



# SUPPLIER DOCUMENT COVER SHEET

## Greater Stella Development Project



Supplier Name: TM.P  
 Purchase Order Title: JI-675-PPFM-002# EXPORT OIL & BOOSTER PUMPS  
 Equipment / Tag Number: P-0152 A/B EXPORT OIL PIPELINE MESB150.11 PUMPS  
 P-0158 A/B 100AP50 BOOSTER PUMPS  
 Supplier's Document No.: 1252195331 R01

### Supplier's Issue Record

Rev	Date	Issue	By	Checked	Approved
02	03/07/13	REVIEW	LAZZERI	LAZZERI	MUSSI
01	20/06/13	FIRST ISSUE	LAZZERI	LAZZERI	MUSSI

### Project Document Number

Purchase Order Number	Document Type Code	Discipline Code	Seq. No	Revision	Revision Date
JI-675-PPFM-002	P02	M	001	02	03/07/13

**DOCUMENT TITLE:** PREPARATION FOR SHIPPING WITH RECOMMENDED HANDLING AND STORAGE PROCEDURE

### SUPPLIER DOCUMENT REVIEW

Purchaser's review of Supplier's documents does not relieve Supplier of the responsibility for correctness under the Purchase Order. Permission to proceed does not constitute acceptance of design, detail and calculations, test methods or materials developed or selected by the Supplier and does not relieve the Supplier from full compliance with the Purchase Order or any other obligations, nor detract from any of the Purchaser's rights.

	A	B	C	D	E
SIGNATURE	<i>[Signature]</i>				
DATE	9/4/13				

- CODE 1** - Accepted. Work may proceed.
- CODE 2** - Accepted With Comments. Revise and re-submit, but work may proceed subject to the incorporation of Purchaser comments.
- CODE 3** - Rejected. Revise and re-submit, but work may NOT proceed until the incorporation of Purchaser comments and approval received by Supplier
- CODE 4** - Information only Accepted for Information Only.

**IMPORTANT**

*If the Supplier considers that any comments made by the Purchaser change the Scope of Supply the Supplier shall advise the price and delivery implications of such changes within five working days of receipt. The Supplier must not incorporate such changes without prior approval of the Purchaser of the revised price and delivery implications. RETROACTIVE CHANGES WILL NOT BE CONSIDERED.*

The document consists of this front sheet plus pages.

TERMOMECCANICA GROUP	<b>COMPANY TECHNICAL STANDARD</b>	1252195331 R01
	<b>PREPARATION FOR SHIPPING WITH RECOMMENDED HANDLING AND STORAGE PROCEDURE</b>	

***PREPARATION FOR SHIPPING WITH RECOMMENDED  
HANDLING AND STORAGE PROCEDURE***

01	03/07/13	REVIEW		Lazzeri		Lazzeri		Mussi
00	20/06/13	ISSUE		Lazzeri		Lazzeri		Mussi
<b>Rev</b>	<b>Date</b>	<b>Description</b>	<i>func.</i>	<i>signature</i>	<i>funz.</i>	<i>signature</i>	<i>funz.</i>	<i>signature</i>
			<b>Written by</b>		<b>Verified</b>		<b>Approved</b>	

TERMOMECCANICA GROUP	<b>COMPANY TECHNICAL STANDARD</b>	1252195331 R01
	<b>PREPARATION FOR SHIPPING WITH RECOMMENDED HANDLING AND STORAGE PROCEDURE</b>	

## Table of Contents

1.	SCOPE.....	3
2.	APPLICABILITY .....	3
3.	REFERENCE DOCUMENTS.....	3
4.	ACTIVITY PERFORMANCE.....	4
4.1.	General notes .....	4
4.2.	Preparation of materials before packing.....	5
5.	TYPOLOGY OF PACKAGE.....	5
5.1.	General notes .....	5
5.2.	Packing Style Criteria .....	6
5.3.	Wooden crate construction sketch (typical).....	7
6.	MARKING .....	8
6.1.	Main shipping marks.....	8
6.2.	Auxiliary shipping marks.....	10
6.3.	Package number .....	11
7.	PACKING LIST .....	11
8.	SHIPPING .....	13

TERMOMECCANICA GROUP	<b>COMPANY TECHNICAL STANDARD</b>	1252195331 R01
	<b>PREPARATION FOR SHIPPING WITH RECOMMENDED HANDLING AND STORAGE PROCEDURE</b>	

## 1. SCOPE

The scope of this procedure is to define the prescriptions to be followed for the preparation of the packaging and for the shipping of the materials supplied by TM.P. S.p.A..

## 2. APPLICABILITY

This procedure shall be applied by TM.P. S.p.A and in particular by the external firm which is the warehouse management contractor.

## 3. REFERENCE DOCUMENTS

API 610 11<sup>TH</sup> Ed -"CENTRIFUGAL PUMPS FOR PETROLEUM, PETROCHEMICAL AND NATURAL GAS INDUSTRIES "

API RP 686 - "RECOMMENDED PRACTICE FOR MACHINERY INSTALLATION AND INSTALLATION DESIGN"

JI-675-PPFM-002 MB1 M 001  
JI-675-PPFM-002 MB1 M 002  
JI-675-PPFM-002 MD2 M 001  
JI-675-PPFM-002 MD2 M 002  
JI-675-PPFM-002 D01 M 002

P-0152 A/B PUMP GENERAL ARRANGEMENT  
P-0158 A/B PUMP GENERAL ARRANGEMENT  
P-0152 A/B PUMP DATA SHEET  
P-0158 A/B PUMP DATA SHEET  
P-0152 A/B & P-0158A/B WEIGHT DATA SHEET

JI-675-PPFM-002 Q03 M 001

P-0152A/B QC INSPECTION AND TEST PLAN FOR PUMP PACKAGE

JI-675-PPFM-002 Q03 M 002

P-0158A/B QC INSPECTION AND TEST PLAN FOR PUMP PACKAGE

TERMOMECCANICA GROUP	<b>COMPANY TECHNICAL STANDARD</b>	1252195331 R01
	<b>PREPARATION FOR SHIPPING WITH RECOMMENDED HANDLING AND STORAGE PROCEDURE</b>	

## 4. ACTIVITY PERFORMANCE

### 4.1. General notes

All the packed materials shall be appropriately secured on the bottom of the case, in order to prevent shifting during shipping.

All auxiliary tubing supplied loose must carry a metal identification label with the reference number of the appropriate assembly instructions drawing.

All detached parts accompanying the machine, such as flexible coupling must be protected with grease, wrapped separately in anti corrosive waxed paper. Mechanical seals shall be protected with a film of vaseline.

Small or sophisticated parts of instruments and Electric equipment shall be packed in waterproof wooden box and attention shall be made to prevent damage from moisture as well vibration during the transportation.

Commissioning, capital spares and special tools shall be packed in separate boxes inside the main package. The boxes shall be individually tagged and marked Tag number of spare parts shall be described in the packing list as an identification number so that client distinguish them at jobsite.

The packing and the preservation are suitable for 6 months storage.

TERMOMECCANICA GROUP	<b>COMPANY TECHNICAL STANDARD</b>	1252195331 R01
	<b>PREPARATION FOR SHIPPING WITH RECOMMENDED HANDLING AND STORAGE PROCEDURE</b>	

#### 4.2. Preparation of materials before packing

All materials should be dry, clean, and free from all defects prior to packing protection against environmental corrosion caused by extremes of humidity, condensation, rain, dust, sand, salted air, and sea spray.

All threaded areas on oxidable materials shall be adequately greased and covered with adequate protective shield to protect mechanical damage.

Unpainted machined surfaces of oxidable material, shall be cleaned, dried and coated with Valvoline Tectyle 506 or similar rust preventative. For long-term storage a periodical check of coating shall be carried out and if protective film is broken, it shall be restored for continued storage.

The type and quantity of rust preventatives employed shall be clearly stated outside the equipment.

Internal surfaces of an assembled unit as antifriction bearing and bearing support shall be protected with lubricating oil.

All internal surfaces of any piping materials disassembled from materials for ease of shipment shall be free of scale and all other foreign matters.

Pump flange and piping end flanges shall be protected with bolted-on steel plate (minimum 6mm thick, 4 bolts) with rubber gaskets between the flange and the steel plate.

Silica gel, if required, shall be used to protect all internal metallic surfaces of equipment. The type and quantity of silica gel enclosed shall be clearly stated outside the equipment.

Exposed ( unpainted) shaft of pumps, motors and other equipment are coated with a suitable preservation grease or other acceptable water resistance substances.

## 5. TYPOLOGY OF PACKAGE

### 5.1. General notes

The packaging shall be apt to preserve the goods from weather, both on ground and at sea. Six months storage at open yard shall be considered.

the packing crates will be provided with support under the pump base frame structures to take the load off the gimbals.

#### Full Assembly of Equipment

Complete shipment must be made. No unauthorized partial shipments are allowed. Equipment shall be shipped fully assembled whenever practical. When it is not possible to ship equipment fully assembled, it shall be the Vendor's responsibility to disassemble equipment so that it can be properly packed and protected, and to include instructions with the shipment for assembly of equipment after delivery to the job site. The Packer shall disassemble equipment for packaging in accordance with the instructions by the Vendor.

TERMOMECCANICA GROUP	<b>COMPANY TECHNICAL STANDARD</b>	1252195331 R01
	<b>PREPARATION FOR SHIPPING WITH RECOMMENDED HANDLING AND STORAGE PROCEDURE</b>	

#### Quality of Packing Material

All packing material shall be new with highest quality and selected and applied in compliance with good engineering/manufacturing/construction practice.

Second-hand case, crate and/or any other type of wooden packing material constructed with "used" timber are not acceptable.

#### Spare Parts

Initial (start-up) spares and operational spares, if and when ordered, must always be packed in separate case respectively.

The packaging shall also be prepared for various loading and unloading operations which it shall undergo, from the shipping to the installation on jobsite. and solidly made to be suitable for all mechanical and inland transportation.

The packaging provision for supporting and overburden of three or four layers of general cargo shall be included in package design and construction.

The closure of the cases (crates) must happen with nails of section and length dimensioned to the thickness of the tables.

### 5.2. Packing Style Criteria

The packaging for each category of item shall be the following:

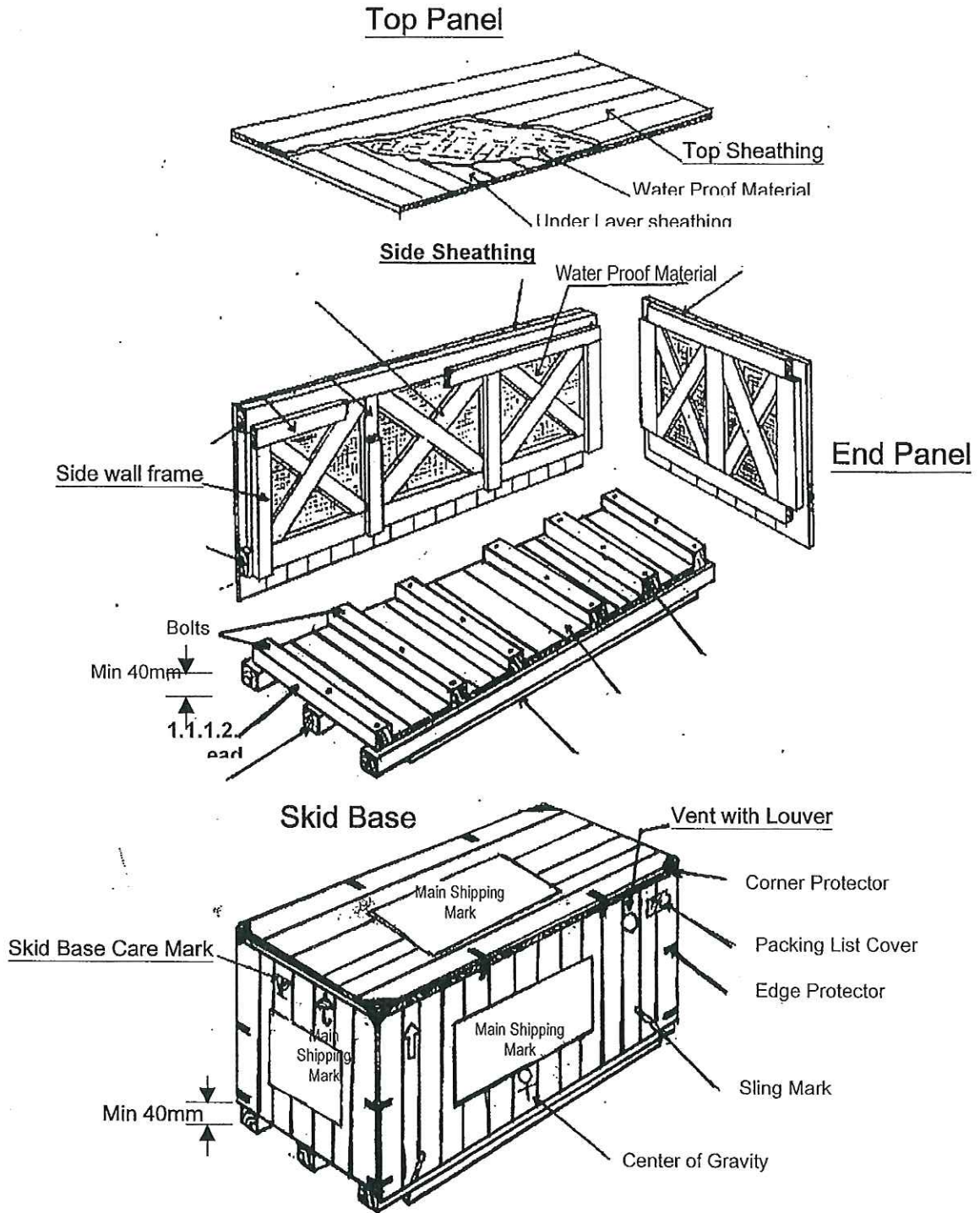
- Pump: waterproof wooden crate
- Electric motor: waterproof wooden crate
- Steel structure: waterproof wooden crate
- Terminal boxes, cables: waterproof wooden crate

Packing shall be suitable for 2 months sea transportation and for 6 months outdoor storage.

The size of the packing crates will not exceed the maximum allowable sizes for road transport, if shipment by road is chosen for shipment (by Others) to the job site.

TERMOMECCANICA GROUP	<b>COMPANY TECHNICAL STANDARD</b>	1252195331 R01
	<b>PREPARATION FOR SHIPPING WITH RECOMMENDED HANDLING AND STORAGE PROCEDURE</b>	

Wooden crate construction sketch (typical)





TERMOMECCANICA GROUP	<b>COMPANY TECHNICAL STANDARD</b>	1252195331 R01
	<b>PREPARATION FOR SHIPPING WITH RECOMMENDED HANDLING AND STORAGE PROCEDURE</b>	

The crate shall be made according to the following criteria:

Net Weight (kg)	Floor-Sides-Roof sheathing Minimum Thick. (mm)	Bottom Skids Min. Section (mm)	Headers Min. Section (mm)	Side Wall Frame Sect. (mm)
300 - 1000	20	80 x 80	80 x 80	/
1000 - 1500	20	100 x 100	80 x 80	100 x 30
1500 - 6000	20	120 x 120	80 x 80	100 x 35
6000 - 9000	25	150 x 150	100 x 80	100 x 35
9000 - 20000	30	200 x 200	100 x 100	100 x 45

## 6. MARKING

### 6.1. Main shipping marks

The crate shall be clearly marked on three sides (long sides and top) with capital letters black painted.

The size of letter must be determined according to package size, as follows:

Length of package (mm)	Size of letter (mm)
Under 1000	25 x 20
1001 ~ 3000	40 x 30
3001 ~ 5000	50 x 40
5001 ~ 10000	60 x 50
10001 or more	80 x 70






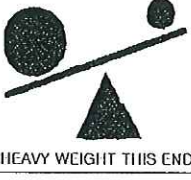

TERMOMECCANICA GROUP	<b>COMPANY TECHNICAL STANDARD</b>	1252195331 R01
	<b>PREPARATION FOR SHIPPING WITH RECOMMENDED HANDLING AND STORAGE PROCEDURE</b>	

The following information must be indicated:

PORT OF SHIPMENT : (Shipping Port)  
 PORT OF DESTINATION :  
 CONSIGNEE :  
 NET WEIGHT : KGS  
 GROSS WEIGHT : KGS  
 MEASUREMENT : (L) CM x (W)CM x (H)CM  
 PACKAGE NO. :  
 PROJECT NAME :  
 CONTRACT NO. :  
 P/O NO. : (PURCHASE ORDER NO.)  
 ITEM DESCRIPTION : (GENERALIZED NAME)  
 L/C NO. :  
 COUNTRY OF ORIGIN : (COUNTRY OF ORIGIN)

TERMOMECCANICA GROUP	<b>COMPANY TECHNICAL STANDARD</b>	1252195331 R01
	<b>PREPARATION FOR SHIPPING WITH RECOMMENDED HANDLING AND STORAGE PROCEDURE</b>	

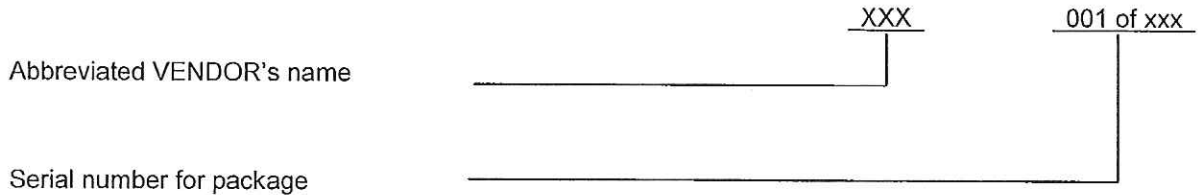
**6.2. Auxiliary shipping marks**

NO	Name of mark	Stenciled marks and letters	Remarks
1	Center of gravity		At the center of Gravity
2	Sling		Where sling wire is To be applied
3	Top		When package cannot Be placed upside Down
4	Keep dry		For boxes that need protection from water and moisture
5	Handle with care		For fragile cargo
6	Heavy weight this end		When center of gravity is on one side
7	Danger		For boxes containing Dangerous and toxic materials

TERMOMECCANICA GROUP	<b>COMPANY TECHNICAL STANDARD</b>	1252195331 R01
	<b>PREPARATION FOR SHIPPING WITH RECOMMENDED HANDLING AND STORAGE PROCEDURE</b>	

### 6.3. Package number

Package number shall be included in the packing list and the serial No. of package shall start from 001 up to the number required. In principle, the package number within the main shipping mark of each package shall be as follows:



## 7. PACKING LIST

Two copies of packing list in a waterproof plastic envelope shall securely be nailed under a galvanized outside steel cover on the both surface of the package. The packing list shall correspond to effective content of the package. Other documents to be attached to the package, if necessary, are shown in the Special Packing and Shipping Instructions.

Packing list cover page.

Shipper/Exporter		No. & date of invoice			
For account & risk of Messer's		Remarks:			
Notify party					
Port of loading	Final destination				
Carrier	Sailing on or about				
Marks and numbers of PKGS	Description of Goods	Quantity	Net weight	Gross weight	Measurement

TERMOMECCANICA GROUP	<b>COMPANY TECHNICAL STANDARD</b>	1252195331 R01
	<b>PREPARATION FOR SHIPPING WITH RECOMMENDED HANDLING AND STORAGE PROCEDURE</b>	

PORT OF SHIPMENT	:	(Shipping Port)
PORT OF DESTINATION	:	
CONSIGNEE	:	
NET WEIGHT	:	KGS
GROSS WEIGHT	:	KGS
MEASUREMENT	:	(L) CM x (W)CM x (H)CM
PACKAGE NO.	:	
PROJECT NAME	:	
CONTRACT NO.	:	
P/O NO.	:	(PURCHASE ORDER NO.)
ITEM DESCRIPTION	:	(GENERALIZED NAME)
L/C NO.	:	
COUNTRY OF ORIGIN	:	(COUNTRY OF ORIGIN)

Packing list Detailed Item List.

No. of PKGS	Description of Goods	Quantity	Net- weight (KGS)	Gross- weight (KGS)	Size (CM x CM x CM)	Measurement (CBM)

TERMOMECCANICA GROUP	<b>COMPANY TECHNICAL STANDARD</b>	1252195331 R01
	<b>PREPARATION FOR SHIPPING WITH RECOMMENDED HANDLING AND STORAGE PROCEDURE</b>	

## 8. SHIPPING

The following documents are required for the shipping:

- 1) Packing List
- 2) Invoice

### Inspection and shipment

The vendor shall be responsible for completion of customer inspection requirements and may not ship materials before receiving

Inspection Release Certificate.

### Partial Shipment

No partial shipment is allowed, unless approved in writing by customer.

### Complete Units

Shipment of machines or machine assemblies shall be basically made as a complete unit including special tools.