

Liquid-Applied Internal Protective Coatings for Oilfield Production Equipment

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ABSTRACT

This standard presents procedures for applying liquid coatings to the interior of various types of oilfield production equipment used primarily for the processing and storage of corrosive fluids in oilfield operations. It also details various factors required to obtain a satisfactory coating, including production equipment design and fabrication considerations, surface preparation, coating application, and inspection. This standard is maintained by Task Group 506.

KEYWORDS

Nonmetallics, internal coatings

Foreword

This standard practice provides guidelines for obtaining an effective internal coating or corrosion barrier to protect against general or pitting corrosion of production equipment commonly used in oilfield operations at atmospheric and elevated pressures. This standard is not applicable to the internal or external coating of tubing, casing, line pipe, or other tubular goods. This standard is intended for end users, applicators, and manufacturers.

This standard details various factors required to obtain a satisfactory coating, including production equipment design and fabrication considerations, surface preparation, coating application, and inspection.

Determination of the need for coating, selection of portions of the production equipment to be coated, and selection of a coating are outside the scope of this standard. These decisions must be based on the user's experience, knowledge of the system conditions, project economics, and environmental and safety considerations. Because numerous excellent coatings are available, no attempt was made to list all of the coatings suitable for this service.

This standard was originally prepared in 1981 by Task Group T-1G-20, a component of former Unit Committee T-1G on Protective Coatings and Nonmetallic Materials for Oilfield Use, to replace former NACE Standard RP0372. It was revised in 1994 by T-1G-20, and in 2006 by Task Group (TG) 087, "STG 33 Standards and Technical Committee Reports: Revision, Reaffirmation, or Withdrawal." It was revised in 2019 by TG 506, "Review of NACE SP0181-2006 (formerly RP0181)." TG 506 is administered by Specific Technology Group (STG) 33, "Oil and Gas Production—Nonmetallics and Wear Coatings (Metallic)," and sponsored by STG 03, "Coatings and Linings, Protective: Immersion and Buried Service." This standard is issued by NACE under the auspices of STG 33.

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Liquid-Applied Internal Protective Coatings for Oilfield Production Equipment

1.	General	4
2.	Definitions	4
3.	Production Equipment Design and Fabrication.....	4
4.	Coating Types	5
5.	Surface Preparation	6
6.	Application.....	8
7.	Inspection.....	9
8.	Cathodic Protection (CP)	10
9.	Laboratory and Field Testing.....	10
10.	Monitoring, Records, and Maintenance	11
11.	Safety Guidelines	11
	References.....	12
	Appendix A: Placing Caulking, Putty, or Filler—Mandatory.....	13
	Appendix B: Special Surface Preparation for Bolted Tanks—Mandatory.....	14
	Appendix C: Inspection Report on Production Equipment—Mandatory	15
	Appendix D: Reinspection Report:Internal Coating on Production Equipment (After Period of Service)—Mandatory	17