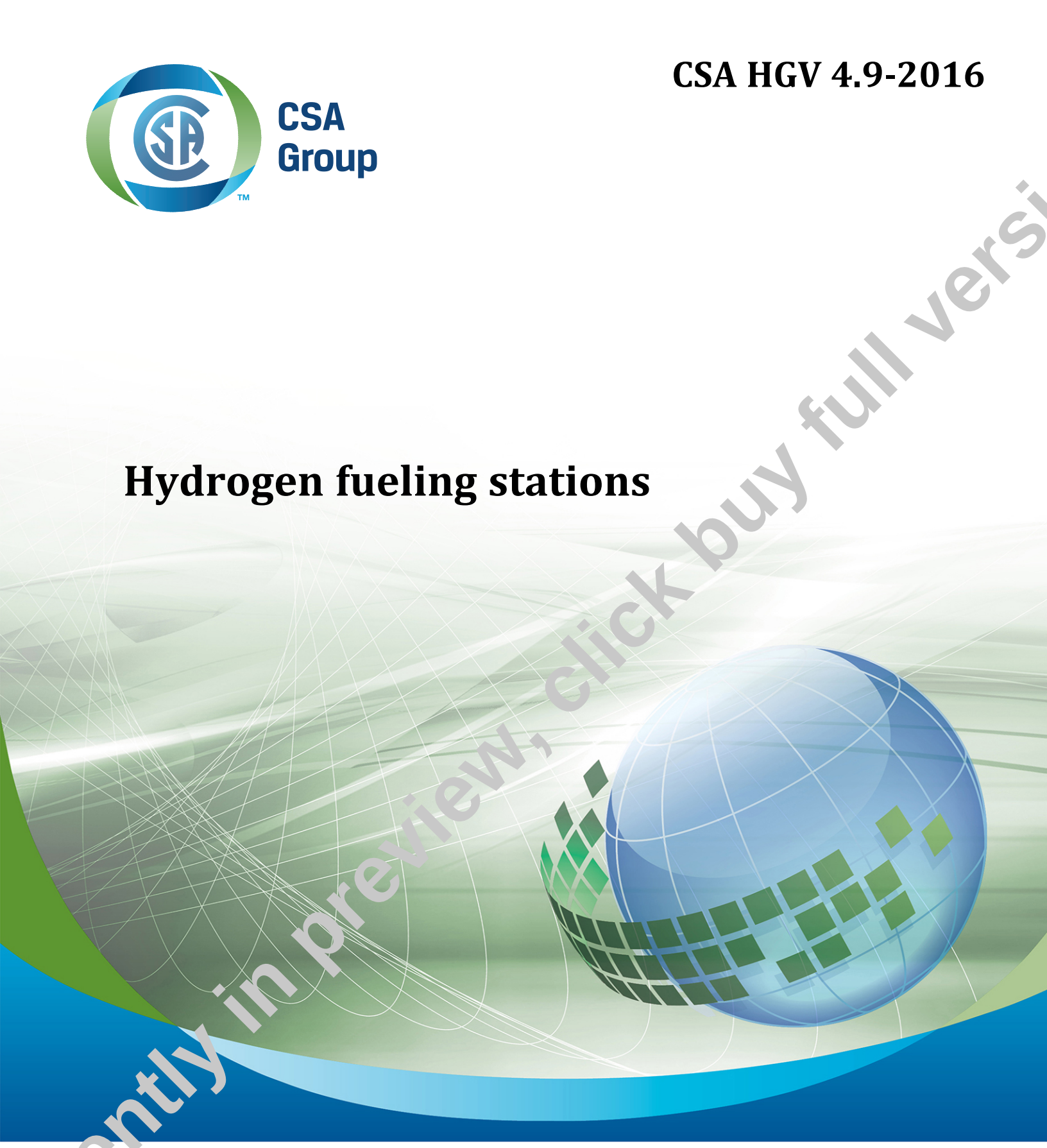
CSA HGV 4.9-2016

Hydrogen fueling stations



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Preface

This is the first edition of CSA HGV 4.9, *Hydrogen fueling stations.*

This Standard was prepared by the HGV 4.9 Technical Subcommittee on Standards for Hydrogen Fueling Stations, under the jurisdiction of the Automotive Technical Committee.

Notes:

1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*

2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*

3) *This Standard was developed by consensus, which is defined by CSA Policy governing standardization – Code of good practice for standardization as "substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity." It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this publication.*

4) *This Standard is subject to review at least every five years; suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to inquiries@csagroup.org and include "Proposal for change" in the subject line:*

a) *Standard designation (number)*
b) *relevant clause, table, and/or figure number;*
c) *wording of the proposed change; and*
d) *rationale for the change.*

5) *To submit a request for interpretation of this Standard, please send the following information to inquiries@csagroup.org and include "Request for interpretation" in the subject line:*

a) *define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;*
b) *provide an explanation of circumstances surrounding the actual field condition; and*
c) *where possible, phrase the request in such a way that a specific "yes" or "no" answer will address the issue.*

6) *Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are available on the Current Standards Activities page at standardsactivities.csa.ca.*

CSA HGV 4.9-2016
Hydrogen fueling stations

1 Scope

1.1
This Standard specifies the design, installation, operation and maintenance of site-built and modular gaseous hydrogen fueling stations (HFS) for light duty vehicles, where light duty vehicles are defined by the Environmental Protection Agency as passenger cars and light trucks, minivans, passenger vans, pickup trucks, and sport-utility vehicles, also referred to as the "common category" which includes class 1, 2, 3 vehicles up to 14,000 lbs. The requirements are based upon United States and international codes and standards, but, where appropriate, local and federal codes and standards may supersede the requirements listed in this Standard.

1.2
Unless otherwise stated the standard conditions are: temperature 15 °C and pressure 101 KPa.

1.3
In case of conflict between this Standard and Federal, Provincial, State, or Local requirements, governmental requirements take precedence.

1.4
This Standard contains SI (Metric) units with corresponding yard/pound quantities, the purpose being to allow the standard to be used in SI (Metric) units. If a value for a measurement and a corresponding value in other units are stated, the first stated value is to be regarded as the requirement. The given corresponding value may be approximate. If a value for a measurement and a corresponding valve in other units are both specified as a quoted marking requirement, the first stated unit, or both are to be provided.

Note: *IEEE/ASTM SI 10 or ISO 80000-1 was used as a guide in making metric conversions to yard/pound quantities.*

1.5
All references to pressure throughout this Standard are to be considered gauge pressure unless otherwise specified.

1.6
In this Standard, "shall" is used to express a requirement, i.e., a provision that the user shall satisfy in order to comply with the standard; "should" is used to express a recommendation or that which is advised but not required; "may" is used to express an option or that which is permissible within the limits of the standard; and "can" is used to express possibility or capability.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.