

# Evaluation of Internal Plastic Coatings for Corrosion Control of Tubular Goods in an Aqueous Flowing Environment

This NACE International standard represents a consensus of those individual members who have reviewed this document, its scope, and provisions. Its acceptance does not in any respect preclude anyone, whether he has adopted the standard or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not in conformance with this standard. Nothing contained in this NACE International standard is to be construed as granting any right, by implication or otherwise, to manufacture, sell, or use in connection with any method, apparatus, or product covered by Letters Patent, or as indemnifying or protecting anyone against liability for infringement of Letters Patent. This standard represents minimum requirements and should in no way be interpreted as a restriction on the use of better procedures or materials. Neither is this standard intended to apply in all cases relating to the subject. Unpredictable circumstances may negate the usefulness of this standard in specific instances. NACE International assumes no responsibility for the interpretation or use of this standard by other parties and accepts responsibility for only those official NACE International interpretations issued by NACE International in accordance with its governing procedures and policies which preclude the issuance of interpretations by individual volunteers.

Users of this NACE International standard are responsible for reviewing appropriate health, safety, environmental, and regulatory documents and for determining their applicability in relation to this standard prior to its use. This NACE International standard may not necessarily address all potential health and safety problems or environmental hazards associated with the use of materials, equipment, and/or operations detailed or referred to within this standard. Users of this NACE International standard are also responsible for establishing appropriate health, safety, and environmental protection practices, in consultation with appropriate regulatory authorities if necessary, to achieve compliance with any existing applicable regulatory requirements prior to the use of this standard.

**CAUTIONARY NOTICE:** NACE International standards are subject to periodic review, and may be revised or withdrawn at any time without prior notice. NACE International requires that a notice be taken to reaffirm, revise, or withdraw this standard no later than five years from the date of initial publication. The user is cautioned to obtain the latest edition. Purchasers of NACE International standards may receive current information on all standards and other NACE International publications by contacting the NACE International FirstService Department, 15835 Park Ten Place, Houston, Texas 77084, telephone +1 (281) 228-6223.

## ABSTRACT

This NACE standard test method establishes a test to evaluate and compare the corrosion protection that various internal plastic coatings afford oilfield tubular goods. Using this test method, random sections are tested with flowing water at a given velocity under controlled temperatures for a specified period of time. This standard includes a figure of the typical test apparatus used for this test method. This standard is maintained by Task Group 488.

## KEYWORDS

test methods, nonmetallic coatings

***In NACE standards, the terms shall, must, should, and may are used in accordance with the definitions of these terms in the NACE Publications Style Manual. The terms shall and must are used to state a requirement, and are considered mandatory. The term should is used to state something good and is recommended, but is not considered mandatory. The term may is used to state something considered optional.***

## Foreword

This standard test method was written to provide manufacturers, applicators, and users of internal pipe coatings with a method of comparing the performance of these coatings. This method is not intended to correlate with any field performance but merely provides a means of comparing samples of internally coated tubing or line pipe under identical flowing water conditions.

This standard was originally prepared in 1983 by Working Group T-1G-6b of Unit Committee T-1G on Protective Coatings and Nonmetallic Materials for Oilfield Use. It was reviewed by T-1G-6 and reaffirmed by Unit Committee T-1G in 1988, 1993, and 2000, and in 2006 by Specific Technology Group (STG) 33 on Oil and Gas Production—Nonmetallics and Wear Coatings (Metallic). It was made a stabilized standard by Task Group (TG) 488, Review of NACE Standard TM0183 in 2009. This standard is issued by NACE International under the auspices of STG 33.

# Evaluation of Internal Plastic Coatings for Corrosion Control of Tubular Goods in an Aqueous Flowing Environment

1. General .....	4
2. Test Apparatus .....	4
3. Test Specimen Preparation .....	4
4. Test Procedure .....	6
5. Reproducibility of Coating Performance.....	7
6. Recording Test Data.....	7
References.....	8

**Figure**

Figure 1: Schematic Diagram of a Typical Test Apparatus.....