Compressed hydrogen powered industrial truck on-board fuel storage and handling components
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Preface

This is the first edition of CSA HPIT 1, Compressed hydrogen powered industrial truck on-board fuel storage and handling components.

This Standard was prepared by the HPIT 1 Technical Subcommittee on Standards for Compressed Hydrogen Powered Industrial Truck On-Board Fuel Storage and Handling Components, under the jurisdiction of the Joint Automotive Technical Committee, and had been formally approved by the Technical Committee.

Notes:
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1 Scope

1.1 This Standard establishes minimum requirements for the material, design, manufacture, and testing of newly produced compressed hydrogen gas fuel system components and serially produced, refillable Type HPIT 1 containers intended only for the storage of compressed hydrogen gas installed in powered industrial truck applications or other heavy duty industrial applications. The following are components covered under this Standard:

a) check valve;
b) manual valve;
c) manual container valve;
d) automatic valve;
e) pressure sensors and pressure gauges;
f) pressure regulator;
g) pressure relief device;
h) excess flow valve;
i) rigid fuel line;
j) flexible fuel line;
k) filter;
l) fittings;
m) discharge line closures; and
n) containers – HPIT Types 1, 2, 3, and 4.

The construction of compressed hydrogen gas fuel system components and containers is covered under Clause 4.

The performance of compressed hydrogen gas fuel system components and containers is covered under Clause 6.

1.2 This Standard applies to containers permanently attached to the powered industrial truck and intended only for on-board refueling from a dispenser.

1.3 This Standard does not apply to the following:
a) stationary gas engines;
b) containers that can be removed from the powered industrial truck, refilled, and reattached; and
c) reseating or resealing pressure relief devices.