Base Load Power Hub (BLPH)

# ULTRASONIC FLOWMETER

# SHIPPING, HANDLING, STORAGE and PRESERVATION PROCEDURES

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Document Class: 3

ROSETTI MARINO

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| 1 | APPROVED - WORK MAY PROCEED |
| 2N | REVISE AND RE-SUBMIT - DO NOT PROCEED |
| 2Y | REVISE AND RE-SUBMIT - WORK MAY PROCEED |
| 3 | REJECTED |
| 4 | APPROVAL NOT REQUIRED |

*NOTE: Approval doesn't relieve the supplier from mandatory compliance with contractual documents and specifications. Comments made do not imply acceptance of any cost or delivery impact.*

| Sign | Date |
|---|---|
| Rossi Leonardo | 21/10/2024 |

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| 00 | 18/10/2024 | Issue for Information (IFI) | BH DC | Tom Griffin | Niall Townsend |
| Rev. | Date | Description | Prepared | Reviewed | Approved |

Baker Hughes

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## Revision / Change Log

| Rev. | Description |
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## HOLDS LIST

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**Title: Preservation, Packing and Marking Procedure**

**Procedure Number: PS-411** **Revision: T** **Date: 27/June/2023**

## 1.0 SCOPE

This document specifies the preservation method, packing and marking requirements to be applied to all products for export.

## 2.0 REFERENCES

| | |
|---|---|
| PS-017 | Dangerous Good Packing Procedure |
| PS-020 | Shipping Process |

## 3.0 PRESERVATION METHOD

Products for export shall undergo the following preservation procedure prior to being packing in boxes / crates.

**3.1** The Packer shall perform an inspection to ensure the material is clean & dry.

**3.2** In the case of sample systems entry and exit fittings shall be sealed off using protective material compliant with preservation requirements to prevent the nuts vibrating loose during transportation and to prevent entry of foreign matter.

**3.3** All Electronic units shall to be packed in a box or crate and shall be wrapped in 400/500-gauge Polythene film with desiccant added, and sealed off using plastic adhesive tape. Sharp edges shall be protected using protective material compliant with preservation.

**3.4** In the case of electronic instrument packaging, a sachet of desiccant (silica gel granules) shall be enclosed within the shipment.

**3.5** Sachets of desiccant (silica gel granules) shall be located / stored in re-sealable containers mounted on either side of all packing stations to prevent moisture content being absorbed prior to packing.

## 4.0 PACKING

Box sizes and creates are allocated based on product type see appendix 1.
For special non-standard packing see 4.3

## 4.1 Airfreight

Material for airfreight shall be packed in cardboard boxes except for Special packing requirement covered in 4.3 below

A minimum allowance of 25mm for packing all around the goods shall be factored in when there is a customised requirement.

**4.1.1** Having selected a box, line the base of the box with foam / aero board lining

**4.1.2** Place the wrapped package in the centre of the foam / aero board lining

**4.1.3** Fill up the remaining space within the box with Padpak expandable corrugates or instapak pre-formed foam.

**4.1.4** Ensure slight overfill of aero beads is applied before closing the box lapels.

**4.1.5** Strap the box shut using 10mm wide plastic strapping. The number of straps to be applied shall be 2 or increased as necessary.

## 4.2 Sea freight

The packer will check for a customer's specification in SAP and where specified sea-freight packing shall be observed.



## 4.3 Special Packing

Non-standard product will be packed as specified below: -

### 4.3.1 Cable

Depending on cable type, Cable >80-100m length is packed on reels, constructed using 10mm thick plywood. Reels are secured with timber screws and strapping to a pallet.





### 4.3.2 Transducers with Isolation Valves and Spool-pieces.

This equipment is packed in custom specific cardboard boxes with timber floors and polyethylene inserts ISTA 51 drop test certified. This is also fitted with external ribbing for strengthening purposes. used to retain parts within the box to prevent movement of the material during transport. For non-standard IMA lengths, we will use plywood boxes where applicable.

### 4.3.3 Sample Systems in Large Weatherproof Enclosures

'Standard' sample systems will be packaged in boxes with foam corner inserts (on each corners- top/bottom) with the box sizes based on the below matrix and as per below pictures.

| Box Dimensions | Enclosure Part No. | Enclosure Size |
|---|---|---|
| 865 x 780 x 390 | 425-607 | 760 x 600 x 210 |
| 865 x 780 x 390 | 425-608 | 760 x 600 x 210 |
| 865 x 780 x 390 | 425-581 | 760 x 600 x 210 |
| 905 x 865 x 390 | 425-611 | 760 x 600 x 300 |
| 905 x 865 x 390 | 425-612 | 760 x 600 x 300 |
| 905 x 865 x 390 | 425-633 | 760 x 600 x 300 |
| 1105 x 940 x 390 | 425-613 | 1000 x 800 x 300 |
| 1105 x 940 x 390 | 425-614 | 1000 x 800 x 300 |
| 1105 x 940 x 390 | 425-640 | 1000 x 800 x 300 |







Large sample system in excess of 1000mm x 700mm will be crated and secured with fixing bolts to a pallet.
Any system smaller than the above size will be packed into cardboard boxes lines with 2-inch aero board.
**No double packing**

### 4.3.4 Clean Gas Analysers

All CGA units shall be packed as per Para. 4.1.1 to 4.1.6. If additional parts are required on the sales order, the box shall be placed inside a larger box and the remaining space shall be filled to overflow with Padpak expandable corrugates or instapak pre-formed foam.

### 4.3.5. Flowcells

- Flowcell shall be packed in timber crates.
- Flowcells shall be put in position in crate on the upright chocking supports.
- Flowcell shall be supported in place in crate using timber battons.
- Foam is placed under the batton before they are screwed into place.
- If a Flowcell Tag Plate stops you from securing the batton a foam insert is also placed underneath the batton.
- The ends of the flowcell shall be sealed with a plywood disc to ensure no damage is done to the raised face on the flange. When all the above is completed the crate shall be sealed up & is then ready for shipping.

## 5.0 BOX MARKINGS

### 5.1 Stencil Markings

Standard shipping marks are created using A3/A4 laminated sheets which are affixed to the box using adhesive and staples. For customer requiring a permanent ink, stencils are procured locally .




### 5.2 Labels

All Boxes now come with international shipping labels incorporated ie Fragile, Keep upright and Keep Dry.

### 5.3 Packing List

A packing list shall be attached to each box. The packing list shall be enclosed in an adhesive backed plastic wallet (waterproof) which is attached to the box. Metal plates are supplier when required by our customer.




## 6.0 HAZARDOUS GOODS

### 6.1 Electrolyte Solution for Servomex Cells

In accordance with the IATA Regulations governing the transport of hazardous goods, electrolyte solution shall be packed as specified below.

**6.1.1** Electrolyte shall be packed in special 4G UN-BOX 4G/X16. A single shipment shall not exceed a volume = 5 Litres or weight =30Kg.

**6.1.2** The bottom of the box shall be lined with aero board.

**6.1.3** Place containers in an upright position in the box ensuring that there is at least 25mm space all around the periphery to accommodate packing.

**6.1.4** Fill remaining space with Padpak expandable corrugates or instapak pre-formed foam to prevent movement of the containers within the box.

**6.1.5** Place a sheet of 25mm thick aero board on top and seal with tape.

**6.1.6 Labelling and Markings**

Only operatives with the relevant dangerous goods training will be allowed to apply the following labels for shipment of dangerous goods, in accordance with IATA regulations.

This is an example of Labelling required on a Class 8 and Class 9 Dangerous Goods







Note: Arrows up, class 9/8 & UN number 3363/1814 labels

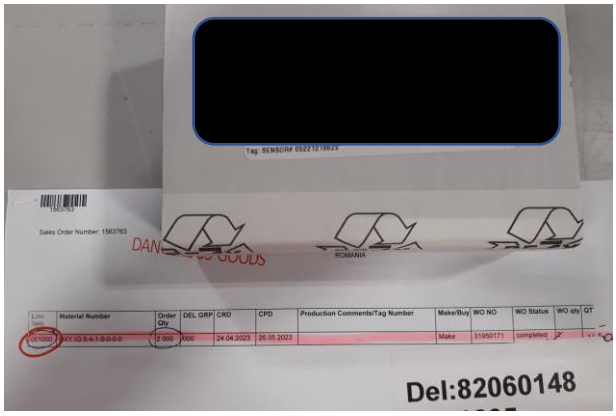
Once complete the Dangerous Goods Declaration will be completed and then placed on the box along with the AWB ready for collection.



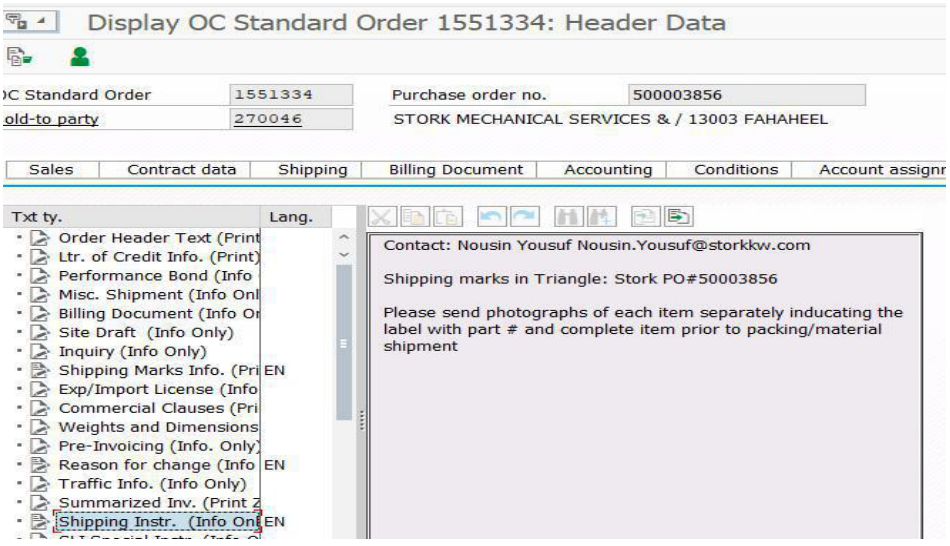
## 7.0 S.O.P Shipping

**7.1** Boxes come from staging (if C.P.T. – Jamie/Dylan) everything else goes to location 555

**7.2** Product taken from location 555, checks are carried out to ensure the label (s)on the part (s) match up with the information on the traveller.




**7.3** Check to see if there are any special shipping instructions (photo's, barrier bagged, crated, nett weights per line).




**7.4** Pack into required packaging, attach Sales Orders and Delivery Numbers to the outside of the boxes.

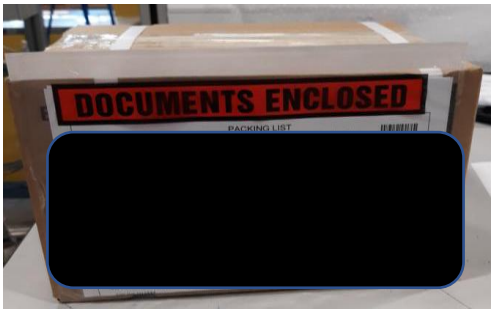


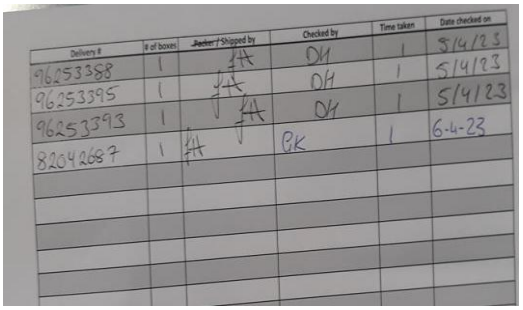

**7.5** Get weights and dimensions in mm and kg's.

**7.6** Transact on S.A.P. and enter volume (shelf location in shipping)

**7.7** Print packing list, verify that the packing list and labels have the same Sales Orders and Delivery Notes.

**ENSURE BUDDY CHECK IS CARRIED OUT ONCE ALL LABELS, PACKING LIST AND AIRWAY BILL ARE ON PLACE.**




**7.8** Physically place the product into the correct location, ensuring the labels are visible.




**7.9** Place traveller document into designated location on the shelf to be scanned against that working day for reference later if required.



## 8.0 LONG TERM STORAGE

**8.1** The equipment to be stored should be maintained in its original transit packaging.

**8.2** Stores parts/shipping crates /production parts /documentation / equipment / Orders “On-Hold” may be stored offsite.

- The storage area shall be indoors and be a clean, dry, level surface, away from, or protected from vehicular traffic and protected from direct sunlight.
- The Shipping Supervisor shall maintain a log of Parts / Orders at Off-site storage.
- The offsite storage company shall provide an electronic stock sheet.
- The Shipping Supervisor shall cross check this with the site log to verify integrity of records.

**8.3** The storage area should not be subject to:

- Contaminant Sources. i.e., saliferous or sulphurous atmospheres.
- Variation in temperature or high humidity.
- Limits: Temperature: -5 to +35 Deg C
- Relative Humidity: 0 to 60% RH.

**8.4** Equipment packing cases over 25kg shall not be stacked.

**8.5** When removing items from storage a visual inspection on the outside of the package should be performed to ensure packing is still adequate i.e., not affected by moisture, rodents etc.

**8.6** Large parts/crates being returned to site from off-site storage may have to be brought on-site via shipping entrance. They shall bear suitable identification, to prevent any inadvertent shipping during congested periods.

**Title: Preservation, Packing and Marking Procedure**

**Procedure Number: PS-411** **Revision: T** **Date: 27/June/2023**

## APPROVALS / REVISION RECORD

| REV NO | PARA. NUMBER | REVISION |
|---|---|---|
| R | 4.3.3 | Updated reference to Sample System Packaging & Inclusion of Dangerous Goods Requirements DCO# 1955 |
| S | 7.0<br>2.0 | New S.O.P section added DCO# 2251<br>Removed PS-018,PS019, PS470, Added PS017,PS020 |
| T | Approvals / revision record table<br>Throughout | Updated to only show the lates 3 revisions and the Approver "Technical" changed to "Process Owner" DCO# 2262<br>Removed redundant information & blanked out redundant/data sensitive portions of photos |

## APPROVALS

| REV | SIGN/DATE | SIGN/DATE | SIGN/DATE |
|---|---|---|---|
| T | TJ Chorba 27-June-2023 | Niamh Cahalan 27-June-2023 | N/A |
| S | RK 27/04/23 | ES 27/04/23 | FH 27/04/23 |
| R | PP 18/09/2017 | PT 18/09/2017 | N/A |
| | **PREPARED BY** | **Q.A.** | **PROCESS OWNER** |