



**CSA HPIT 1:15**  
*(reaffirmed 2020)*

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



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<b>B. Yeggy</b>	Hexagon Lincoln Inc., Lincoln, Nebraska, USA	
<b>J. Cairns</b>	CSA Group, Cleveland, Ohio, USA	<i>Project Manager</i>

# ***Technical Subcommittee on Standards for Compressed Hydrogen Powered Industrial Truck On-Board Fuel Storage and Handling Components***

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<b>J.P. Cohen</b>	Air Products and Chemicals Inc., Allentown, Pennsylvania, USA	
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<b>J.B. Dimmick</b>	Clean Vehicle Education Foundation, Waukesha, Wisconsin, USA	
<b>J. Eihusen</b>	Hexagon Lincoln Inc., Lincoln, Nebraska, USA	
<b>S. Goyette</b>	Nuvera Fuel Cells, Inc., Billerica, Massachusetts, USA	
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<b>J.F. Jordan</b>	Agility Fuel Systems, Cook, Minnesota, USA	
<b>T. Joseph</b>	Bethlehem Hydrogen Inc, Northampton, Pennsylvania, USA	
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<b>J.S. Wallace</b>	University of Toronto, Toronto, Ontario	<i>Associate</i>
<b>J. Weis</b>	CSA Group, Cleveland, Ohio, USA	<i>Project Manager</i>

# 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.

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- 1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
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# ***CSA HPIT 1:15***

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

### **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.