

# Test Method for Measurement of Gouge Resistance of Coating Systems

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AMPP values your input. To provide feedback on this standard, please contact: [standards@ampp.org](mailto:standards@ampp.org)

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## Foreword

This standard provides a test method for determining the gouge resistance of coating systems used on buried ferrous metal pipelines.

Organic coatings are the most frequently used materials to protect buried ferrous metal pipelines from corrosion and mechanical damage. During storage, transport, and installation, pipes are exposed to severe mechanical stress that can lead to damage of the protective coating layer.

Therefore, it is important to use coatings with high mechanical strength and toughness. Impact resistance, wear resistance, hardness, and resistance to shear scratch/indentation are good indicators of the coating's mechanical strength and toughness.

## Scope

This standard describes the design and operation of an apparatus to determine the gouge resistance of pipe coatings. It is intended to be used by pipeline operating companies, pipeline owners, pipeline contractors, pipeline inspection services, and pipeline coating mills.

## Rationale

There have been several efforts in the past to develop a reliable test method for determining the gouge resistance of coating systems, but they failed because different kinds of test equipment and test conditions led to scattered data. This tighter test method should lead to more consistent test data.

This latest effort to develop a test method was driven by the joint efforts of representatives of coating manufacturers, coating applicators, equipment suppliers, corrosion specialists, and other personnel concerned with the construction of underground pipeline facilities.

This revision includes the number of test panels and photos of the test apparatus.

<p>In AMPP standards, the terms <i>shall</i> and <i>must</i> are used to state requirements and are considered mandatory. The term <i>should</i> is used to state something that is recommended, but is not considered mandatory. The term <i>may</i> is used to state something considered optional.</p>
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