



Designation: F1193 – 17

Standard Practice for Quality, Manufacture, and Construction of Amusement Rides and Devices¹

This standard is issued under the fixed designation F1193; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This practice establishes the minimum requirements for a quality assurance program and the manufacturing of amusement rides and devices (including major modifications).

1.2 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.3 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*²

E543 Specification for Agencies Performing Nondestructive Testing

F770 Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices

F1950 Specification for Physical Information to be Transferred With Used Amusement Rides and Devices (Withdrawn 2008)³

F2291 Practice for Design of Amusement Rides and Devices

2.2 *AWS Standards:*⁴

As applicable.

2.3 *ASME Standards:*⁵

As applicable.

2.4 *ASNT Document:*⁶

Recommended Practice SNT-TC-1A Personnel Qualification and Certification in Nondestructive Testing

3. Significance and Use

3.1 The purpose of this practice is to provide the minimum manufacturing requirements for amusement rides and devices and to provide the minimum requirements for a written quality assurance program for an amusement ride or device manufacturer, or component supplier. This is not intended to include suppliers of off-the-shelf components (for example, fasteners, electrical wire, etc.).

4. Drawing Control Procedure

4.1 A procedure shall be in effect so that appropriate manufacturing drawings, their engineering revisions, and related documents are utilized.

5. Material and Component Control Procedure

5.1 A procedure shall be in effect so that materials, processes, and components, including raw materials, are in accordance with the engineering specifications.

5.1.1 This procedure shall provide the purchasing agent with all the information required to order appropriate material.

5.1.2 A receiving procedure shall be in effect so that incoming material and components are checked against the purchasing specifications.

5.1.3 A procedure shall be in effect so that material in stock can be properly identified for future use.

5.1.4 Documentation on any material, process, or components certified shall be filed for reference.

6. Manufacturing

6.1 Amusement ride and device components and systems shall be manufactured and assembled in accordance with the designer/engineer specified criteria.

¹ This practice is under the jurisdiction of ASTM Committee F24 on Amusement Rides and Devices and is the direct responsibility of Subcommittee F24.24 on Design and Manufacture.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ The last approved version of this historical standard is referenced on www.astm.org.

⁴ Available from The American Welding Society (AWS), 550 NW LeJeune Rd., Miami, FL 33126.

⁵ Available from American Society of Mechanical Engineers (ASME), ASME International Headquarters, Three Park Ave., New York, NY 10016-5990.

⁶ Available from The American Society for Nondestructive Testing (ASNT), P.O. Box 28518, 1711 Arlington Ln., Columbus, OH 43228-0518.