







MATERIAL REQUISITION FOR MV & LV BUS DUCTS

 JSC Contract No.: JPC9387
 Doc. No.: J-85-EL-MRQ-1653-0001-2(1)
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 TCM Project No. 3863
 Doc. No.: 3863-NN-MR-8500004

Material Requistion For MV & LV Bus Ducts (Shortage-1)

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2	30.June.2017	R	Issued For Review	GHB	ASP	ASP			
1	12.Jul.2016	R	Issued For Review	GHB	ASP	ASP			
0	09.Aug.2015	R	Issued For Review	MAB	ASP	ASP			
Rev	Date	Class	Status	Prepared	Checked	Approved	Prepared	Checked	Approved
Kev	Date	Date Class Status			TCM		JSC		



TCM Project No. 3863

JAM ABS & RUBBERS PLANT (BANDAR ASSALUYEH)







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Part A: List of Documents supplied with Requisition

 ${\tt NOTE-FURTHER\,ISSUES\,OF\,BELOW\,DOCUMENTS.\,NOT\,MODIFYING\,ORDER\,CONDITIONS,\,WILL\,BE\,DELIVERED\,WITHOUT\,MR\,REISSUING.}\\$

Description	Reference	Rev	Date of attachment
1. PROJECT SPECIFICATIONS/PROCEDURES			
Packing , marking and shipping instructions	J-80/85/88-PP-PRC-0052	0	12.Jul.2016
Spare parts procedure	J-80/85/88-PP-PRC-0054	0	12.Jul.2016
Shipping procedure	J-80/85/88-PP-PRC-0051	0	12.Jul.2016
Packing and Marking Procedure for Electrical Panels and Instruments	J-80/85/88-PP-PRC-0053	0	12.Jul.2016
Vendor Documentation Management Procedure	J-80/85/88-PP-PRC-0000-0005	1	12.Jul.16
2. JOB SPECIFICATIONS			
Electrical Design General Specification	J-808588-EL-JSD-0000-0001	1	12.Jul.2016
Painting specification	J-80/85/88-PR-JSC-1300-0005	4	30.June.2017
3. EQUIPMENT SPECIFICATIONS/DATASHEETS			
Typical LV Switchgear Side Bus duct Termination Drawings	Attachment-1	0	30.June.2017
Typical MV Switchgear Side Bus duct Termination Drawings	Attachment-2	0	Later
Typical Distribution Transformer (6/0.42kV) GA Drawings	Attachment-3	0	30.June.2017
Typical Power Transformer (20/6.3kV) GA Drawings	Attachment-4		Later
Job specification for MV & LV Bus Ducts	J-808588-EL-JSS-1653-0001	0	09.Sep.2015
Datasheet – Bus Ducts	J-85-EL-DSH-1653-0001	2	30.June.2017
Electrical Equipment Layput Substation – Rubber Plant	J-85-EL-DWG-0000-0001	1	12.Jul.2016
4. SITE CONDITION			
Site Design Condition For Electrical Installation	J-80/85/88-EL-JSD-0000-0002	1	12.Jul.2016
5. INSPECTION			
Inspection and test plan LV Bus Ducts	J-85-EL-ITP-1653-0001	1	12.Jul.2016

















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Part B: Scope of Supply

This supply is composed of two parts:

Sub-part B-I: Equipment / Bulk Material Supply Sub-part B-II: Documents and Drawings Supply

Sub-Part B-I: Equipment / Bulk Material Supply

POSITION	ITEM/TAG	QUANTITY	DESCRIPTION
9	BD-8503C	1	LV Bus Duct, 5000 A, 65kA/Sec
10	-	1 Set	2 Years Operation Spare Parts
11	-	1 Set	Erection, Precommissioning, Commissioning and Start-up Spare Parts
12	-	1 Set	Special Tools
13	-	-	Factory Acceptance Test
14	-	-	Site Commissioning Assitance / Supervision
15	-	-	Training at site









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Sub-Part B-II: Documents and Drawings Supply

Documents To be submitted by vendor	At Bid Stage	For A _l	oproval	Purpose	Final Issue / As Built
	No. of Prints	Issue Date	No. of Prints		
1. GENERAL DOCUMENTS					
List Of Vendor's Documents And Drawings		+2W	4C+1CD	IFR	4C+1CD
Fabrication Production Schedule (Overall Manufacturing Schedule)	E	+2W	4C+1CD	IFR	4C+1CD
Engineering, Procurment, Manufacturing And Test Schedule	Е	+1M	4C+1CD	IFR	4C+1CD
Vendor Mechanical Catalogue		2M before Delivery	1C	IFR	11C+3CD
Index Of Mechanical Catalogue		+8W	1C	IFR	1C
Sub Order Schedule / Copy Of Unpriced Sub Orders		+1M	4C+1CD	IFR	4C+1CD
Sub-Vendor / Supplier List	Е	+1M	4C+1CD	IFR	4C+1CD
Material Purchasing Specification For Suborder		+1M	4C+1CD	IFR	4C+1CD
Contract Specific Inspection & Test Plan		+2M	4C+1CD	IFR	4C+1CD
Summery Of Manufacturing Inspection Dossier		1M before Delivery	4C+1CD	IFR	4C+1CD
Physical Progress Report (Monthly)		+1M	4C+1CD	INFO	4C+1CD
Vendor's Procurement Status (Monthly)		+1m	4C+1CD	INFO	4C+1CD
Painting Specification and Procedure		+8W	4C+1CD	IFR	4C+1CD
2. ARRANGEMENTS					
General Arrangements showing main dimensions, arrangement of Aux. components and the minimum clearnces required for ventilation and safety during operation & maintannee	Е	+1M	4C+1CD	IFR	4C+1CD





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Documents To be submitted by vendor	At Bid Stage	For A	pproval	Purpose	Final Issue / As Built
	No. of Prints	Issue Date	No. of Prints		_ ,,
Utility Requirements (Electrical Consumption For Equipment And Auxiliary, Ac And Dc)	E	+2M	4C+1CD	IFR	4C+1CD
Foundation Requirements For Ground Supports		+1M	4C+1CD	IFR	4C+1CD
Outline Drawing With All Relevant Dimensions And Weight/Massof total Assembly & of the individual sections		+8W	4C+1CD	IFR	4C+1CD
Details of bus duct flange connection to trafo/DG & Switchgear	Е	+4W	2C+1CD	IFR	2C+1CD
Bus-Duct supporting arrangement drawing and design.		+4W	4C+1CD	IFR	2C+1CD
Technical details of design and manufacturing	Е	+4W	4C+1CD	INFO	2C+1CD
3. DATA SHEETS					
Filled-Up Data Sheet(S) Of LV Bus Duct	Е	+4W	4C+1CD	IFR	4C+1CD
4. CALCULATIONS & PERFORMANCE DATA					
Temperature rise & Bus bar sizing calculations		+2M	4C+1CD	IFR	4C+1CD
Heat loss data for Bus-Duct incl. details for each shipping section.		+4W	4C+1CD	IFR	2C+1CD
5. DETAIL MECHANICAL/CIVIL DRAWINGS					
Parts List / Bill Of Material		+2M	4C+1CD	IFR	4C+1CD
Civil Work Guide Drawing		+4W	4C+1CD	IFR	4C+1CD
6. DETAIL ELECTRICAL DRAWINGS					
Terminal Block Diagram		+8W	4C+1CD	IFR	4C+1CD
Name Plate Drawing/ Rating Plate Drawing		+8W	4C+1CD	IFR	4C+1CD
Schematic and connection diagrams for auxiliary circuits for Bus-Duct.		+4W	4C+1CD	IFR	2C+1CD
Brochures / Catalogues for all accessories	Е	+4W	4C+1CD	INFO	2C+1CD



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Documents To be submitted by vendor	At Bid Stage	For A _l	oproval	Purpose	Final Issue / As Built	
	No. of Prints	Issue Date	No. of Prints			
7. TEST PROCEDURES						
Routine, Functional & Performance Test Procedures & reports along with final inspection reports		+1 M	4C+1CD	IFR	4C+1CD	
Factory Acceptance Test Procedure		+1M	4C+1CD	IFR	4C+1CD	
Copies of Type test reports on identical equipment.	Е	+4W	4C+1CD	IFR	2C+1CD	
Quality Control Plan including Inspection Test Plan and Test Procedures	Е	+4W	4C+1CD	IFR	2C+1CD	
Site Acceptance Test Procedure		+2M	4C+1CD	IFR	4C+1CD	
8. CERTIFICATION						
Manufacturing Data Report (Mdr) Index		+2M	4C+1CD	IFR	4C+1CD	
Manufacturing Data Report (Mdr)		+2M	4C+1CD	IFR	4C+1CD	
Copies of Test reports of bought out items (sub components)						
Material Certificates		+2M	4C+1CD	IFR	4C+1CD	
Codes/Standard/Compliance Certificates		+1M	4C+1CD	IFR	4C+1CD	
Test Results		2W before delievery	4C+1CD	INFO	4C+1CD	
Specification Waivers	Е					
Test Certificates		2W before delievery	4C+1CD	INFO	4C+1CD	
Inspection Release Note		2W before delievery	4C+1CD	INFO	4C+1CD	
9. HANDLING & SITE INSTALLATION						
Packing, Shipping, Preservation, transportaion authorization, Handling & Storage Procedures		1W before delievery	4C+1CD	INFO	4C+1CD	
Heavy and/or large equipment drawings with weight, Transportation Drawing		4W before delievery	4C+1CD	IFR	4C+1CD	









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Documents To be submitted by vendor	At Bid Stage	For A	pproval	Purpose	Final Issue / As Built
	No. of Prints	Issue Date	No. of Prints		Duni
Detailed Schedule For Site Erection		3M before Delivery	4C+1CD	INFO	4C+1CD
Packing List including transportation dimensions, weight ans drawing of equipment in shipment condition.		2W before delievery	4C+1CD	INFO	4C+1CD
Special Precautions For Handling Prior Erection		3M before Delivery	4C+1CD	INFO	4C+1CD
Recommendations For Storage Prior And During Erection		3M before Delivery	4C+1CD	INFO	4C+1CD
Proceudre For Site Assmebly, Levelling And Welding		3M before Delivery	4C+1CD	INFO	4C+1CD
Procedure Of Preparation Of Equipment For Commissioning		3M before Delivery	4C+1CD	INFO	4C+1CD
List Of Components To Be Erected/ Installed On Site		3M before Delivery	4C+1CD	INFO	4C+1CD
List Of Special Tools And Means For Erection And Assembly	Е	3M before Delivery	4C+1CD	INFO	4C+1CD
Recommendations for Protection during transportation		4W before Delivery	4C+1CD	INFO	4C+1CD
List Of Spare Parts Of Erection, Commissioning And Start-Up	Е	3M before Delivery	4C+1CD	INFO	4C+1CD
List of Spare Parts for (tbd) years operation Tbd=2 years, SPIR form as per 808588-PP-PRC-0008-1	Е	4W before Delivery	4C+1CD	INFO	4C+1CD
10. OPERATING INSTRUCTIONS					
Operating & Maintenance Manual		3M before Delivery	4C+1CD	INFO	4C+1CD
Installation, stat-up & Commissioning Manuals		3M before Delivery	4C+1CD	INFO	4C+1CD
List of Special Tools for Maintenance		3M before Delivery	4C+1CD	INFO	4C+1CD









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Part C: Extent of Supply

The supply shall include, but not limited to the following:

- All engineering activities needful to design and construct the Bus Ducts and other equipment and
 accessories included in the supply. Vendor shall survey the bus duct route and evaluate all necessary
 accessoris and consider them in the offer.
- Main Supporting Structures
- Horizontal & Vertical Fixing Hangers and all other installation accessories.
- Painting as per Painting specification.
- All services, materials etc related to fabrication, manufacture, assembly, testing, inspection, and packing, marking of Bus Ducts and other equipments and accessories.
- Storage up to transportation.
- Delivery as indicated in bid Inquiry letter.
- Technical documentation and Bus Duct's handbook containing any necessary instruction and detail for installation, operation and maintenance (drawings, catalogues, brochures etc.).
- Assistance to erection, installation, commissioning and start-up.

All components (Mechanical, Electrical, Instrumentation, etc.) and devices not mentioned in this specification but necessary for engineering, proper operation, control and safety of the Bus Ducts shall be included in the vendor scope of supply.

It shall be responsibility of Bidder to suggest during the bid stage any additional appropriate components to be included in the scope of supply and any modifications to improve the reliability / safety of the Bus Ducts, on the basis of his experience and practice.

Vendor shall be responsible for the total guarantee of Bus Ducts (materials, design, performances). Vendor shall have overall responsibility for the co-ordination with his sub-vendors, and for the proper execution of any accessory, item assembly, testing, delivery and any other service defined herein.

In the event of a contradiction or difference between standards and codes, the most restricting document will prevail.

Any contradiction or difficulty to interpret the above listed points raised by Vendor shall be notified to PURCHASER for clarification. Design and manufacture cannot be started before having clarified the said discrepancies.

Part D: Exclusions

Vendor's scope of supply shall not include:

- Civil Foundations
- Installation and connection of equipment.
- · Local grounding grid and relevant connections

N.B: Others will perform all civil works. The Vendor shall provide the detailed foundation drawing indicating weights and all dimensions.











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Part E: Vendor's Compliance

- Vendor shall submit their bid in full compliance with the requirements of this MR and attachments.
- Any exceptions or deviations from the MR shall be clearly stated in the deviation list (as a part of confirmity letter) and shall be submitted along with the bid.
- If no exceptions are specified, we will consider that the bid is in completely in accordance with the MR
 and relevant documents.
- Vendor shall also quote separately all the alternatives requested in this MR and its attachments.
- Vendor shall submit along with the offer the "Letter of Confirmity with deviations(if any)" duly filled and signed
- Compliance with this MR in any instance shall not relieve the vendor of his responsibility to meet the specified conditions/obligations.







(VENDOR)



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Part F: Letter of Conformity

TO:									
FROM	/ :(VENDOR)								
Here	with we confirm that our q	uotatior)(QUOTATIO		sponse to				
your	inquiry	d	ated		is fully in				
	(PURCHASER INQUIF	RY)	(1	DATE)					
acco	dance with the conditions	as stat	ed therein and we	e confirm that all	technical				
adhe	requirements as stipulated in the above mentioned inquiry documents have been adhered to, except deviations listed in the exception/deviations form as follows in the table with this format:								
Sr. No.	Section of the MR	Page No.	Article or Paragraph No.	Requirement	Exception	Remarks			
1	(Material Requisition)	INO.	· an angle approved						
2									
	o Exception / Deviation xceptions/Deviations are	nention	ed in the attached	d Table.					
				Date, Sig	nature				