



Operational Sustainability, LLC[®]
Driving Operational Excellence[™]



Receiving Inspections Checklist: Plastic-Lined Pipe

Purchase Order #:	Line Item #:
Project / Work Order #:	Unit / Area:
SAP Material #:	Manufacturer / Supplier:
Description:	

Fill out one form for each PO line item. Indicate *Accept*, *Reject*, or *NA* for each question. Any rejection is a nonconformance. Record the nonconformance and the corrective action taken in the Remarks sections.

Table 1 – Plastic-Lined Pipe Checklist (see Appendix A for guidance)				
Criteria	Accept	Reject	N/A	Remarks
Quantity				
Damage				
Manufacturers Technical information (U-1, manuals, etc.)				
The manufacturer is an approved Supplier				
Nominal pipe size matches the PO				
Spool length matches the PO				
Flange classification matches the PO				
Liner identification bands are in place with the liner type appearing in raised letters				
Liner type description corresponds with the liner color (if applicable, Appendix B)				
If applicable, scan barcode from primary fabricator for compliance with the PO				
Heat number matches Material Test Report (MTR)				
Protective covers are in place and tight against the plastic liner				
Steel pipe housing for PTFE, PVDF, and PP lined pipe is vented				
Steel pipe housing for PTFE lined pipe has vent collars				
Paint and/or coating on steel pipe housing is not damaged				
Weld tabs / buttons are present on lap joint flanges for fittings and spools				

Table continued on next page.

Table 1 – Plastic-Lined Pipe Checklist (see Appendix A for guidance)				
Criteria	Accept	Reject	N/A	Remarks
Weep hole couplings are welded in place, if applicable				
Substitutions are not allowed without an approved MOC				
All documentation in the PO is included				

Additional inspections are required by the user	
Remarks:	
Signature	Date:
Receiving Inspection by:	
Nonconformance accepted by:	

APPENDIX
Receiving Inspections Checklist:
Plastic-Lined Pipe

Appendix A – Guidance

Receiving Inspection (RI) are required to ensure that materials that are used for Process Safety Critical Equipment and Spare Parts are in good condition and meet the required specifications before they are entered into inventory or used in the facility. This Procedure describes the requirements for performing RI on Plastic-Lined Pipe.

1. **Quantity** – Check the shipping documents to verify the correct quantity was received
2. **Damage**
 - Check the containers and material for obvious damage or contamination
 - Notify purchasing management immediately for any damage or contamination
3. **Substitutions**
 - Substitutions considered Replacement-In-Kind (RIK) shall be subject to engineering review and/or approval
 - Procurement personnel and suppliers do not substitute materials unless an MOC is first documented and authorized
4. **Acronyms**
 - ASTM American Society for Testing and Materials
 - NPS Nominal Pipe Size
5. **Sampling**
 - 5.1 Sample 5% of the product by heat or lot number
 - 5.2 If a piece in a sampled lot is found to be nonconforming, either reject the lot or perform a 100% inspection
6. **Certification**
 - 6.1 Verify that the following items match the product description on the PO:
 - NPS
 - Spool Length ($\pm 1/8$ ")
 - Flange Classification
 - 6.2 **Liner Identification**
 - Verify, if applicable, that liner identification bands are in place with liner type appearing in raised letters
 - Verify bands and liners are color-coded as shown in Appendix B
 - 6.3 **Supplementary Checks** (when applicable) – Scan barcode from primary fabricator for compliance with purchase requisition

7. Appearance

7.1 Protective Covers

- Ensure that protective covers are in place and tight against the plastic liner
- Caps shall be removed only prior to installation

7.2 Steel Pipe Housing – Visually inspect the finish and appearance for the following:

- Vent holes or collars
- Paint and/or coating in good condition
- Acceptable weld tabs / stops on lap joint flanges for fittings and spools
- Welded-on weep hole couplings, if applicable

8. References

- API 936 Refractory Installation QC

Appendix B – Manufacturers' Color Codes for Identification Bands and Liners

Table 2						
Material	Crane Resistoflex		Fusibond		3P	
	Tie Band	Liner	Tie Band ^a	Liner	Tie Band	Liner
Teflon [®] TFE	Natural ^b	Pure White	—	Pure White	White	Pure White
PVDF (pigmented)	Black	Black	—	Black	Black	Black
PVDF (unpigmented)	—	—	—	—	—	—
PP (pigmented)	Orange	Orange	—	Orange	Orange	Orange
PP (unpigmented)	Green	Milky White	—	—	—	—
Tefzel [®] TFE	Gray	Off White	—	Off White ^c	—	Off White ^c
Tefzel [®] PFA	—	—	—	Natural (Off White)	Gray	Gray
HIF ^d (Teflon [®] TFE)	Yellow	Pure White	—	—	—	—

^a No tie bands. Liner identified on end caps. Will identify liner with indelible paint.

^b Red on 12-in. pipe only

^c Does not meet ASTM F1545 for steam cycle, vacuum, and heat aging for ETFE

^d High-integrity flanges

Disclaimer

This document is presented solely for the purpose of providing guidance regarding Receiving Inspections, the facts and circumstances of your particular facility and business, as well as all risks inherent therein, should be considered in adopting or changing your Receiving Inspections, and addressed accordingly. Nothing herein should be construed to suggest that by following such guidance, you will be in compliance with applicable legal and regulatory requirements. In particular, Operational Sustainability, LLC® (OS) does not suggest that adopting this or any other policy will ensure the safe operation of your facility. You agree that you are solely responsible for all decisions made regarding Receiving Inspections for your facility, the determination and implementation of all policies and procedures regarding the same, and for the safe operation of your facility, and OS shall not be responsible for and disclaims any liability for any of the foregoing.



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