

GLOBAL MANUFACTURING RECORD BOOK STRUCTURE AND CONTENT (Subsea Product) - STANDARD INSTRUCTIONS

REV	DATE (Mth YY)	STATUS / CHANGES	WRITTEN BY (name & visa)	CHECKED BY (name & visa)	APPROVED BY (name & visa)
DOCUMENT REVISIONS					

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1. PURPOSE AND SCOPE

This procedure provides the instructions to build a Manufacturing Record Book (MRB) that shall be required by TechnipFMC Customer as an end deliverable for a physical part.

These instructions shall apply to all parts and assemblies that are directly deliverable to both TechnipFMC Sister plants and to TechnipFMC customers.

These instructions shall not apply when specific instructions apart from standard TechnipFMC MRB Index are agreed between TechnipFMC and its customer. These special instructions shall be mentioned in the contract or Purchase Order.

2. REFERENCES

ISO 9001: 2015	Quality Management System
API Q1	Quality Management System Requirements for Manufacturing Organizations for the Petroleum and Natural Gas Industry
API Q2	Specification for Quality Management System Requirements for Service Supply Organizations for the Petroleum and Natural Gas Industries
GPS-PRD-10002	Global Manufacturing Record Book Structure and Content
PRD-0000035685	Administration Requirements: Quality Management
PRD-0000035686	Administration Requirements: Document Management

[TechnipFMC Standards](#) site.

3. DEFINITIONS

MRB	Manufacturing Record Book
Supplier MRB	The MRBs built by TechnipFMC Suppliers as part of delivery to TechnipFMC
TechnipFMC MRB	The MRBs built by TechnipFMC for the parts that are fabricated or assembled internally as part of delivery to our Customers

See the [TechnipFMC Glossary](#).

4. ROLES AND RESPONSIBILITIES

Referring to “[Control of Manufacturing/Service Record BPMS](#)” – Responsibilities include:

Responsibility Matrix Legend:

R = Responsible for performing the action A = Accountable to ensure action happens. Only one A in case of more R
 C = Consulted during the action
 I = Informed after the action has completed

	Quality Directors	Site Project Quality Teams	Site Product Quality Teams	Hyderabad Quality Documentation Teams	Supplier Quality Teams
1. Identify Regional Process Owners (RPOs) and resources required for the deployment of this global standardization of the MRB process	R	I	I	R	-
1. Develop, deploy and maintain tools to support the MRB process	A	I	C	C	C
2. Develop Customer-specific templates based on this GPS and Customer requirements, where allowed by this guideline.	-	R	C	C	-
3. Ensure the integrity of the manufacturing documentation to be included in an MRB	-	-	R	R	-
4. Ensure all MRBs are structured and compiled per this work instruction (Reference Section 5.5)	A	C	C	R	-
5. Ensure adequate training is provided to suppliers to support the global MRB process	-	-	C	-	R
6. Administers comments and suggestions to the Global Process Owner (GPO) as part of a continuous improvement process	-	-	-	-	-

5. INSTRUCTIONS:

5.1 FORMAT

MRBs shall be generated as an electronic bookmarked Portable Document Format (PDF) file and shall include an indexed table of contents for ease of navigation. The MRB may be divided into multiple volumes based upon the maximum file size constraints by storage or transmittal limitations. All cover and index pages must conform to the latest TechnipFMC branding guidelines, and included documentation shall be easily legible.

The PDF format must:

- Be produced with the latest version of Adobe Acrobat unless otherwise specified by Customer.
 - Adobe Acrobat DC/Pro is a PDF editing software used to create, combine, edit, structure them in a desired way, share and sign PDFs licensed by Adobe.
- Be produced from the original drawing or document file.
- Be fully compatible with the standard Adobe Reader as unlocked files.
- Have page(s) oriented for viewing without need for rotation.
- Have document initial view options set to "bookmarks and page" (navigation pane available).
- Have Bookmarks that shall have destination action "fit page".

5.2 LANGUAGE

The default language for all included documentation shall be English. However, it is recognized and acceptable to provide local language documentation if required by regional and/or customer specific requirements.

5.3 STRUCTURE

All the MRBs shall adhere to the following structure:


- **Front Page**
- **Section A:** Certificate of Conformance
- **Section B:** General Documentation
- **Section C:** Assembly/Fabrication Records
- **Section D:** Component Records
- **Section E:** Project/Customer-Specific

TechnipFMC's standard offering for MRBs shall consist of Sections A, B and C. Section D shall be included, if required by Customer specifications. The content of section D (i.e., part levels to be included - subassemblies, bodies, weldments, etc.) shall also be defined per Customer requirements.

For external Suppliers, MRB shall include section D (when required by the part report.)

5.3.1 Front Page

The MRB Complier shall use the following front Page while building the MRB with information filled out as per the instructions provided following the picture



Insert Supplier Logo
 (Only applicable for
 Procured Parts)

MANUFACTURING RECORD BOOK

Supplier/Manufacturer	1	
TechnipFMC MRB Number	2	<u>Rev.No.</u>
Equipment Description	3	
Part No.	4	<u>Rev.No.</u>
Serial No.	5	
Tag No.	6	
Approved by Manufacturer <i>(Name/Signature /Designation/Stamp /Date)</i>	7	
Approved by Customer Representative <i>(Name/Signature /Designation/Stamp /Date)</i>	8	
Approved by Certifying Authority <i>(Name/Signature /Designation/Stamp /Date)</i>	9	

S.No	Field	Supplier MRB	TechnipFMC MRB
1	Supplier/Manufacturer	Supplier name as per the Purchase Order shall be updated.	“TechnipFMC” shall be updated in the field
2	TechnipFMC MRB Number	<p>The MRB number shall be chosen by the supplier along with the Revision. The recommended but not mandatory format is “MRB-Purchase Order-Line Item Number”. Example below</p> <p>i. If the Purchase Order is 4300076547 and the Line Item Number in the Purchase Order is 110, the MRB number would be MRB-4300076547-110.</p> <p>ii. In case of multiple MRBs per Line Item, the supplier may choose to add a numerical suffix to differentiate between the MRBs</p>	The MRB compiler shall use SAP generated number as a MRB number along with the revision number. However this can vary based on the plant.
3	Equipment Description	A short or truncated form of the part report description that best describes the part shall be updated.	
4	Part Number(Part No.)	Part number as per the TechnipFMC part report for which the book is being built shall be updated. The Revision number shall be the revision under which the physical part is built.	
5	Serial Number(Serial No.)	As defined by the part report specifications, if the part is serialized or batch managed, respective serial number or batch number shall be updated in accordance with the physical part.	
6	Tag Number(Tag No.)	Unless TechnipFMC provides the Tag Numbers directly, the field shall not be updated and shall be left as blank. It is TechnipFMC responsibility to provide Tag numbers to the supplier.	The project shall provide the input to the MRB compiler about the Tag Numbers. If not required, the field shall be updated as N/A.
7	Approved By Manufacturer	Supplier Quality Representative’s name who approved the MRB along with his Designation(Stamp, if a available) and date shall be updated.	TechnipFMC Quality Representative’s name who approved the MRB along with his Designation(Stamp, if a available) and date shall be updated.
8	Approved By Customer Representative	If required by the Part Report/Purchase Order/Contract, the MRB shall be reviewed by a Customer representative and his/her signature shall be updated in the field.	
9	Approved By Certifying Authority	If required by the Part Report/Purchase Order/Contract, the MRB shall be reviewed by a Certifying Authority and its signature shall be updated in the field.	

5.3.2 Section A: Certificate of Conformance

SECTION A		
CERTIFICATE OF CONFORMANCE		
A	Certificate of Conformance	A or N/A
A1	Certificate of Conformance	

Supplier MRB	TechnipFMC MRB
If the part report requires a Certificate of Conformance to be submitted then the section shall be marked as 'A' and the Supplier is responsible to provide the document for the level he is delivering to TechnipFMC as part of the final documentation package delivered to TechnipFMC. If not required, the column shall be marked as N/A.	A Certificate of Conformance shall be issued to TechnipFMC's Customer with shipment when required by part report/customer contract or customer sales order (final deliverables). The column shall be marked 'A' or 'N/A' accordingly.

5.3.3 SECTION B : General Documentation

<p>I</p> <h2 align="center">SECTION B</h2> <h1 align="center">GENERAL DOCUMENTATION</h1>		
B	General Documentation	A/NA
B1	TechnipFMC Part Report	
B2	General Arrangement Drawing	
B3	Inspection & Test Plan (MPQP/MPS if Applicable)	
B4	Supplier Master Document Register (SMDR/eSMDR)	
B5	Customer Inspection Release Certificates (ECRN/IRN)	
B6	Certificates issued by Certifying Agency/Body (Third Party)	
B7	Deviations and Concessions	

B	General Documentation	Supplier MRB	TechnipFMC MRB
B1	TechnipFMC Part Report	Shall be marked 'A' or 'N/A' based on the requirement in the Part report/Purchase Order.	Is applicable for all the MRBs
B2	General Arrangement Drawing		Applicable for only the final deliverables to the Customer. GA Drawing shall be available in the Part Report
B3	Inspection & Test Plan (MPQP/MPS if Available)		Only ITP is Applicable for only the final deliverables to the Customer.
B4	Supplier Master Document Register (SMDR/eSMDR)		Not Applicable for Final Deliveries
B5	Customer Inspection Release Certificates		Applicable for only the final deliverables to the Customer.
B6	Certificates issued by Certifying Agency		Reference the ITP to find out if a Certifying Authority is available or not. Applicable if available else not.
B7	Deviations and Concessions	All the approved Deviation and Concession requests submitted to TechnipFMC shall be listed.	All the approved Deviation and Concession requests at Assembly Level shall be listed.

5.3.4 SECTION C : Assembly/Fabrication Records

This section shall consist of documentation that pertains to assembly/fabrication, testing and final inspection of the final deliverable as applicable per the TechnipFMC Part Report. If the part report/customer requires other types of records in addition to the listed below, the compiler shall add a new section accordingly.

C	Assembly / Fabrication Records	Supplier MRB	TechnipFMC MRB
C1	Traceability Record	Applicable as per Traceability specifications linked to the part Report. Ex: Q03401, Q03402	Applicable for all MRBs
C2	Factory Acceptance Test	Applicability as per Part Report. The reports may include <ul style="list-style-type: none"> • Completed Functional/Hydrostatic/Gas Test Reports or procedures • Continuity Test Reports • Cleanliness Reports • Pressure Test Charts • Flushing Reports • Leak Test Reports • Hyperbaric Test Reports • Electrical Test Reports • Electrical Stress Screening Reports • Completed Extended FAT (EFAT) Report 	
C3	Welding Records	Applicability as per Part Report. The records may include welding/cladding report that displays the following welding details at a minimum: Traceability of components being welded <ul style="list-style-type: none"> • Welder(s) identification • Welding Procedure Specification (WPS) No. • Weld Map (for closure welds) • Post Weld Heat Treatment (PWHT) Charts And also Weld Visual Inspection Report and Clad Thickness Reports	
C4	Non-Destructive Examination (NDE)/ Non-Destructive Test (NDT) Reports	Applicable if any of the subsequent sections C4.1 to C4.7 are applicable	
C4.1	Liquid Penetrant Inspection Reports	Applicability as per Part Report	
C4.2	Magnetic Particle Inspection Reports		
C4.3	Radiographic Examination Reports		
C4.4	Ultrasonic Examination Reports		
C4.5	Hardness Reports		
C4.6	Dimensional Reports		

C	Assembly / Fabrication Records	Supplier MRB	TechnipFMC MRB
C4.7	Positive Material Identification Reports	Applicability as per Part Report	
C4.8	Ferrite Inspection Report		
C5	Threading Reports		
C6	Weight Certificate		
C7	Lifting Certificates		
C8	Hazard Certificates		
C9	Insulation Reports		
C10	Coating Reports		
C11	Stack Up Reports		
C12	Buck Up Records		
C13	Mechanical Completion Checklists/Final Factory Inspection Checklists		
C14	Equipment Log card/Traveler Job card)		

5.3.5 SECTION D : Component Records

SECTION D

COMPONENT RECORDS

Section	Component P/N	Component Description	Component Serial / Batch No.
D1	P6000XXXXXX	"A short or truncated form of the part report description that best describes the part shall be updated."	XXXXXX
D2			
D3			
D4			

This section shall consist of documentation that pertains to traceable components of the assembled/fabricated deliverable. Each traceable component shall be listed as shown in the above screenshot.

For TechnipFMC designed part reports that have an indented BOM structure, Section D shall be structured per

the BOM.

Certain TechnipFMC Part Reports have a flat level structure (i.e., there is no TechnipFMC - defined BOM on the Part Report). Documentation for components on such parts may be required to be included in the MRB. In such instances, the component documentation/MRBs shall be included in a manner that aligns as closely to a BOM as possible.

Note : Documentation for components without traceability requirements are not required to be part of MRB.

5.3.6 SECTION E : Project/Customer-Specific

<h1 style="margin: 0;">SECTION E</h1> <h2 style="margin: 0;">PROJECT SPECIFIC DOCUMENTATION</h2>		
E	Project Specific Documentation	A or N/A
E1		
E2		
E3		

This section shall consist of documentation that are typically not included as part of the above sections (A through D), but are required as part of contractually-agreed requirements

Examples of documents that could typically be included in this section are:

- Specifications and Procedures
- Transportation and Handling instructions
- Engineering documents (Master Equipment List (MEL), Master Document Register (MDR), Request for Information (RFI), etc.)

Supplier MRB	TechnipFMC MRB
TechnipFMC project shall inform Supplier via Purchase Order for any of these documents via the MRB	Project Quality is responsible for the communicating this to the MRB Compiler

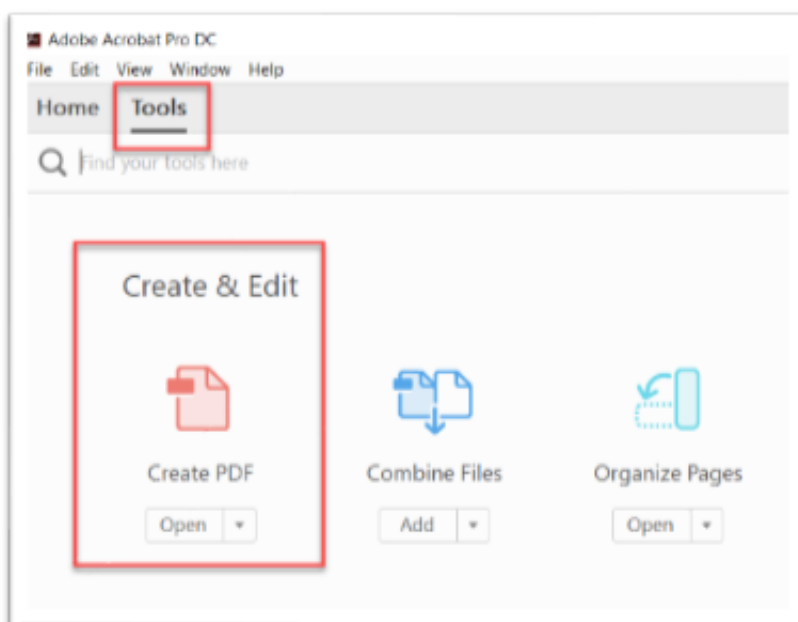
6. How to create MRB using the above Structure:

Referring to section 7.1, latest version of Adobe Acrobat software is required to build the MRB using the template that is generated using the steps detailed in the previous sections.

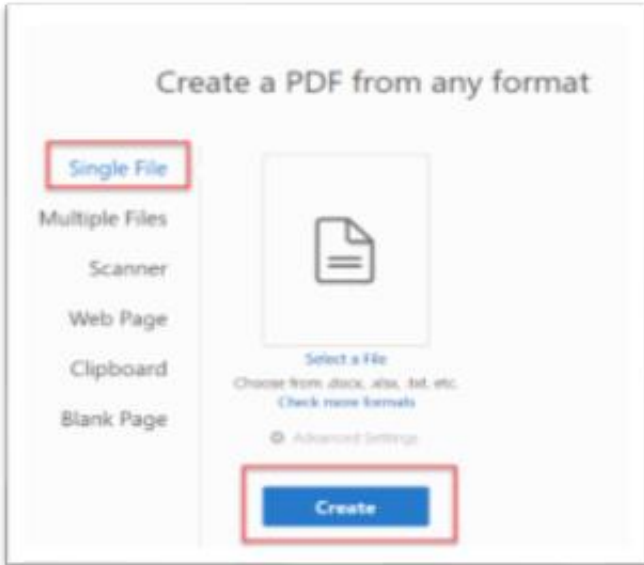
Attribute	Supplier MRB	TechnipFMC MRB
Document Requirement	TechnipFMC Part Report shall be followed unless otherwise communicated by TechnipFMC via the Purchase Order	TechnipFMC Part Report shall be followed unless otherwise communicated by TechnipFMC Project team. In case of Intercompany Orders, the Purchase Order shall contain any additional document requirement for the MRB.
Bill of Materials	TechnipFMC Part Report shall be followed and the documents for the various parts shall be compiled into the MRB depending on whether externally procured or manufactured internally	TechnipFMC Part Report shall be followed and the documents for the various parts shall be compiled into the MRB depending on whether externally procured or manufactured internally. This information can be found by the compiler via SAP. Transaction ZPPSerial shall be used to find out the exact BOM used for the assembly.

After the relevant documents are available , then use the Adobe software(Steps below) to compile them into one book as per the template created.

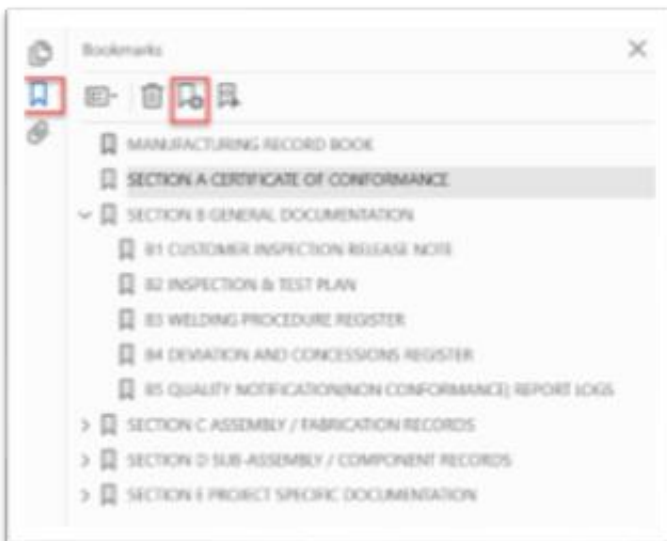
Step 1 : Open the Adobe PDF software and go to Tools and click on Create Pdf option



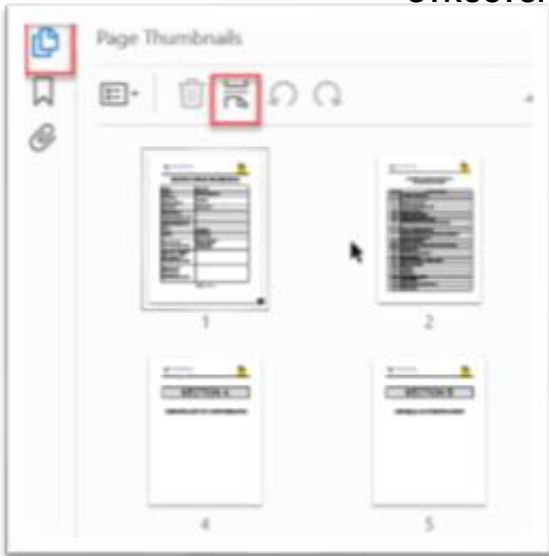
Step 2 : In the Create Pdf tab, you shall be greeted with various options. Choose the first option “Single File” and click on “Create” and select the template you have created.



Step 3: After the pdf is created , bookmarks need to be created for existing sections and the sub bookmarks shall also be created as per requirements as shown in the screenshot.



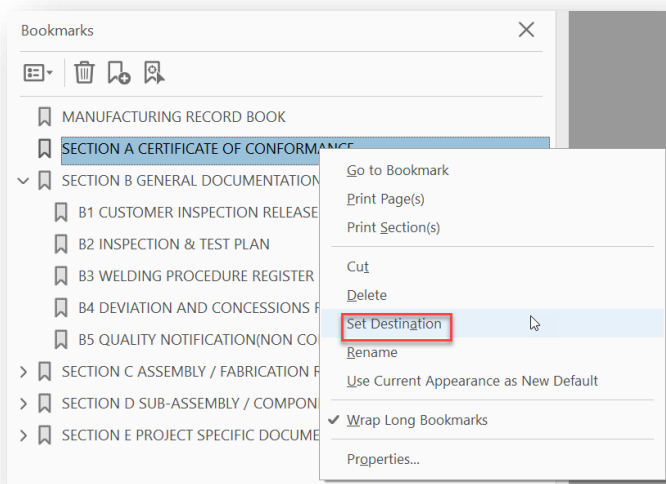
Step 4 : Download all the required documentation that shall go into the MRB(if not available in pdf format, the documentation must be converted into pdf format before proceeding for this step)



Click on the pages tab and start inserting the pages in their respective section by using the insert button. You can also simply drag and drop pages from one pdf to another pdf.

Step 5: After the insertion of documents, the compiler needs orient the page(s) for viewing without need for rotation.

Step 6: The pages shall be referenced to relevant bookmark meaning when you click the bookmarks, the respective page shall be referenced. This can be done by using “Set Destination” option as shown in the screenshot. The compiler has to select the page, click on “Fit one page to Full Window” and right click on the bookmark that he/she wishes to tag and click “Set Destination”.



Step 7: The resulting pdf document shall be stored with the compiler until it is transmitted for review and approval.