NACE International & Pipeline Coatings

Cliff Johnson
Director, Education
Larry Christie
Coatings Market Manager

Presentation Overview

- Who is NACE International
- How Standards are Developed
- External Coating Standards for Pipelines
- Test Methods & Technical Committee Reports for Pipeline Coatings
- NACE Committee Listings for Pipeline Coatings
- Coating Applicator Training Program
- NACE Legislative Efforts
NACE International
About us

History
- Founded in 1943
- Began with the Oil & Gas Industry
- Goals – Protect the environment, public safety, and reduce the economic impact of corrosion

Since 1943 NACE International has:
- Produced over 100 standards
- Developed numerous training and certification courses
- Grown to almost 15,000 members worldwide

How NACE Standards Are Developed

- More than 300 NACE technical committees
- The committees serve as the technical arm of the association
- Committee members develop NACE standards, reports, and conduct informative meetings, symposia, and open forums to exchange state-of-the-art technical information.
- NACE International publishes 3 classes of standards: material requirements (MR), recommended practices (RP), and test methods (TM).
Committee Listings for Pipeline Coatings

- **Specific Technology Group (STG 03)** “Coatings and Linings, Protective: Immersion and Buried Service”

- **Task Group (TG 247)** Coatings, Liquid Epoxy for External Repair, Rehabilitations, and Weld Joints on Buried Steel Pipelines

- **Task Group (TG 251)** Coatings, Tape for External Repair, Rehabilitations, and Weld Joints on Pipelines


Committee Listings for Pipeline Coatings

- **Task Group (TG 281)** Coatings, Polyurethane for Field Repair, Rehabilitation, and Girth Weld Joints on Pipelines

- **Task Group (TG 294)** Above Ground Techniques for the Evaluation of Underground Pipeline Coating Condition

Committee Listings for Pipeline Coatings

- **Specific Technology Group (STG 35)** - “Pipelines, Tanks, Well Casings”
- **Task Group (TG034)** Pipeline Coatings, External : Gouge Test
- **Technology Exchange Group (TEG) 033X** Pipeline Rehabilitation Coatings

NACE External Coating Standards for Pipelines

- **RP0399-2004** Plant-Applied, External Coal Tar Enamel Pipe Coating Systems: Application, Performance, and Quality Control
- **RP0602-2002** Field-Applied External Coal Tar Enamel Pipe Coating Systems: Application, Performance, and Quality Control
- **RP0394-2002** Application, Performance, and Quality Control of Plant-Applied Fusion-Bonded Epoxy (FBE) External Pipe Coating
- **RP0402-2002** Field-Applied Fusion-Bonded Epoxy (FBE) Pipe Coating Systems for Girth Weld Joints: Application, Performance, and Quality Control
NACE External Coating Standards for Pipelines

- RP0303-2003  Field-Applied Heat-Shrinkable Sleeves for Pipelines: Application, Performance, and Quality Control
- RP0490-2001  Holiday Detection of Fusion-Bonded Epoxy External Pipeline Coatings of 250 to 760 µm (10 to 30 mils)
- RP0185-96  Extruded Polyolefin Resin Coating Systems with Soft Adhesives for Underground or Submerged Pipe
- RP0375-99  Wax Coating Systems for Underground Pipeline Systems

Test Methods for Coatings

- TM0102-2002  - Measurement of Protective Coating Electrical Conductance on Underground Pipelines
- TM0174-2002  - Laboratory Methods for the Evaluation of Protective Coatings and Lining Materials for Immersion Service
- NACE Technical Committee Reports on Pipeline Coatings
- NACE Publication 10D199  - Coatings for the Repair and Rehabilitation of the External Coatings of Buried Steel Pipelines
### Standards Under Development

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<tr>
<th>Committee Number</th>
<th>Document Type</th>
<th>Title</th>
<th>Status</th>
<th>Expected Publication Date</th>
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<tbody>
<tr>
<td>TG 247</td>
<td>Standard</td>
<td>Coatings, Liquid Epoxy for External Repair, Rehabilitations, and Weld Joints on Buried Pipelines</td>
<td>Re-balloted</td>
<td>October 2005</td>
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<td>TG 251</td>
<td>Standard</td>
<td>Tape Coatings for External Repair, Rehabilitations, and Weld Joints on Pipelines</td>
<td>Completing Draft</td>
<td>October 2005</td>
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<td>TG 294</td>
<td>Standard</td>
<td>Aboveground Techniques for the Evaluation of Underground Pipeline Coating Condition</td>
<td>Just received draft from committee</td>
<td>June 2006</td>
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Coating Applicator Training Program

- Action spurred by the U.S. Navy and the International Union of Paint and Allied Trades (IUPAT)
- NACE International and SSPC are co-developing a comprehensive credentialing program for coating applicators that includes a standard on performance qualifications, training & certification

Task groups have been established to work on the standard and the training and certification programs.
- Tentative plan is to offer four levels of training ranging from the “helper” level to the “master” level.
- Plan to publish standard in January 2006. Training and certification will follow.
- Approaching development stages
- Hands-on training + lecture
Invest in the Future
“Request to Congress”

- Corrosion Prevention Tax Credit
- Propose a 15% Tax Credit on Implementation of Corrosion Prevention Strategies and Methodologies
- Tax Credit to all businesses and in all industries based on new initiatives

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Office of Pipeline Safety Workshop on
Advanced Coatings R&D for Pipelines and Related Facilities
June 9, 2005