Gas-fired equipment for drying farm crops
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CSA 3.8:14
October 2014

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Gas-fired equipment for drying farm crops

IGAC
Interprovincial Gas Advisory Council

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Approved on September 9, 2014 by IGAC
Effective in Canada June 1, 2016
Published in October 2014 by CSA Group
A not-for-profit private sector organization
178 Rexdale Boulevard, Toronto, Ontario, Canada M9W 1R3

To purchase standards and related publications, visit our Online Store at store.csagroup.org
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ISBN 978-1-77139-619-6
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## CSA Technical Committee on Gas Appliances and Related Accessories

<table>
<thead>
<tr>
<th>Name</th>
<th>Company/Institution</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z.J. Fraczkowski</td>
<td>Technical Standards &amp; Safety Authority (TSSA), Toronto, Ontario, Canada</td>
<td>Chair</td>
</tr>
<tr>
<td>A. Gould</td>
<td>Reliance Comfort Ltd. Partnership dba Reliance Home Comfort, Cambridge, Ontario, Canada</td>
<td>Vice-Chair</td>
</tr>
<tr>
<td>A. Abdel-Rehim</td>
<td>A.O. Smith Enterprises Ltd., Fergus, Ontario, Canada</td>
<td>Associate</td>
</tr>
<tr>
<td>J.K. Angus</td>
<td>J.M.A. Associates Representing EnerCare Solutions, Midland, Ontario, Canada</td>
<td>General Interest</td>
</tr>
<tr>
<td>P.A. Baker</td>
<td>Maxitrol Company, Hamilton, Ontario, Canada</td>
<td>Producer Interest</td>
</tr>
<tr>
<td>D. Baxter</td>
<td>Enbridge Gas Distribution, Thorold, Ontario, Canada</td>
<td>User Interest</td>
</tr>
<tr>
<td>J. Boros</td>
<td>Rheem Sales Co Inc AKA Rheem Manufacturing Co, Montgomery, Alabama, USA</td>
<td>Producer Interest</td>
</tr>
<tr>
<td>T. Brennan</td>
<td>Natural Resources Canada, Ottawa, Ontario, Canada</td>
<td>Associate</td>
</tr>
<tr>
<td>C. Côté</td>
<td>Gaz Métro, Montréal, Québec, Canada</td>
<td>User Interest</td>
</tr>
<tr>
<td>C. Gibbs</td>
<td>Guelph, Ontario, Canada</td>
<td>General Interest</td>
</tr>
<tr>
<td>D.N. Hird</td>
<td>SaskPower, Regina, Saskatchewan, Canada</td>
<td>Government and/or Regulatory Authority</td>
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<tr>
<td>D.R. Jamieson</td>
<td>GHP Group Inc, Oakville, Ontario, Canada</td>
<td>Producer Interest</td>
</tr>
<tr>
<td>C.E. Jorgenson</td>
<td>British Columbia Safety Authority (BCSA), New Westminster, British Columbia, Canada</td>
<td>Government and/or Regulatory Authority</td>
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<tr>
<td>S. Katz</td>
<td>S. Katz and Associates Inc., North Vancouver, British Columbia, Canada</td>
<td>Associate</td>
</tr>
<tr>
<td>J.R. Marshall</td>
<td>Technical Standards &amp; Safety Authority (TSSA), Toronto, Ontario, Canada</td>
<td>Associate</td>
</tr>
<tr>
<td>J. Melling</td>
<td>SaskPower, Saskatoon, Saskatchewan, Canada</td>
<td>Associate</td>
</tr>
<tr>
<td>J. Overall</td>
<td>Toronto, Ontario, Canada</td>
<td>Associate</td>
</tr>
<tr>
<td>T.W. Poulin</td>
<td>A.O. Smith Enterprises Ltd., Fergus, Ontario, Canada</td>
<td>Producer Interest</td>
</tr>
<tr>
<td>G.B. Prociw</td>
<td>Union Gas Limited, Chatham, Ontario, Canada</td>
<td>User Interest</td>
</tr>
<tr>
<td>E. Scott</td>
<td>British Columbia Safety Authority (BCSA), New Westminster, British Columbia, Canada</td>
<td>Associate</td>
</tr>
<tr>
<td>B.J. Swiecicki</td>
<td>National Propane Gas Association, Frankfort, Illinois, USA</td>
<td>Associate</td>
</tr>
<tr>
<td>M. Thomas</td>
<td>Natural Resources Canada CANMET Energy, Ottawa, Ontario, Canada</td>
<td>Associate</td>
</tr>
<tr>
<td>M. Travers</td>
<td>Reliance Comfort L.P, Cambridge, Ontario, Canada</td>
<td>Associate</td>
</tr>
</tbody>
</table>
**Interprovincial Gas Advisory Council**

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</thead>
<tbody>
<tr>
<td>R. Brousseau</td>
<td>Régie du Bâtiment du Québec, Montréal, Québec, Canada</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M.E. Davidson</td>
<td>Province of New Brunswick Dept of Public Safety,</td>
<td>Fredericton, New Brunswick, Canada</td>
<td><strong>Government and/or Regulatory Authority</strong></td>
</tr>
<tr>
<td>A. Durnie</td>
<td>Alberta Municipal Affairs,</td>
<td>Edmonton, Alberta, Canada</td>
<td></td>
</tr>
<tr>
<td>D. Eastman</td>
<td>Service NL, Newfoundland &amp; Labrador, St. John’s,</td>
<td>Newfoundland and Labrador, Canada</td>
<td><strong>Government and/or Regulatory Authority</strong></td>
</tr>
<tr>
<td>P. Fowler</td>
<td>Nova Scotia Department of Labour Advanced Education,</td>
<td>Halifax, Nova Scotia, Canada</td>
<td><strong>Government and/or Regulatory Authority</strong></td>
</tr>
<tr>
<td>D.N. Hird</td>
<td>SaskPower,</td>
<td>Regina, Saskatchewan, Canada</td>
<td><strong>Government and/or Regulatory Authority</strong></td>
</tr>
<tr>
<td>C. Lashek</td>
<td>Manitoba, Office of the Fire Commissioner,</td>
<td>Winnipeg, Manitoba, Canada</td>
<td><strong>Government and/or Regulatory Authority</strong></td>
</tr>
<tr>
<td>W. Lock</td>
<td>British Columbia Safety Authority (BCSA),</td>
<td>New Westminster, British Columbia, Canada</td>
<td><strong>Government and/or Regulatory Authority</strong></td>
</tr>
<tr>
<td>S.C. Manning</td>
<td>Alberta Municipal Affairs Safety Services,</td>
<td>Edmonton, Alberta, Canada</td>
<td><strong>Government and/or Regulatory Authority</strong></td>
</tr>
<tr>
<td>J.R. Marshall</td>
<td>Technical Standards &amp; Safety Authority (TSSA),</td>
<td>Toronto, Ontario, Canada</td>
<td><strong>Government and/or Regulatory Authority</strong></td>
</tr>
<tr>
<td>R. McRae</td>
<td>Government of the NWT Public Works &amp; Services,</td>
<td>Yellowknife, Northwest Territories, Canada</td>
<td><strong>Government and/or Regulatory Authority</strong></td>
</tr>
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</tr>
<tr>
<td>J. Melling</td>
<td>SaskPower, Saskatoon, Saskatchewan, Canada</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.W. Reid</td>
<td>Department of Environment, Energy and Forestry, Charlottetown, Prince Edward Island, Canada</td>
<td>Government and/or Regulatory Authority</td>
<td></td>
</tr>
<tr>
<td>J. Renaud</td>
<td>Régie du bâtiment du Québec, Montréal, Quebec, Canada</td>
<td>Government and/or Regulatory Authority</td>
<td></td>
</tr>
<tr>
<td>G. Tremblett</td>
<td>Service NL, Newfoundland &amp; Labrador, St. John's, Newfoundland and Labrador, Canada</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Valliere</td>
<td>Alberta Municipal Affairs Safety Services, Edmonton, Alberta, Canada</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M.A. Wani</td>
<td>Government of Nunavut Dept of Community &amp; Government Svcs, Iqaluit, Nunavut, Canada</td>
<td>Government and/or Regulatory Authority</td>
<td></td>
</tr>
<tr>
<td>D. Young</td>
<td>Yukon Government, Whitehorse, Yukon, Canada</td>
<td>Government and/or Regulatory Authority</td>
<td></td>
</tr>
<tr>
<td>B. Zinn</td>
<td>British Columbia Safety Authority (BCSA), Coquitlam, British Columbia, Canada</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Technical Subcommittee on Gas Operated Agricultural Equipment

J. Tomlinson  
L.B. White Co., Inc.,  
Onalaska, Wisconsin, USA  
Chair

C. Richter  
GSI Group LLC a Worldwide Brand of AGCO,  
Assumption, Illinois, USA  
Vice-Chair

B. Affolter  
Gt Mfg., Inc.,  
Clay Center, Kansas, USA  
Associate

B. Bloemendaal  
Brock Grain Systems, A Division of CTB, Inc.,  
Frankfort, Indiana, USA

N. Erickson  
Shivvers Manufacturing, Inc.,  
Corydon, Iowa, USA  
Associate

R. Peart  
Maxon Corporation,  
Deer Park, Illinois, USA

M. Schroeder  
Shivvers Manufacturing, Inc.,  
Corydon, Iowa, USA  
Associate

C. Turner  
L.B. White Co., Inc.,  
Onalaska, Wisconsin, USA

D. Ward  
Ontario Ministry of Agriculture Food & Rural Affairs,  
Ridgetown, Ontario, Canada  
Associate

J. Watson  
Thompson Gas,  
Blue Ridge, Georgia, USA

J.T. Williams  
Brock Grain Systems, A Division of CTB, Inc.,  
Frankfort, Indiana, USA

C. Bielawski  
CSA Group,  
Cleveland, Ohio, USA  
Project Manager
Preface


This Standard was prepared by the Z83/CSA Joint Technical Advisory Group on Gas Operated Agricultural Equipment, under the jurisdiction of the Technical Committee on Gas Appliances and Related Accessories and the Strategic Steering Committee on Standards for Fuel Burning Equipment, and had been formally approved by the CSA Technical Committee, and the Interprovincial Gas Advisory Council.

Interpretations: The Strategic Steering Committee on Standards for Fuel Burning Equipment has provided the following direction for the interpretation of standards under its jurisdiction: “The literal text shall be used in judging compliance of products with the safety requirements of this Standard. When the literal text cannot be applied to the product, such as for new materials or construction, and when a relevant committee interpretation has not already been published, CSA Group’s procedures for interpretation shall be followed to determine the intended safety principle.”

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CSA 3.8:14
Gas-fired equipment for drying farm crops

1 Scope

1.1 This Standard applies to newly produced direct gas-fired crop dryers of the recirculating or non-recirculating type hereinafter referred to as “dryers”, whose primary purpose is to provide process heating to dry farm crops. These dryers are used in non-occupied spaces and are constructed of non-combustible materials having input ratings of 12,500,000 Btu/hr (3 663 389 W) or less, constructed entirely of new unused parts and materials.

This Standard refers to equipment in which heated air is used to reduce the moisture content of farm crops.

The installation is to conform with local codes, or in the absence of local codes, in accordance with the Natural Gas and Propane Installation Code, CSA B149.1, and the Propane Storage and Handling Code, CSA B149.2.

This Standard is intended to cover complete dryers with integral air moving components, i.e., those which are designed by, catalogued by, and built on a repetitive basis by the manufacturer and those in which the dryer and air moving components are tested as an assembly and available for separate sale.

1.2 Dryers covered under this Standard are for use:
   a) with natural gas; and
   b) with propane in the liquid and vapour phase.

1.3 This Standard applies to dryers intended for outdoor use only.

1.4 This Standard is limited to dryers that are equipped with forced draft burner(s), which relies on combustion air supplied by a mechanical device such as a fan or blower.

1.5 The construction of dryers for use with the above mentioned gases is covered under Clause 4.

1.6 The performance of dryers for use with the above mentioned gases is covered under Clause 5.

1.7 If a value for measurement as given in this Standard is followed by an equivalent value in other units, the first stated value is to be regarded as the specification.