

# Turbomachinery & Process Solutions

<ARSB-O&G-002 | Rev. 2.1>

# <Supplier requirements for Box & Packing and Preservation>

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**Document Revision Chart**

The following chart lists the revisions made to this document tracked by version. Use this to describe the changes and additions each time this document is re-published. The description should include as many details of the changes as possible.

#.#	Section Modified and Revision Description	Date	Author
1.0	First Issue	21 Apr 2009	Baragatti G, Grillo S, Frati M
2.0	Main changes: updated par 3.0; added par 3.1 for Box & Packing and par 3.2 for Marking; updated the "Appendix"	14 Feb 2019	Faiella, Bartolomeo
--	Document rebranded (BHGE GE Company > Baker Hughes)	08 April 2020	Carolina Biondi
2.1	Update due to GE Separation: replaced <a href="#">GE O&amp;G QMS Lexicon</a> with <a href="#">BHOS Glossary Link</a> .  <i>This revision does not require a formal approval process.</i>	11 May 2022	QMS

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## 1.0 Purpose

This procedure is intended to give quality requirements regarding the Box & Packing, internal and external preservation of the items purchased by Baker Hughes-TPS-Nuovo Pignone. The requirements will be applicable for both storage at Supplier's or Baker Hughes -TPS-Nuovo Pignone locations.

## 2.0 Scope/Application

This procedure applies to all purchases made by Baker Hughes-TPS-Nuovo Pignone business entities located in Italy.

## 3.0 Procedure

Supplier shall preserve the goods during production and service provision, to the extent necessary to ensure conformity to requirements, according to minimum duration stated in table 1.

If any specific packing and/or preservation requirement is applicable to purchase order, supplier shall comply with this. Supplier shall check if goods are suitable for storage type stated in table 1 and ask for deviation if not.

Supplier shall provide preservation instructions. They must be included both into the Maintenance Manual (as a separate paragraph "Preservation and re-preservation activities") and into the Box of the Equipment delivered. Instructions shall indicate all detailed work activities to extend or renew the preservation after the expiration date

### 3.1 Box & Packing

Supplier shall comply to ITN54750.00 and provide packing according to it in case of:

- additional line is added by Buyer in related PO (e.g. line 1001)
- specific requirement is present in Quality Requirement List (QRL) document
- requirement added onto Technical specification/Purchasing specification
- additional request by TPS via proper tools (e.g. BQF, SDR)

**In all other cases supplier must comply with ITN54760.**

### 3.2 Marking

Supplier shall comply with ISO780 standard marking and provide a packing plate applied on the external side of the packaging with following information:

- Preservation start date
- Preservation expiration date
- Storage type as per table 1

These last 3 information shall be reported also on packing list/delivery note in addition to the standard shipping information. Bar code or QR code with encoded above information is a nice to have.

Supplier shall also comply with labelling requirements stated in ARSB-O&G-005.

#### **4.0 Quality Records**

No Quality Records are produced by this procedure

#### **5.0 Terms, Definitions and Acronyms**

Refer to [BHOS Glossary Link](#) for Terms, Definitions and Acronyms. Acronyms have been repeated here for convenience purposes

**BQF:** *Bid Qualification Form*

**GT:** *Gas Turbine*

**PO:** *Purchase Order*

**QR:** *Quick Response Code*

**RC:** *Reciprocating Compressor*

**SDR:** *Supplier Deviation Request*

**TPS:** *Turbomachinery Process & Solutions*

#### **6.0 References**

[BHOS Glossary Link](#)

ISO 9001:2015 section 8.5.4 "Preservation"

ISO/TS 29001:2010 section 7.5.5 "Preservation of product"

ISO 780:2015 "Packaging -- Distribution packaging -- Graphical symbols for handling and storage of packages"

ITN54760 – Minimum requirements for the packaging of products by suppliers

ITN54750.00 – General requirement for outdoor storage, packaging and final MARKING

ARSB-O&G-005 – Supplier Requirements for Completeness Process

#### **7.0 Compliance Requirements**

Full compliance required by publication date

## 8.0 Appendix/Attachments

Equipment Type	Minimum Preservation Duration (Months)	Storage Type
Skid machines and GT auxiliaries with supporting base, Engine pumps	12	D
Auxiliary skids for cooling, lubricating oil and seal control units	12	D
Steam turbine condenser, gas turbine regenerators	12	D
High Speed Power Turbine modules	12	D
RC Cylinders, RC Crankcase	12	D
Rotors, diaphragms, gaskets, bearings, dry gas seals and spare parts	12	B
Rotors, diaphragms, dry gas seals and spare parts in pressurized container	12	D
Heat exchangers, tanks, volume bottles, separators, coolers, cooling units	12	D
Fans	12	D
Gas generator	12	D
Filter house modules / Exhaust ducts / Inlet ducts	12	D
Ventilation ducts with accessories	12	D
Filter cartridges	12	B
Gear Boxes	6	D
Vorecon	12	D
Structures/Carpentry	12	D
Piping, Tubing, threaded bars, Sketch tubes	12	D
Laminated	12	D
Foundations, nuts and bolts, accessories	12	D
Cylinder cabinet, Y strainer	12	B
Container, control cabinets, cylinders container	12	D
Valves, Coupling	12	B
Metal or PVC drums, containers in general for lubricating oil	12	D
Insulating material, hoods and acoustic panels	12	D
Imo material, batteries, electrolytes, inflammables, solvents	12	F
Exciter and Instruments with any radioactive component(s)	12	R
High Voltage Motors and Generators, Transformers	12	D
Low Voltage Motors and Generators	12	B
Cable reels	12	D
Control boards, electric panels, battery chargers	12	A
Instruments, electrical material, fittings	12	B

“A” – Air-Conditioned Closed Warehouse (From -20°C to +50°C Relative humidity max 80%)

“B” – Closed Warehouse

“C” – Warehouse in Shed

“D” – Warehouse in open air

“E” – Closed Air-conditioned Warehouse dangerous materials (From -20°C to +50°C Relative humidity max 80%)

"F" – Closed Warehouse dangerous materials

"G" – Warehouse in Shed \* dangerous materials

"I" – Closed Warehouse for dangerous materials in pressurized container (From -20°C to +50°C Max relative humidity 80%)

"L" – Closed Warehouse for dangerous materials in pressurized container

"M" – Warehouse in shed for dangerous materials in pressurized container

"H" – Open air Warehouse for dangerous materials in pressurized container

"R" – Radioactive material