance does not imply assumption of responsibilities, endorsing or adding positive authorization.

Acceptance Criteria
- A limit is placed on the variation permitted in the characteristics of an item expressed in definitive engineering terms such as dimensional tolerances, chemical composition limits, density and size of defect, temperature ranges, time limits, operating parameters and other similar characteristics.

Accuracy
(distinguished from: **Precision**)
- The degree of conformity of a measured or calculated value to some recognized standard or specified value. This concept involves the systematic error of an operation, which is seldom negligible (ASTM-E380).

Adverse Condition
- A condition not conforming to procedures, codes, standards and/or other documents applicable for a project.

Alloy
- Any material whose P number is three or higher as defined in ASME, Section IX.

Alloy Verification
- Verification of the presence (qualitative) and if required quantities of specified elements in alloy materials or consumables used in construction of an item using an accepted analyzing method.

Approval
- Statement that the product, document or service is in accordance with specified requirements.

Approved Vendor List
- A procurement document prepared by Procurement Department, reviewed by Engineering and approved by the Project Manager. This list is the sole basis on which bids are invited.

As-Built Data
- Documented data that describes the condition actually achieved in a product (ANSI N45.2).

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Audit

- A documented activity performed in accordance with written procedures or check lists to verify, by examination and evaluation of objective evidence, that applicable elements of the quality assurance program have been developed, documented, and effectively implemented in accordance with specified requirements. An audit does not include surveillance or inspection for the purpose of process control or product acceptance (ISO 6215, BS 5882 and ANSI N45.2*) .
  ***Note**:*
  The examination and evaluation can cover quality in general, product quality, process quality, as well as quality assurance system itself.

Auditee

- The individual, organization or part of an organization being audited.

Auditor

- An auditor is any individual who performs any portion of an audit (including lead auditors), who is qualified to perform the audit, who is not necessarily a member of the QA Department (such as technical specialists, and others such as management representatives and auditors in training) and who shall not be directly responsible for the activities being audited.

Audit Team

- One or more auditors, including a Lead Auditor, who are authorized to perform an audit (IAEA-50-SG-QA10).

Authority

- Any recognized body that has legal jurisdiction over the design, fabrication, inspection, installation or operation of a facility. The legal jurisdiction may result from either governmental acts or control requirements.

Authorized

- Vested by a person or agency having the power or right to take a decision with said power or right on behalf of Governments, insurance companies with reference to written, legally accepted documents (such as codes, specifications etc.) or whose opinion is accepted or is recognized to be expert on this subject.

Authorized Inspection

- Inspection by an authorized inspector to confirm compliance with a legal code.

Authorized Inspection Agency

- An agency authorized to provide inspection services that confirm compliance with a code. The requirements for this inspection is part of the code as well as the requirements for authorizing the agency.

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Authorized Inspector

- An inspector authorized to confirm compliance with a legal code. The authorized inspector must be employed by an authorized inspection agency and qualified as required by the legal code.

Calibration

- The comparison of two measuring tools or instruments, of which one is a standard with known accuracy and traceable to a higher national or international standard, in order to discover, record and eliminate possible inaccuracy of the measuring tools or instruments which are compared with the standard (NS 5801).

Calibration Certificate

- A document that verifies the accuracy of the instrument or equipment used in testing in accordance with a known standard.

Certificate of Compliance

- A written statement, signed by a qualified party, attesting that the items or services are in accordance with specified requirements and accompanied by additional information to substantiate the statement (ANSI N45.2).

Certificate of Conformance

- A written statement, signed by a qualified party, certifying that items or services comply with specific requirements (ANSI N45.2).

Certification

- A written attestation that the applicable specified requirements were met, stating the means of verification (e.g. review, inspection, test, witness), which is signed or stamped and dated by the certifying party. Certifications must identify the purchase order and item(s) covered.

Certified
(e.g. for purchase or for construction)

- The status of a document for which qualified engineers formally attest by signature, that the document fulfills the requirements needed for detailed design, purchase or construction.

Certified Mill Test Report (CMTR)

- A document generated by a vendor specifying the requirements as noted in the Purchase Order documentation or codes and it shall include chemical analysis or mechanical, electrical or dimensional properties. CMTR's are not acceptable unless conveying the results of testing by an approved independent testing authority. (See also: **Verified Certified Mill Test Report**).

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Certified Test Report

- A written and signed document, approved by a qualified party, that contains sufficient data and information to verify the actual properties of items and the actual results of all required tests (ANSI N45.2).

Characteristic

- A characteristic is an inherent and measurable property of an item. Such a property may be electrical, mechanical, thermal, hydraulic, electromagnetic, or nuclear and can be expressed as a value for stated or recognized conditions. A characteristic may also be a set of related values of a property, usually shown in graphical form.

Check

- Verification of conformance to a specified requirement by review or inspection. The checks' intensity, varying from complete to random sampling, depends on the specified requirements. These requirements will be specified in advance.

Checking (Design)

- Is the detailed technical examination of a document to make certain that it is accurate and to ensure that all the technical design inputs, design bases and other design criteria have been correctly incorporated (IAEA-50-SG-QA6).

Chemical Analysis (CA)

- A product, check or verification analysis of the semi-finished or finished product, usually for the purpose of determining conformance to the specification requirements (ASTM-A751).

Client

- The organization to which the engineering organization has contracted its services to engineer (design and analyze) designated items or systems contract services may also include procurement and construction of the designated items or systems

Code

- A standard which is recommended or imposed by a regulatory body (ISO 6215, BS 5882).
  ***Note**:*
  This definition includes "rules" and regulations".

Commissioning

- The initial testing and start-up process by which a plant is put into operation (ISO 6215*, BS 5882).

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Competent Person

- A competent person is one who would be recognized as competent by those normally engaged in or responsible for similar activities. If the task is one usually entrusted to persons holding qualifications bestowed by, or recognized by, a professional body, he is expected to possess such qualifications, and where experience is normally required in addition to qualifications, he is expected to have had such experience. Similar principles are applicable where the individual can be expected to be skilled in a particular trade or other activity.

Conformity
(see also: **Nonconformance**)

- The fulfillment of a specified requirement by a quality characteristic of an item or service, the assessment of which does not depend essentially on the passage of time (BS 4778).

Construction Phase

- A period which commences with receipt of items at the construction site and ends when the components and systems are ready for turnover to operations personnel (ANSI N45.2).

Contract

- A document which governs the relationship between client and contractor. Within Badger the following types of contracts are used:

  - Cost Plus Open Ended
  - Cost Plus Not to Exceed
  - Cost Plus Guaranteed Maximum
  - Cost Plus Fixed Fee
  - Cost Plus Incentive Fee
  - Firm Fixed Price
  - Fixed Price with Reimbursable Expenses
  - Time and Materials
  - Time and Materials Open Ended

Contract Documents

- All documents incorporated in the contract or subcontract package and/or referred to therein, which forms the whole of the contract or subcontract between Badger and its Contractor.

Contractor

- Any organization or individual under contract supplying items or services to the client. It may include the terms Supplier, Subcontractor, Fabricator and subtier levels of these where appropriate (ANSI N45.2).

Corrective Action

- Those planned actions taken to ensure that conditions adverse to the achievement of quality requirements are identified and corrected, such as item and equipment malfunctions, deficiencies, deviations, and nonconformances. For significant conditions adverse to quality requirements, the

	program shall provide that the cause of such conditions be determined and corrective actions taken to prevent repetition (ISO 6215).
Cost Plus Open Ended (CPOE)	• Cost-plus-open-ended contracts provide for payment of allowable costs plus negotiated burden rates on labour and/or costs, without any funding limitation on expenditures.
Cost Plus Not to Exceed (CPNTE)	• Cost-plus-not-to-exceed contracts provide for payment of allowable costs plus negotiated burden rates on labour and/or costs, subject to a limitation on the cumulative expenditures. Contractually, the company is not obliged to incur costs and the customer is not obligated to reimburse the company beyond the estimated funding limit.
Cost Plus Guaranteed Maximum (CPGM)	• Cost Plus Guaranteed Maximum price contracts provide for payment of allowable costs plus negotiated burden rates on labour and/or costs up to a ceiling price. The Guaranteed Maximum price differs from a not-to-exceed contract in that completion of the contract is required regardless of cost. Sharing agreements may or may not be part of the contract.
Cost Plus Fixed Fee (CPFF)	• Cost-plus-fixed-fee contracts provide for payment of allowable costs plus negotiated burden rates on labour plus a negotiated lump sum fee.
Cost Plus Incentive Fee (CPIF)	• Cost-plus-incentive-fee contracts provide for payment of allowable costs plus negotiated burden rates on labour and/or costs plus incentive fee amount based upon specific evaluation criteria.
Critical Defect	• Defect that judgement and experience indicate is likely to result in hazardous or unsafe conditions for individuals using, maintaining or depending upon the product; or an defect that judgement and experience indicate is likely to prevent performance of the essential functions of a major end item, such as a ship, aircraft, computer, medical equipment or telecommunications satellite (NS 5800, ISO 2859).
Decommissioning	• The permanent retirement from service of a plant and the work which follows in bringing it to a definitive condition (BS 5882*).

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Defect	• The non-fulfillment of intended usage requirements (ISO 8402).
Defective Material	• A material or component which has one or more characteristics that do not comply with specified requirements (ANSI N45.2). ***Note**:* "*Defective Material*" *to be read preferably as* "*Nonconforming Material*".
Design	• The technical and management processes which lead to and include the issuance of design documents such as drawings, specifications and other documents defining technical requirements of structures, systems and equipment.
Design Analyses	• All process which use design inputs and which result in the generation of information necessary for preparation of design output documents such as drawings, specifications and procedures. Design analyses include calculations (IAEA-50-SG-QA6).
Design Book	• Provides the design basis of a plant or unit without mechanical details but inclusive of operating aspects.
Design Changes	• Any revision or alteration of the technical requirements defined in, approved and issued, design documents.
Design Criteria	• The basic data contained in the design documents to which an item shall be de-signed. These data can be requirements of the Client, Badger, authorities, vendors, etc.
Design Documents	• Drawings, specifications, data sheets, calculations, records, reports, codes, standards and other documents that will be used in design and/or procurement, manufacture, fabrication, erection/installation, testing, and examination.
Design Input	• Those criteria, bases or other design requirements upon which the detailed final design is based.
Design Interface	• The boundary between the design related responsibilities and activities of one organization, group, or individual and another organization, group or individual. It includes both the external design interface which is the boundary between different organizations, and the internal design interface, which is the boundary between design units of the same organization, (IAEA-50-SG-QA6).

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Design Output

- Documents such as drawings, specifications and other documents defining technical requirements of materials, parts, components, equipment, structures and systems.

Design Review

- A formal, documented, comprehensive and systematic examination of a design to evaluate the design requirements and the capability of the design to meet these requirements and to identify problems and propose solutions (ISO 8402).

Design Specification

- A document provided by the Client or Badger, detailing requirements as to the intended operating conditions in such detail as to constitute an adequate basis for selecting materials and designing, fabricating and inspecting the product(s) as required to comply with the applicable Code requirements.

Design Verification

- The process of checking, confirming or substantiating the design to provide assurance that specified requirements have been met. Acceptable methods include design reviews, alternate calculations and testing.

Destructive Testing

- Verification of material or component properties by a test which destroys the test piece. Common destructive tests are tensile testing, impact testing, bend testing, compression testing, and proof testing.

Deviation

- A nonconformance or departure of a characteristic from specified requirements (ANSI N45.2).

Deviation Permit

- See: **Production Permit**.

Discrepancy

- Any condition that does not conform to specified requirements including procedural, material, documentation, and construction requirements.
  ***Note**:*
  A discrepancy is a difference, an inconsistency (Concise Oxford).

Disposition

- An action to determine how a departure from specified requirements is to be handled or settled (IAEA-50-SG-QA1).

Document

- A drawing, specification, sketch, procedure, item list, or report form containing pertinent data or information.

Documentation

- Any recorded or pictorial information describing, defining, specifying, reporting or certifying activities, requirements,

procedures or results (ISO 6215, BS 5882 and ANSI N45.2*).

Drawings (Design)

- Plans which show a design complete with sizes, sections, and relative location of all items but generally not showing details of joints and attachments.

Drawings (Shop)

- Shop drawings give complete information necessary for fabrication of the item including details of joints and attachments.

Endurance (Life test)

- A test in which an item is subjected to specified stress(es) over a specified long period of time or large number of operations, or both, in order to determine its durability.

Engineering Contractor

- Any organization or individual under contract supply engineering services to the client.

Engineering Documents

- Engineering documents are all engineering drawings and specifications which reflect Code or Users Design Specification requirements such as Material-, Welding-, NDE Specification, etc.

Engineering Flow Diagram (EFD)

- This document shows all equipment connecting piping, utility piping, complete with control loops and all other instrumentation, all valves and safety measures. It is the main tool for the project engineer to convey information to the piping design office and control systems engineering group to the piping design office and control systems engineering group for the detailed piping and control systems design.

Erection Contractor

- Any organization or individual under contract, supplying services for installation of items on the site to the client.

Equipment Dossier

- Describes the equipment used in a plant or unit without consideration of its position or function in the plant.

Examination

- An element of inspection consisting of investigation of materials, components, supplies, or services to determine conformance to those specified requirements which can be determined by such investigation. Examination is usually non-destructive and includes simple physical manipulation, gauging, and measurements (ANSI N45.2).

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External Audit
- An audit of those portions of an organizations quality assurance program which are performed by another organization (IAEA 50-SG-QA10).

Failure
- The occurrence of a defective item while the item is under test or in service.

Final Documentation
- All documents required to confirm final condition of an item and includes as-built-data, test reports, and certifications.

Final Inspection
- The final inspection carried out by the contractor to verify that all specified inspection has been carried out and that the delivery satisfies all the specified requirements, including requirements as to documentation (NS 5801).

Finding
- Survey originated objective evidence that a control feature of the approved quality program was not implemented with an acceptable level of reliability (API-Q1).

Firm Fixed Price (FFP)
- A firm-fixed-price contract provides for a price that is not subject to any adjustment on the basis of the contractor's cost experience in performing the contract. This contract type places full responsibility upon the contractor for all costs and resulting profit or loss.

Fixed Price with Reimbursable Expenses (FPw/RE)
- A firm fixed price contract which additionally reimburses the contractor for non-labour costs (i.e., travel and repro).

Grade
- An indicator of category or rank related to features or characteristics that cover different sets of needs for products or services intended for the same functional use (ISO 8402).

Guidelines
- Particular provisions which are considered good practice but which are not mandatory. The term "should" denotes a guideline; the term "shall" denotes a mandatory requirement (ANSI N45.2*).

Hold Point
- Mandatory point in the manufacturing sequence of which the client's quality control organization shall be notified and work shall not proceed until required inspections and tests have been witnessed or waived in writing.

Inquiry
- A procurement document prepared by the Procurement Department which is sent to vendors shown on the Approved Vendors List requesting a proposal for the item of service described in the Material Requisition.

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Inspection

- Activities such as measuring, examining, testing, gauging one or more characteristics of a product or service and comparing these with specified requirements to determine conformity (ISO 8402).

Inspection Check List

- An itemized instruction document that defines and prescribes the manner and sequence of performing manufacturing or construction site surveillance.

Inspection Point

- Any point during manufacture and installation which comprises inspection activities as stated in the routing plan of quality control program.

Inspector

- A qualified inspector employed by the owner, or installer whose duties include the verification of quality related activities or installations or both (ANSI N45.2 *).

Interconnecting Flow Diagram (IFD)

- This document shows the interconnecting lines between various plant units, e.g. tank farms, etc.

Interface

- Organizational Interface - A written description of the organizational relationship between the design groups of various project contractors, sub contractors and consultants.
  Physical Interface - The physical location identified by coordinates and elevation where divisions in engineering responsibility exists.

Internal Audit

- An audit of those portions of an organization's quality assurance program which are performed within its organizational structure (IAEA-50-SG-QA10).

Item

- a. A part, equipment, sub-system or system that can be individually considered and separately examined or tested;
  b. An actual or conventional object on which a set of observations may be made;
  c. Defined quantity of material on which a set of observations may be made;
  d. An observed value, either qualitative (attributes), or quantitative (measured) (BS 4778).

Job Instruction

- Description of a certain work procedure and determined pattern of action in given situations (NS 5801).

Lead Auditor

- An individual qualified to organize and direct an audit, report audit findings, and evaluate corrective action (ANSI N 45.2).

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Line Designation Table

- Listing of engineering flow diagram pipelines. It contains additional information including maximum temperature for thermal stress calculations, operating pressure and temperature, design pressure and temperature, testing pressure and medium, insulation code and thickness, paint code and type of heat-tracing.

Maintenance

- The combinations of all technical and corresponding administrative actions intended to retain an item in, or restore it to, a state in which it can perform its required function.
  ***Note**:*
  The required function may be defined as a stated condition (BS 4778).

Major Defect

- A major defect is one which reduces the usability of an item for its intended purpose.

Manufacturer

- One who constructs any class of components, part, or appurtenance to meet prescribed design requirements (ANSI N45.2).

Manufacturing

- Collective term for purchasing, production, inspection and storing.

Material

- A substance or combination of substances forming components, parts, pieces, and equipment items (Intended to include such as machinery, castings, liquids, formed steel shapes, aggregates, and cement.) (ANSI N45.2).

Material Requisition

- A procurement document prepared by engineering personnel which defines by specification, referenced codes and standards and specific quality requirements, that which is to be purchased.

Material Test Report

- A document provided by the Material manufacturer giving the results of tests required by the basic material specification.

Material

- Equipment, stores, supplies and spares that form the subject of a contract.
  ***Note**:*
  This generic term is often used for large scale procurement purposes and avoids the necessity of repeating items covered in this definition (See: BS 5750).

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Mechanical Catalogue

- Provides full mechanical details of a plant or unit such as full sets of specifications and requisitions, design drawings and all major vendor prints. Operating aspects are not covered.

Minor Defect

- A minor defect is one that does not materially reduce the usability of an item for its intended purpose, or is a departure from established standards having no significant bearing on the effective use or operation of the item.

Modification

- A planned change in plant design or operation and accomplished in accordance with the requirements and limitations of applicable codes, standards, specifications, licenses, and predetermined safety restrictions (ANSI N45.2).

Monitor

- To watch over, observe, or examine a work operation. Results of the observations and examination may be recorded.

Non-Acceptance

- A deficiency in characteristics, documentation or process implementation which renders the quality of an item indeterminate or outside that required by the specification. Examples of nonconformance include: physical defects, test failures, incorrect or inadequate documentation, or deviation from prescribed processing, inspection, or test procedures (ISO 6215 & ANSI N45.2).

Nonconformance

- A deficiency in characteristics, documentation or process implementation which renders the quality of an item indeterminate or outside that required by the specification. Examples of nonconformance include: physical defects, test failures, incorrect or inadequate documentation, or deviation from prescribed processing, inspection, or test procedures (ISO 6215 & ANSI N45.2*).

Non-compliance

- An observed (structural) deficiency in the Quality System, which must be solved by:
  - Taking adequate corrective action(s).
  - Taking measures to prevent re-occurrence.

Non-conformity

- The non-fulfillment of specified requirements (ISO 8402).

Non-Destructive Examination (NDE)

- Any examination process that determines the quality of a specimen without destroying it, permitting examination of all articles and materials that are to be used. NDE includes non-destructive testing.

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Non-Destructive Examination Audit

- An audit of the results of NDE's and personnel certifications, the verifications of the accuracy of NDE equipment and determination of the adequacy of interpretation of NDE results.

Non-Destructive Testing (NDT)

- Specific non-destructive examination methods used to detect material discontinuities. Five methods of NDT are currently in common use: magnetic particle, liquid penetrant, eddy current, ultrasonic and radiographic.

Objective Evidence

- Any fact or documentation containing objective information, either quantitative or qualitative, pertaining to the quality of an item or service which can be obtained by observation, visual inspection, testing, measuring of a feature or quality against applicable specifications, written limits of acceptability etc. (BS 5882*).

Observation

- An observed single deficiency in the Quality System, which must be resolved by taking adequate corrective action(s).

Observe Point (or: Warning Point)

- An operation, test, or examination for which the purchaser's inspector must be notified in advance and for which he has the right to observe, but without requiring the supplier to alter their production schedule to accommodate the inspector's schedule.

Occupational Safety & Health Act

- Law 91-596 dated 29/12/70: "A very powerful 'People Oriented Law' which covers each and every company in the United States; requires companies to do whatever they do, wherever they do it, in a Safe and Healthful manner".

Ongoing Improvements

- An observed grouping of similar deficiencies in the Quality System to be resolved by improving adherence to requirements.

Operating Manual

- Describes the operating aspects of a plant or unit without giving mechanical details.

Owner

- The person, group, company, or corporation who will have or has title to the facility or installation under construction (ANSI N45.2).

Packaged Unit

- An assembly of items and parts which can be disassembled without destroying the integrity of the individual parts (ANSI N45.2).

Part

- An item which has work performed on it and which is attached to and becomes part of a component before completion of the component (ANSI N45.2).

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Plan	• A document describing or identifying specific practices and procedures relevant to particular items, processes or services (ISO 6215, BS 5882).
Plant	• The equipment, piping, structures, buildings and property that comprise an installation or facility (ANSI N45.2).
Positive Material Identification (PMI)	• **See: Alloy Verification**.
Pre-Award Meeting	• A meeting between purchaser and supplier before the award of a purchase order bringing in line the purchaser's technical, inspection and commercial requirements with the capabilities of the supplier. The meeting is guided by a checklist and is confirmed in Minutes of Meeting.
Pre-Fabrication Meeting	• A meeting with a supplier after vendor print review and prior to the start of fabrication to assure mutual understanding and agreement on technical, fabrication and coordination details and review of vendor's inspection plan incl. indication of Badger's hold points.
Pre-Inspection Meeting	• A meeting between inspection group and supplier defining document availability, code requirements, fabrication and inspection responsibilities. The meeting is guided by a check list and is confirmed in Minutes of Meeting.
Precision (as distinguished from: **Accuracy**)	• The degree of mutual agreement between individual measurements, namely repeatability and reproducibility (ASTM-E380).
Pressure Temperature Profile Diagram (PTP)	• This document is prepared by the Process Engineering Department with the purpose of providing project, control systems and piping engineers with the correct pressure and temperature correlations between the various piping systems, vessels, exchangers, etc. The document ensures that proper values are being used for preparation of data sheets, line tables and other documents, e.g. painting systems, insulation, etc.
Procedure	• A document that specifies or describes how an activity is to be performed. It may include methods to be employed, equipment or materials to be used and sequence of operations (ANSI N45.2).

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Procedure Qualification Record (PQR)	• The recording on a form of the specific facts involved in the qualifying of a WPS by the demonstration that welds made by that specific procedure can meet prescribed standards.
Process Flow Diagram (PFD)	• This document shows the main process equipment, fluid flows, main control loops and critical valves. It is a tool for the process engineer(s) to convey information to project and specialist engineers to design the installation in detail. The PFD is developed by the Process Engineering Department.
Process Safeguarding Flow Diagram (PSFD)	• This document shows the correlation of safety devices installed but indicated on separate EFD's. It highlights the final level of protection provided by the safety systems installed.
Procurement	• The activities performed by a purchaser or his designated representative for obtaining an item or service, beginning with the preparation of specified requirements, and concluding with the purchaser's acceptance of such items or service (IAEA-50-SG-QA3).
Procurement Documents	• Contractually binding documents that identify and define the requirements which items or services must meet in order to be considered acceptable by the purchaser (ANSI N45.2).
Product Audit	• A review of a sample of documents to give the Auditor sufficient insight in the quality of documents produced.
Product Liability	• A generic term used to describe the onus on a producer or others to make restitution for loss related to personal injury, property damage or other harm caused by a product or service (ISO 8402).
Production	• Collective term for that part of manufac-turing which concerns forming and machining of materials and mounting of components.
Production Permit	• Written authorization, prior to production or before provision of a service, to depart from specified requirements for a specified quantity or for a specified time (ISO 8402). Examples of production operations are turning, milling, casting, welding, surface treatment etc. (NS 5801).
Project	•

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Receiving	• Taking delivery of an item at a designated location (ANSI N45.2).
Recommendation	• An advice for a possible improvement/corrective action/further investigation.
Regulation	• A legal or authority requirement.
Reject	• A nonconformance disposition that states that an item is unsuitable for its intended purpose and cannot be made suitable in a feasible and economical manner.

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	nized body which results from the process of formulating and applying rules for an orderly approach to a specific activity or a physical specimen giving examples of professional performance of work. ***Note**:* *This definition includes Badger's and/or Client's standards.*
Storage	• The act of holding items at the construction site or in an area other than its permanent location in the plant (ANSI 45.2).
Subcontractor	• Any organization or individual under contract supplying items or services to the contractor.
Supplier	• See: **Contractor**.
Supplier Evaluation	• An appraisal to determine whether or not a supplier is capable of producing a component, product or service in accordance with a specified requirement, and providing objective evidence thereof (ISO 6215, BS 5882). ***Note**:* *Supplier's QA/QC system to be evaluated as well.*
Supplier Performance Evaluation	• Assessment of a supplier's control of quality carried out during and after completion of manufacture.
Surveillance (Quality)	• The continuing monitoring and verification of the status of procedures, methods, conditions, processes, products and services, and analysis of records in relation to stated references to ensure that specified requirements for quality are being met (ISO 8402).
Surveillance Check Plan	• An instruction document that defines and prescribes the manner and sequence of performing manufacturing or construction site surveillance.
Technical Documentation	• Drawings, specifications, calculations and other technical data, possibly patterns (NS 5801).

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Typical

- When associated with a dimension, means that the dimension applies to all features that appear to be identical in size and configuration. The tolerance stated for a dimension labelled typical also applies to each identical feature.

Use-as-is

- A disposition which may be imposed for a nonconformance when it can be established that the discrepancy will result in no adverse conditions and that the item under consideration will continue to meet all engineering functional requirements, including performance, maintainability, fit, and safety (ANSI N45.2).

Utilities Flow Diagram (UFD)

- This document shows how utilities are generated and distributed from the source or supply point to the various parts of an installation. The diagram shows common control loops, additional equipment that is deemed necessary to supply the utility as required and the safety measures necessary. The diagrams shall be drawn in accordance with the geographical layout of the plant.

Vendor

- Any organization or individual which offers items or services to a potential client.

Vendor Prints

- All of the documents submitted by a vendor to purchaser for either review, approval or record purposes.

Verification

- The act of reviewing, inspecting, testing, checking, auditing, or otherwise verifying and documenting whether items, processes, services, or documents conform to specified requirements (ISO 6215, BS 5882 and ANSI N45.2*).

Verified Certified Mill Test Report

- A CMTR whose authenticity is confirmed by positive proof. Photocopies of CMTR's are not generally acceptable without further laboratory check testing (to the require-ments of the appropriate product specifica-tion) unless the vendor or supplier verifies the photocopy by company stamping and signing in ink on the photocopy that the copy is either an original or stating the actual location where the original is held.

Waiver

- Written authorization to use or release a quantity of material, components or stores already produced but which do not conform to the specified requirements (ISO 8402).

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Welding Procedure Specification (WPS)	• The Welding Procedure Specification (WPS) shall list in detail the various base metal P Numbers to be joined by welding, the filler materials to be used, the range of preheat and post-weld treatment, thickness, and other variables described for each welding process as either essential or non-essential (ASME Section IX).
Witness (verb)	• The operation, test, or examination in which the purchaser's inspector must be present during the specified activity.
Witness Point	• Point of which the QA department shall be notified and work shall not proceed until required inspections and tests have been witnessed.
Work Standard	• Document or physical specimen giving example of professional performance of work.