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E013.34E

Instruction for Vendor Documentation and Final Vendor Documentation Handover

M&G RESINS USA, LLC JUMBO PROJECT

CORPUS CHRISTI, TX, USA

REFERENCE SPEC. NO. -					
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1 GENERAL

This procedure covers the general requirements for documentation (including the final) provided by Vendors of equipment and materials (hereinafter collectively referred as "Equipment") to the Companies responsible to issue Purchase Orders and Contracts (hereinafter referred as "Purchaser") for the "JUMBO" project (Integrated grass root PTA/ PET plant to be realized for M&G Resins USA, LLC in Corpus Christi, TX, USA).

Vendor shall submit all the documents required in the applicable requisition, but not limited to, for the Purchaser's approval and/or for other purposes as scheduled.

Immediately after receiving a Purchase order or a letter of intent, Vendor shall notify the Purchaser:

- contacts of reference person responsible for the Supply (inclusive of telephone number, fax number)
- Company address

Should Vendor wishes to use different commercial and technical reference persons responsible for the Supply, Vendor shall make sure to provide Purchaser the relevant contacts.

All Vendor's documents to be submitted to the Purchaser shall be written in the English language unless otherwise indicated by the Purchaser.

2 FUNCTIONS AND ADDRESS OF PURCHASER'S PARTIES

2.1 PURCHASER M&G FINANZIARIA S.R.L. – TORTONA OPERATION CENTER (MGF)

For Correspondence, Minutes of Meeting and Vendor Documentation

Functions: Purchaser's project office for JUMBO project, Corpus Christi integrated PTA/PET Plant Purchasing Activities

Address: M&G Finanziaria s.r.l.
Att. "JUMBO" Project Team
Strada Ribrocca 11 - 15057 - (AL) Tortona – Italy

2.2 PURCHASER SINOPEC ENGINEERING CO., LTD. – BEIJING OPERATION CENTER (SEG)

For Correspondence, Minutes of Meeting and Vendor's Documentation

Functions: Purchaser's project office for JUMBO project, Corpus Christi integrated PTA/PET Plant Purchasing Activities.

Address: Sinopec Engineering Co., LTD
Att. "JUMBO" Project Team
Lanhua Guoji B,19 Anyuan, Anhuibeli Chaoyang District, Beijing, 100101
– People's Republic of China

2.3 PURCHASER CHEMTEX INTERNATIONAL INC. – WILMINGTON OPERATION CENTER (CII)

For Correspondence, Minutes of Meeting and Vendor's Documentation

Functions: Purchaser's project office for JUMBO project, Corpus Christi integrated PTA/PET Plant Purchasing Activities

Address: Chemtex International Inc.
 Att. "JUMBO" Project Team
 1979 Eastwood Road, Wilmington, NC 28403 – U.S.A.

3 CORRESPONDENCE, TRANSMITTALS AND MINUTES OF MEETING

All correspondence, transmittals and minutes of meeting shall be prepared in the following manner.

3.1 NUMBERING

A serial number shall be given to all correspondence, minutes of meeting, etc. including transmittals, with respect to each type document and each Vendor according to the what below indicated.

Vendor shall always check if there are any missing numbers in the series of documents including receipt of transmittals and inform Purchaser of such fact for rectification.

3.2 HEADING OF CORRESPONDENCE

All correspondence shall be prepared with a heading consisting with the following format:

[Purchaser's P.O. number]-E013.34Y-[Vendor's Name]-C-XXXX: [Subject]

Where,

- [P.O. number]: Purchaser's P.O. number
- E013.34Y Project Area Code, where "Y" shall be changed into:
 - A: PTA
 - B: PET
 - C: BOP
 - D: R/C/D (Rail/ Cogeneration/ Dock)
 - E: General/ Multi Area
- [Vendor's Name]: Name of supplier
- C: Type of correspondence (F: Fax, H: Hard Copy, E: e-mail, L: Letter, T: Transmittal)
- XXXX Message number given in sequence from 0001 to 9999
- [Subject] Subject of the message

Each communication shall have a new serial number.

In case the communication finds reference into a previous, it has to be recalled before anything else in the message.

Reference such as Equipment name, Equipment item No., former (9) correspondence No., etc.

3.3 VALIDITY OF CORRESPONDENCE

E-mails, **only duly numbered according to the above criterion**, shall be deemed as formal correspondence.

Vendor must confirm verbal communications in writing within three (3) days.

3.4 MINUTES OF MEETING

During any meeting between Vendor and Purchaser, Purchaser shall prepare the relevant Minutes of Meeting (MOM).

The MOM shall be signed by Purchaser and Vendor's representative attending the meeting and, subsequently, recorded and distributed via M&G's DMS.

In case, for any reason, the MOM is prepared by Vendor, the Purchaser will review the and return them to Vendor with approval or comments within three (3) working days.

The document shall be numbered as follows:

E013.34Y-MOM-CPC-XXX

Where,

- E013.34Y Project Area Code, where:
 - A: PTA
 - B: PET
 - C: BOP
 - D: R/C/D (Rail/ Cogeneration/ Dock)
 - E: General/ Multi Area
- MOM: Acronym for Minutes of Meeting
- CPC: Coordinating Party Code (see below table) or type of meeting, as, for example:
 - HZP: HazOp Analysis
 - KOM: Kick-off Meeting
 - HZD: HazId Analysis
 - SIL: SIL Analysis
 - 3MR: 3D Model Review

Shall the meeting being relevant to a single discipline, the CPC will correspond to the discipline code, as, for example:

- PRS: Process
- MEC: Mechanical (Static Equipment)
- ROT: Mechanical Rotating Equipment
- PAC: Packages
- PIP: Piping
- CIV: Civil
- ELE: Electrical
- I&C: Instrumentation
- PRC: Procurement
- CON: Construction
- INS: Inspection
- EXP: Expediting
- LOG: Logistics
- PJC: Project Control

- XXX: Sequential number (starting from 001, for each coordinating party/ type of meeting – by Project Area)

For abbreviation of parties involved, refer to the following table:

OWN	Owner - M&G Resins USA LLC
PMT	Project Management Team
JDEC	Jing Ding Engineering and Construction
SEG	Sinopec Engineering Group/ America
MGF	M&G Finanziaria s.r.l.
CII	Chemtex International Inc.
CTXI	Biochemtex S.p.A.
CCIL	Chemtex Consulting of India (P) Ltd.
BMI	Burns & McDonnell Engineering India Ltd.
POCCA	Port of Corpus Christi Authority
GVD	Govind
AMB	Ambitech
EME	Emerson
...	Third Parties (TBD)

4 **DOCUMENTATION**

Vendor shall prepare and submit all documentation relevant to a specific Item of the applicable Purchase Order (e.g.: drawings, specifications, calculations, procedures, lists, etc.) according to the methodology here below described.

Particular attention shall be paid to produce clear and legible copies to allow the reader to read legibly, reproduce clear copies.

4.1 **NUMBERING OF VENDOR DOCUMENT**

Vendor documents can bear the vendor own document numbering.

4.1.1 PURCHASER DOCUMENT NUMBER

Notwithstanding the aforementioned rules for correspondence, Purchaser does not have in place any own document numbering for Vendor Documentation.

Accordingly, Vendor is free to adopt his preferred numbering.

4.1.2 NUMBERING OF DOCUMENTS IN SIZE ISO A2 (OR SIMILAR) AND LARGER

In case of documents size A2 and larger, one drawing number shall be assigned to one drawing sheet only.

4.1.3 NUMBERING OF DOCUMENTS IN SIZE ISO A4/ A3 (OR SIMILAR)

In case of documents sized A4 and A3 such as data sheets, specifications, manuals, reports, calculations, chart, etc., one number shall be assigned to one group of documents, irrespective of the plural number of pages or sheets.

In this case, the document number and page number shall be indicated on each sheet.

4.1.4 CANCELLED DOCUMENT NUMBER

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Purchaser's document number shall not be re-used if the document is canceled after its issuance.
A new and unique document number shall be allocated to any additional document.

4.2 REVISION NUMBER

If document is re-submitted for revision of contents, the revision number must be increased by one. Therefore, revision numbers must be in sequence starting from 01 and must not skip regardless of Vendor's own revision numbers.

4.2.1 INDICATION OF REVISION

Any revision made taken on a previously issued document shall be encircled by "Cloud Marking", with the indication of the revision number.

Upon release of a new revision, the old cloud marking and associated old revision numbers shall be deleted.

Revised documents without appropriate indication of revision will not be considered by the Purchaser.

4.2.2 ISSUE REASON

The date, description and the revision shall be written in the relevant space in the title block.

The following terms shall **not** be used as issue reason:

- General Revision
- Revised per Customers (Contractor's) Comments
- Any other general terms

All Vendor documents shall be submitted to Purchaser with the following issue purpose according to the stipulation of Requisition.
The submission purpose shall be clearly indicated on the original paper of the documents and transmittal.

- C: For review/ comments/ Acceptance
- I: For information
- S: For construction (Released for construction, fabrication, sub-ordering, for further engineering)
- F: Final (alias As-Manufactured)

4.2.2.1 (Deleted)

4.2.2.2 For Review/ Comments/ Technical Acceptance

In line with M&G Document Control Procedure, all the Documents prepared by Vendor shall be submitted to Purchaser "For Review/ Comments".

All the documentation shall be sent to Purchaser along with the documentation necessary for upload into M&G's Document Management System – herein after "DMS"

– (provided by Purchaser with the “Document Handling Procedure for Vendors”, doc. no. E013.34E-56-00-15).

In line with M&G Document Control rules, a document is not allowed to enter into the Review process unless it is validated and accepted by Document Control. This process may take up to two (2) working days after document receipt.

Passed this time without further notifications, the document can be considered by Vendor as accepted and submitted to the Review Process.

In case of any notification by Purchaser within this time, the document is not accepted for Purchaser’s review process until Vendor fixes the highlighted problems and Document Control validates the modifications taken.

Should any document need special “Technical Acceptance” by Purchaser, Vendor shall clearly highlight it in the reason for issue. For these documents, the review process by Purchaser may take up to 10 working days from the date of acceptance into M&G DMS.

Following to it, and not later than 15 working days (from the date of acceptance into M&G DMS), Purchaser shall return a copy of the documents with comments and/or convey the result of approval in a proper manner.

Codes of the result will be used by the Purchaser as described in Para. 4.4 hereunder so that Vendor shall proceed with the subsequent work or re-work according to the review results.

Unless Vendor obtains the Purchaser’s approval, Vendor cannot proceed with the subsequent work unless otherwise stated by Purchaser.

The result will be indicated in the Purchaser “Technical Acceptance” Status Sticker on the document and the return transmittal.

Documents, which are not intended and not required to obtain Purchaser’s formal “Technical Acceptance”, shall be submitted to the Purchaser “For Review/ Comments” in order to obtain the Purchaser’s comments.

Documents, however, which are deemed by the Purchaser to be “For Technical Acceptance”, will have the issue purpose changed by the Purchaser and be dealt with as “For Technical Acceptance” documents.

4.2.2.3 For Information

Documents containing information only and not subject to “Technical Acceptance” shall be dealt with as “For Information”. However, documents, which are deemed by the Purchaser to be “For Technical Acceptance”, will have the issue purpose changed by the Purchaser and be dealt with as “For Technical Acceptance” documents.

4.2.2.4 For Construction (Released for Construction, for Fabrication, for Sub-Ordering)

Documents Technically Accepted by the Purchaser and/ or documents intended to be used for fabrication, sub-ordering, shop or field assembling work shall be submitted to the Purchaser as “For Construction”.

4.2.2.5 Final

Upon completion of shop fabrication and inspection, Vendor shall submit “As-manufactured” documents to the Purchaser within four (4) weeks after shipment. “As-

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manufactured” documents shall contain all changes made during fabrication and inspection, if any, as well as the Purchaser’s comments given at C/S stage.

Documents, even **not subject to any change**, shall be issued as “As-manufactured”, increasing revision numbers.

4.3 TITLE BLOCK

Vendor shall use the project title block of drawings and cover sheet of documents as per the sample title block and cover sheet format given with numbering system procedure E013 34E-56-00-04.

Vendor is allowed to utilize also its title block standard format, but, in any case, cannot avoid inserting the Purchaser’s title block.

Title block and cover sheet shall contain the information as listed in clause 4.3.1 of this document.

4.3.1 DESCRIPTION OF TITLE BLOCK

The minimum requirements for the title block of a drawing and a cover sheet of document are:

- Vendor's name
- Company's name and Location: M&G Resins, Corpus Christi – TX – USA
- Project name: JUMBO project – Integrated PTA/ PET Plant.
- Purchaser’s Project Area Code “E013.34Y”, where “Y” shall be changed into:
 - A: PTA
 - B: PET
 - C: BOP
 - D: R/C/D (Rail/ Cogeneration/ Dock)
 - E: General/ Multi Area
- Purchaser’s P.O. Number
- Unit/ Facility name according to Purchase Order
- Equipment/ Material name and Item number
- Document title
- Vendor’s document No. with revision No.
- Purchasers document No. with revision No.: ONLY IF REQUIRED BY PURCHASER
- Issue reason
- Historical record of revision, issue purpose, etc.

4.4 CODING OF PURCHASER’S ACCEPTANCE RESULT

Each and every Vendor Deliverable will be subject to Purchaser’s review. Following to the finalization of the commenting cycle, the documents will be returned to Vendor along with an Acceptance Code, which can assume the following values:

1. Accepted
2. Accepted with Comments
3. Revise and resubmit
4. Rejected
5. For information only

All the results, except for 1. require a consequent action from Vendor to bring the document in compliance with Purchaser's comments/ specifications.

4.5 VENDOR DOCUMENT & DELIVERABLE LIST

4.5.1 SUBMISSION SCHEDULE

Vendor shall submit Vendor Document & Deliverable List (hereinafter "DDL") to Purchaser within two (2) weeks after acknowledgment of P.O. and/ or Letter of Intent for Purchaser's Acceptance.

The vendor shall refer **Attachment 11** for Instructions and sample Document List format.

4.5.2 CONTENTS OF DDL

Vendor DDL shall contain all Vendor's documents which are intended/ required to be submitted to the Purchaser.

Scheduled submission date is an important part of this list so that Vendor shall fill them without fail.

Special attention, shall also be paid to the following documents (as applicable):

- Spare parts list
- Installation, operation, maintenance manual
- Lube oil/Chemical/Consumable list
- Manufacturer's data
- Manufacturing data report

4.5.3 REVISION OF DDL

Should revisions to the DDL be required, the new revision of the DDL shall be promptly submitted to Purchaser. The revised or additional portions shall be clearly marked as described at para. 4.2.1.

4.6 DOCUMENT TRANSMITTAL

Vendor's transmittal form shall be attached on all Vendor's documents to be submitted to the Purchaser.

4.6.1 TRANSMITTAL NUMBER

For transmission of documentation to Purchaser, Vendor shall follow the procedures indicated in the "Document Handling Procedure for Vendors". The associated transmittal number to Purchaser shall follow the rules indicated in the above Para. 3.2.

4.6.2 TRANSMITTAL RECEIPT

Upon receipt of Purchaser's transmittals, Vendor shall notify to Purchaser the successful receipt.

4.7 DOCUMENT SIZE

4.7.1 DOCUMENT SIZE CODE

Drawings shall conform to ISO standard “A” series or corresponding or standards (DIN, JIS, American).

For practical purposes, they shall be limited to the following sizes.

Size Code	Size [mm]
A0	841 H x 1189 L
A1	594 H x 841 L
A2	420 H x 594 L
A3	297 H x 420 L
A4	210 H x 297 L

4.7.2 SIZE OF DOCUMENTS

Size of documents other than drawings shall be limited to A4 (or similar). It is acceptable to use A3 size in a special case.

4.7.3 SIZE OF DRAWINGS

Drawing sizes exceeding A0 (841 mm x 1189 mm) or similar shall not be used without obtaining the Purchaser’s approval.

Drawings of such large size shall be divided into standard size portions, each of which shall be identified by an independent document numbers. Size code A1 (or similar) and smaller is preferable.

4.7.4 MARGIN

Each drawing sheet shall have at least a 15 mm wide margin on all sides. The left side space shall be at least 24 mm wide for binding.

4.8 QUALITY OF PAPER

If required, paper copies of documents as well as reproducible copies shall be legible and be of a quality good enough to withstand frequent handling.

4.9 DESTINATION AND MEANS OF DELIVERY

Vendor documents shall be uploaded in the M&G Group Documentation Management System by Vendor as described by the “Document Handling Procedure for Vendors” (E013.34E-56-00-15).

The soft copy issued by vendor will be treated as the official issue for releasing the payments.

5 APPLICABLE DOCUMENTS

Applicable documents which are listed in each requisition will be given to Vendor at the time of enquiry, order, and/ or when each document is revised after P.O. placement.

Upon receipt of a revised requisition, Vendor shall check whether the completeness of the related documentation of the latest revision and, if not, shall promptly inform the Purchaser.

In case Vendor proceeds with design and/ or works without reference to the latest applicable documents due to omitted consistency check, Vendor will be responsible for any re-design/ re-work at own expenses.

6 CONTENTS OF VENDOR DOCUMENTS

Vendor shall prepare the documents based on the applicable specifications BAT and best practices.

The documentation shall describe the necessary information on the whole, partial and separate parts with all the details as required by the requisition.

Piping and Instrumentation Diagrams (P&IDs) shall be drafted according to the symbology as specified in the Material Requisition.

6.1 GENERAL ARRANGEMENT DRAWING

The General Arrangement Drawing shall include, as a minimum, the following information:

- Item number of individual equipment
- North direction and coordinates (when specified by Purchaser)
- Incorporation of equipment in the equipment layout (when specified by Purchaser)
- 3D model
- Overall dimensions of entire unit with individual components, including necessary clearances for operation and maintenance
- Elevations at bottom of base plate
- Size, rating and locations of all connections and terminals for piping, instrument and/ or electrical
- Mandatory clearance for operation and maintenance (if required)
- Required Min. lifting height for maintenance
- Rotating Direction (in case of Rotating Equipment)
- Between shaft end distance (in case of Rotating Equipment)
- Dimensional plot information for all off skid equipment such as oil console, oil run down tank, etc.
- Requirement of inlet piping straight run (for Compressors)
- Requirement of inlet piping arrangement (for Pumps)

6.2 LOADING DATA AND ANCHORING DETAILS

In order to allow the Purchaser to design and construct the needed foundations, Vendor shall provide loading data and anchoring details, including the following information:

- Erection weight, empty weight
- Weight of only fluid(s) during operation
- Live load
- Test load

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- Maximum allowable loads from Purchaser and/or Loads from Vendor to Purchaser at the battery limit
- Stress analysis report (if required)
- Weight of only fluid(s) at time of any operation error (if required)
- Wind load and seismic load
- Maintenance load
- Other special loads (if required)
- Position of gravity center for erection and normal operation
- Anchor bolt location/ size/ type/ projection and base plate size using anchor bolt dimensions specified by the Purchaser
- Required grouting area
- Required opening area of foundation

For Vibrating Equipment, in addition to the above information, the following data are required:

- Dynamic load, its location (plan and elevation) and direction
- Frequency
- Dynamic design load required for foundation design
- Allowable vibration limit on the foundation top

6.3 PRESSURE SAFETY VALVE

If safety relief valves are included in Vendor's scope of supply, Vendor shall provide the following information on each item to facilitate a performance check at site:

- Item No.
- Spring No.
- Pressure safety valve calculation and sizing report according to Purchaser specification and/or applicable local codes whichever is more stringent.
- Pressure range of spring
- Body size and rating
- Orifice type and area
- Manufacturer's name and model No.
- Spring set pressure
- Cold test pressure
- Seat leak test pressure
- Allowable reseal pressure
- Final test report
- Valve body materials
- Certificates of compliance as specified by to Purchaser specification and/or applicable local codes whichever is more stringent.

6.4 INSTALLATION INSTRUCTION

In order to allow the Purchaser to perform all the fieldworks needed for the final installation of the Supply without Vendor's supervisory service, Vendor shall provide Installation/ Erection/ Assembling instructions for site works with full details and duly referenced to the other Vendor's documents

To allow the Purchaser's detailed planning of site works, the installation instruction shall include, where applicable, the following information on required site works:

- Piping work (metric tons/ US Customary tons)
- Structural steel work (metric tons/ US Customary tons)
- Concrete structural work (m³/ ft³)
- Electrical work (numbers of electrical equipment, pcs)
- Instrument work (numbers of instruments, pcs)
- Painting work (m²/ ft²)
- Insulation work (m³/ ft³)
- Reference installation time schedule

6.5 NUMBERING OF AUXILIARY COMPONENTS

Vendor shall assign Auxiliary tag numbers which will be given to Vendor by the Purchaser in due course of design, for fabrication.

If the Package Units contain physically independent large equipment, independent equipment number will be applied.

6.6 ITEMIZED (SUB)EQUIPMENT, ELECTRICAL COMPONENTS AND INSTRUMENT NUMBERING

In due course of design, Vendor shall notify to Purchaser the list of itemized (sub)equipment, electrical components and instruments within its scope supply, so that Purchaser can assign tag numbers in compliance with the Client's numbering philosophy and revert to Vendor for fabrication.

6.7 SPECIAL TOOL LIST

Vendor shall submit a special tool list recommended for installation, operation and maintenance of Equipment. Sketches shall be attached to the list showing main dimensions of each special tool for identification purposes.

6.8 ANCHOR BOLT LIST

Anchor bolt list shall be prepared and submitted to the Purchaser according to the Purchaser's instruction.

6.9 LUBRICATION SCHEDULE & CONSUMABLE LIST

Vendor shall submit to the Purchaser a list of lube oil, seal oil, and consumable such as chemicals, packing, heat medium fluid, power fluid, fuel and other utilities which are consumed normally or just in special cases, etc. with the following information.

- Specification
- Brand name and equivalent
- Quantity of initial inventory
- Duration for first replacement
- Quantity and duration for addition/replacement under normal operation

6.10 SPARE PART LIST

Vendor shall submit to the Purchaser the Capital spare parts list and the 2-years Operation spare parts list.

6.11 DATA SHEET FOR INDUCTION MOTOR

Vendor shall submit to the Purchaser the data sheet for Induction Motor.
Purchaser may request Vendor to use purchaser's Data Sheet blanks, if necessary.

6.12 CONTROL NARRATIVE

Vendor shall submit to the Purchaser the Control Narrative for Purchaser's DCS design if Purchaser specified in his Requisition or other specifications.

7 MANUFACTURING DATA REPORT (MDR)

Manufacturing data report will be composed by:

- Installation, Operation and Maintenance Manual (hereinafter "IOM Manual")
- Certification Dossier (hereinafter "CD")
- List and details of all the agreed deviations
- Other documents, as applicable

For pressure vessels, bulk material or simple items, only one of the documents may be required.

Instructions are given in the relevant Supply Specification. Vendor to require Purchaser in case of doubts.

Vendor shall submit the IOM Manual, which includes Vendor/ Purchaser specifications, Requisition for Purchase Order, Technical Information (i.e. but not limited to Diagrams, Drawings, Bill of Material, Operating and Maintenance instructions, Spare Part List etc.).

Vendor shall also submit the CD, which consists of a collection of documents, such as testing and material certificates, inspection and other reports, providing full report of the manufacturing and/ or fabrication process of the supplied Equipment/ Material. Each category of documents included in the CD shall be well identifiable and segregated from the others.

Should any document pertinent to the CD be handed over as part of the IOM Manual (or vice versa), Purchaser will reject the MDR issued by Vendor.

For the handover of the final documentation MDR the vendor shall refer the section 8 of the present procedure.

8 HANDOVER OF MANUFACTURING DATA REPORT

The following sections outline the requirements that Vendor shall follow for an acceptable submission of the final documentation (referred as "Manufacturing Data Reports") issued for the Project Jumbo.

8.1 BINDING INSTRUCTIONS FOR MDR HARD COPIES

All drawings and documents in hard copy shall be collected in binders ISO A4 (or corresponding) size, ordered by a sequential numbering.

REV.

Binder shall be of 004 PVC (or corresponding) format, white color, 7-9 cm thick (or corresponding) side, 4 rings.

Documents in ISO A4 (or corresponding) size shall be pierced and placed in the 4 ring binder.

Drawings and document, with size larger than ISO A4 (or corresponding), shall be folded to ISO A4 (or corresponding) size and gathered in plastic folders.

The drawings should be of the original size, the drawings of size ISO A0/ A1/ A2 (or corresponding) shall not be compressed to ISO A3/ A4 size (or corresponding).

Each chapter/ section shall be well identifiable and segregated from the others by a white cardboard divider showing the corresponding chapter number.

Each sheet of the manufacturing data report shall be sequentially numbered.

Each binder shall be provided with outer front and side pockets for the insertion of labels.

The front cover and side label shall be manufactured as per shall be as per attachments 1, 2, 3 and 4, printed on cardboard and inserted in front and side transparent pockets of the binders.

Vendor is not allowed to modify the wording, format and dimension of the aforementioned samples.

For itemized materials, the MDB shall be assembled according to the equipment number.

The books shall be divided into IOM Manual(s) and Certification Dossier(s).

8.2 INSTRUCTIONS FOR MDR SOFT COPIES

All Soft Copies of the documents shall be identical to the corresponding Hard Copies.

Soft Copies of MDR shall be provided as CD('s) or DVD('s) as well as via SyncPlicity (refer to Document Handling Procedure for Vendors, E013.34E-56-00-15).

Each CD (DVD) shall contain only one Manual. In case one Manual is contained in more than one CD (DVD), each CD (DVD) shall carry the identification number "CD volume n of N".

File names shall be according to Vendor document name.

All documentation shall be released in fully open and editable formats, as detailed in the section 8.4 of this procedure and, in addition, as *.pdf file.

The electronic files of Vendor catalogues and other not-modifiable documentation, such as test reports, certificates, shall be provided as pdf *.file; in case of Catalogues, Standard Manuals and similar technical documentation, the *.pdf file shall be electronically searchable for easy retrieval of the needed piece of information.

An Index of Content (preferably in Microsoft Excel or Word format) with hyperlinks to the documents shall be provided.

The index shall indicate specify also the file type and file name.

REV.

The Index of Content shall be organized with the same document order used in the Hard Copy.

CD (DVD) relevant box shall be provided with labels, manufactured as per Attachment 7 and 8.

8.3 OTHER MINIMUM REQUIREMENTS FOR CONTENT OF TECHNICAL AND CERTIFICATION DOSSIER

Vendor shall submit the IOM Manuals and Certification Dossiers in dedicated and separated books, using dedicated binders.

The order of the books of MDR relevant to bulk materials shall be by item description, while for the ones relevant to instruments, the books shall be assembled based on the instrument type.

The IOM Manual book(s) shall have a cover sheet and Index of Content as per attachment 5.

The Certification Dossier book(s) shall have a cover sheet and Index of Content as per attachment 6.

Vendor is not allowed to modify the wording, format and dimension of the aforementioned samples.

The indicated Index of Contents shall be considered as minimum requirements to be applied.

All the Vendor documentation electronically generated color shall also be in color in the MDR, both Hard and Soft Copies.

If illegible, the MDR will be rejected.

8.4 INSTRUCTIONS FOR MDR ELECTRONIC FILES

All Soft Copies of the MDR shall be identical to the relevant hard copies.

Each soft copy of the MDR shall be identified by Item number & Volume number

The Electronic MDR files shall be provided as file compatible with:

- P&ID, if available, in SmartPlant P&ID format
- Other drawings: editable copy in Autodesk AUTOCAD version greater than 2010 or more recent for main drawing (like P&ID, General Arrangement and Foundation Drawings etc.)
- Deliverables in Microsoft Excel and/ or Microsoft Word (MS Office release 2003-07 or more recent or compatible) for data sheet, tables, narratives and specifications;
- 3D model: PDS version 6 or SmartPlant 3D, with additional conversion into Autodesk NavisWorks format.
- Deliverables created manually, or with other software, or available only in hard-copy (e.g. nameplate rubbings): electronic scanning (resolution 300x300dpi minimum) converted into in *.pdf.
- Other images: converted into in *.pdf.
- All *.pdf compatible files shall be editable

8.5 REJECTION

Hard copies, Soft copies and electronic files of MDR not in compliance with this specification and the requirements of material requisition and its attachments will be rejected.

8.6 DELAY

Delay on delivery of MDR (hard copy and soft file) is subjected to penalty as stated in the Purchase Order.

8.7 MDR PACKAGE AND DELIVERY

One MDR copy (One hard copy + one CD(DVD) Rom) shall be sent in advance to relevant purchaser office for approval.

Once approved by the purchaser, Vendor shall send the final MDR as agreed in the Vendor Document Requirement & Schedule (VDRS) included in the Purchaser Technical Specification.

The hard copy at site will be sent along with the Material, but in a separate dedicated box or in packing that can be opened without compromising the integrity of the material shipment during the temporary storage at site.

In case MDR is not ready or set at the time of Material delivery, the draft copy shall be sent along with Material as per above and additional final copy shall be sent to site separately via express courier.

The box containing the MDR books shall be labeled as shown in the attachment 9.

The box shall have the relevant packing list, identifying the Volume number against the corresponding box number.

9 LIST OF ATTACHMENTS

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- ATTACHMENT 1: MDR – INSTALLATION, OPERATION AND MAINTENANCE MANUAL BINDER FRONT LABEL REV.
- ATTACHMENT 2: MDR – INSTALLATION, OPERATION AND MAINTENANCE MANUAL BINDER SIDE LABEL
- ATTACHMENT 3: MDR – CERTIFICATION DOSSIER BINDER FRONT LABEL
- ATTACHMENT 4: MDR – CERTIFICATION DOSSIER BINDER SIDE LABEL
- ATTACHMENT 5: MDR – INSTALLATION, OPERATION AND MAINTENANCE MANUAL COVER SHEET AND INDEX
- ATTACHMENT 6: MDR – CERTIFICATION DOSSIER BINDER COVER SHEET AND INDEX
- ATTACHMENT 7: MDR – CD-RW LABELS
- ATTACHMENT 8: MDR – CD-RW BOX LABELS
- ATTACHMENT 9: MDR – DISPATCHING BOX LABEL
- ATTACHMENT 10: INTENTIONALLY LEFT BLANK
- ATTACHMENT 11: DOCUMENT LIST FORMAT