



NACE Standard RP0495-2003  
Item No. 21072

## **Standard Recommended Practice**

# **Guidelines for Qualifying Personnel as Abrasive Blasters and Coating and Lining Applicators in the Rail Industries**

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Reaffirmed 2003-03-17  
Approved July 1995  
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ISBN 1-57590-165-X  
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## Foreword

This standard recommended practice provides guidelines for qualifying personnel employed in the areas of surface preparation and coating and lining of railcar equipment. In order to assist growth and foster technical continuity in the industry, this standard describes a formal system of training and qualification which recognizes the skill and technical competency of the craftsmen employed. Appendix A provides a list of recommended training sources for employers who are seeking to qualify personnel as abrasive blasters or coating and lining applicators in the railcar industry.

During the 1980s, coatings and linings used in the rail industry underwent substantial technical changes. Environmental quality standards and industry requirements for corrosion control and product quality demanded additional technical changes. Coating and lining manufacturers developed products which became increasingly more complex in their application requirements. Railcar equipment owners developed and implemented comprehensive quality programs requiring total conformance to their specifications. In addition, sophisticated equipment and inspection procedures were developed and utilized. During this progressive period, the need to effectively improve the skills of the craftsmen employed in surface preparation and coating and lining application evolved into an area of vital importance.

This standard was first prepared in 1995 by NACE Task Group T-14C-7, a component of Unit Committee T-14C on Rail Equipment Corrosion. It was reaffirmed in 2003 by Specific Technology Group (STG) 43 on Land Transportation. This standard is issued by NACE under the auspices of STG 43.

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*, 4th ed., Paragraph 7.4.1.9. *Shall* and *must* are used to state mandatory requirements. The term *should* is used to state something good and is recommended but is not mandatory. The term *may* is used to state something considered optional.

RP0495-2003

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### Section 1: General

1.1 The quality of a coating application depends primarily upon the capabilities of the people who are performing the actual work. This standard has been prepared to establish guidelines for the qualification of abrasive blasting and coating and lining personnel. These jobs require appropriate knowledge of specific technical principles.

1.2 This standard has been developed to aid in recognizing the essential qualifications of a craftsman engaged in abrasive blasting and the application of modern coating and lining systems.

1.3 In developing written practices as required by Section 5, the qualifying authority shall review the detailed recommendations presented in this standard and shall modify them as necessary to meet specific needs. Any modification shall not compromise the quality of either workmanship or application and shall be documented for review.

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### Section 2: Definitions

**Employer:** The corporate or private entity that employs personnel for wages or salary.

**Qualification:** A written testimony of the skill, training, and experience required for personnel to properly perform the duties of a specific job.

**Qualifying Authority:** The employer of the craftsmen being qualified.

**Training:** The program developed to impart the knowledge and skills necessary for qualification.

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### Section 3: Preparation and Application Processes

3.1 Qualification of personnel in accordance with this standard shall be applicable to each of the following processes:

- (a) Rigging and set-up procedures;
- (b) Abrasive blast and wet abrasive blast cleaning;
- (c) Methods of coating application used in the railcar industry;

- (d) Methods of lining application used in the railcar industry;
- (e) Health, safety, environmental requirements, and worker protection; and
- (f) Quality-control specifications and procedures.

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### Section 4: Levels of Qualification

4.1 There shall be four basic levels of qualification. These levels may be further subdivided by the employer to acknowledge that additional levels of skills and responsibility may be necessary for specific applications.

4.2 During the process of becoming qualified to the basic level of an apprentice, an individual shall be considered a trainee. A trainee shall be able to understand and work under the supervision of a qualified individual and shall not independently conduct any process without direct supervision.

4.3 Four basic levels of qualifications are as follows:

4.3.1 **Trainee:** An individual showing ability and willingness to learn procedures for blasting and application of coating and lining materials. A trainee must have knowledge and understanding of all safety procedures and practices that relate to blasting and application of coatings and linings.

4.3.2 **Apprentice:** An individual qualified to properly perform specific processes according to a written practice, procedure, or set of instructions. An apprentice shall receive the necessary guidance or supervision from a qualified craftsman or master craftsman.