
 PETROBRAS	TECHNICAL SPECIFICATION		Nº: I-ET-3010.2Q-1200-220-P4X-307				
	CLIENT:		MARLIM LESTE E SUL			SHEET: 1 de 5	
	PROGRAM:		BASIC DESIGN – REVIT I				
	AREA:		MARLIM LESTE E SUL			ESUP	
	TITLE:		VALVE INTERLOCK AND LOCKING DEVICE - SPECIFICATION				
					INTERNAL		
MICROSOFT WORD / V. 2013 / I-ET-3010.2Q-1200-220-P4X-307 _0.DOCX							
INDEX OF REVISION							
REV.	DESCRIPTION AND/OR REVISED SHEETS						
0	ORIGINAL ISSUE						
		REV. 0	REV. A	REV. B	REV. C	REV. D	REV. E
DATE		JUL/12/2024					
EXECUTION		CXDI					
CHECK		CJV5					
APPROVAL		U32N					
IN ACCORDANCE WITH DI-1PBR-00337, INFORMATION IN THIS DOCUMENT IS PROPERTY OF PETROBRAS, BEING PROHIBITED OUTSIDE OF THEIR PURPOSE.							
FORM OWNED TO PETROBRAS N-0381 REV. M.							

 PETROBRAS	TECHNICAL SPECIFICATION	Nº: I-ET-3010.2Q-1200-220-P4X-307	REV. 0
	MARLIM LESTE E SUL		SHEET: 2 de 5
	TITLE: VALVE INTERLOCK AND LOCKING DEVICE - SPECIFICATION		ESUP INTERNAL

CONTENTS


1. SCOPE.....3

2. NORMATIVE REFERENCES AND DESIGN SPECIFICATIONS3

3. DEFINITIONS AND ABBREVIATIONS.....4

4. REQUIREMENTS FOR VALVE MECHANICAL INTERLOCK4

5. REQUIREMENTS FOR VALVE MECHANICAL INTERLOCK5

 PETROBRAS	TECHNICAL SPECIFICATION	Nº: I-ET-3010.2Q-1200-220-P4X-307	REV. 0
	MARLIM LESTE E SUL		SHEET: 3 de 5
	TITLE: VALVE INTERLOCK AND LOCKING DEVICE - SPECIFICATION		ESUP
			INTERNAL

1. SCOPE

1.1. This specification covers the requirements for the interlock and or lock devices of valves defined to be interlocked and/or locked. This specification does neither define the criteria for determine if the valve requires any interlock device nor defines the operational sequence for applications.

1.2. The device to be used according to this technical specification are only mechanical type.

1.3. The requirements herein listed are applicable to all players performing such related activities within the scope of this unit, including manufacturers, packagers, suppliers, sub suppliers, integrators, constructors, and all technical personnel involved. Within the scope of this document, they are all referred to as being a SELLER.

1.4. This specification does not dispense the SELLER with the compliance with any reference specification, code, law, regulatory or classification society requirements herein informed or elsewhere in the contract.

1.5. In addition to the requirements of this technical specification, SELLER shall follow all the requirements of the Exhibit I (SCOPE OF SUPPLY), as well as Exhibit III (Directives for Engineering Execution), Exhibit IV (Directives For Construction and Assembly), Exhibit V (Directives for Procurement), Exhibit VI (Directives for Planning and Control), Exhibit VII (Directives for Quality Management System) And Exhibit VIII (Directives for Commissioning Process).

2. NORMATIVE REFERENCES AND DESIGN SPECIFICATIONS

2.1. CLASSIFICATION SOCIETY

2.1.1. SELLER shall perform the work in accordance with the requirements of the Classification Society.


2.1.2. SELLER is responsible to submit to the Classification Society the documentation in compliance with stated Rules.

2.1.3. Classification Society rules may only be waived upon the formal approval from the Classification Society itself and from BUYER.

2.2. CODES AND STANDARDS

2.2.1. The following codes and standards include provisions which, through reference in this text, constitute provisions of this specification. The latest issue of the references shall be used unless otherwise agreed.

2.2.2. Other recognized standards may be used, provided it can be shown that they meet or exceed the requirements of the standards referenced below. Formal approval from BUYER and from Classification Society is also required.

 PETROBRAS	TECHNICAL SPECIFICATION	Nº: I-ET-3010.2Q-1200-220-P4X-307	REV. 0
	MARLIM LESTE E SUL		SHEET: 4 de 5
	TITLE: VALVE INTERLOCK AND LOCKING DEVICE - SPECIFICATION		ESUP
			INTERNAL

#	N.	Title
\1\	ISO 14119	Safety of machinery - Interlocking devices associated with guards - Principles for design and selection.

2.3. GOVERNMENTAL REGULATION

2.3.1. Brazilian Government regulations are mandatory and shall prevail, if more stringent, over the requirements of this specification and other references herein.

2.4. DESIGN SPECIFICATION

#	N.	Document Title
\2\	I-ET-3010.2Q-1200-200-P4X-001	Piping Material Specification - Topside
\3\	I-ET-3010.2Q-1200-200-P4X-002	Piping Material Specification - Hull
\4\	I-ET-3000.00-1200-940-P4X-001	Tagging Procedure for Production Units Design.
\5\	I-ET-3010.00-1200-940-P4X-002	General Technical Terms
\6\	I-ET-3010.00-1200-970-P4X-013	Compliance With NR-13 and SPIE Requirements
\7\	I-ET-3010.00-1200-295-P4X-001	Requirements for Pig Launcher and Receiver Design
\8\	I-ET-3010.2Q-1200-220-P4X-001/002	Annex A - Valve Material Specification

2.5. CONFLICTING REQUIREMENTS

2.5.1. In case of conflicting requirements between this technical specification and other cited references, the most stringent shall prevail. If necessary, Seller shall revert to PETROBRAS for clarification.

3. DEFINITIONS AND ABBREVIATIONS

3.1. DEFINITIONS

All Terms and definitions are established in the latest revision I-ET-3010.00-1200-940-P4X-002 - GENERAL TECHNICAL TERMS.


3.2. ABBREVIATIONS

SS – Stainless steel

4. REQUIREMENTS FOR VALVE MECHANICAL INTERLOCK

4.1.1. The logical interlock system shall be defined prior to purchase interlock devices.

4.1.2. The logical may include other components beyond valves, example pig launcher and receiver openings.

 PETROBRAS	TECHNICAL SPECIFICATION	Nº: I-ET-3010.2Q-1200-220-P4X-307	REV. 0
	MARLIM LESTE E SUL		SHEET: 5 de 5
	TITLE: VALVE INTERLOCK AND LOCKING DEVICE - SPECIFICATION		ESUP
			INTERNAL

4.1.3. The devices of the interlock system shall be from the same manufacturer and purchased as a system or be compatible.

4.1.4. The adaption of the interlock device to components and valves shall be done according to valve manufacturer instructions. For different valve manufacturers, the system shall consider the instructions of all manufacturers.

4.1.5. The temperature on devices shall be less than 50°C, the device design and the installation position shall comply with this.

4.1.6. The material of the devices, including internal parts shall be SS 316.

4.1.7. Other materials may be accepted if approved by Petrobras. For temperature above 50°C, considerations for chlorite stress corrosion cracks shall be done prior to define the material.

4.1.8. The devices shall be purchased according to the requirements of ISO 14119 for mechanical type.

4.1.9. The device shall be purchased together with the valve or the valve manufacture.

4.1.10. Pig launcher and receiver and valves upstream PSV are example of systems that may require interlock.

4.1.11. Interlock system documentation shall be issued by vendor: Certified dimensional drawings with scale, exploded 3D view with parts identified, datasheets, IPT according to contract, data-book according to contract, spare parts list with commercial identification, tests reports.

4.1.12. Spare master keys shall be supplied with the system. These keys shall be kept at a safe box.

5. REQUIREMENTS FOR VALVE MECHANICAL INTERLOCK

5.1.1. For locking devices and warning plates refer to I-ET-3010.00-1200-970-P4X-013-ANNEX I.

5.1.2. For valves that required lock device, in the purchase order shall be indicate this requirement.