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# **Examination Standard for Clean Agent Extinguishing Systems**

**Class Number 5600**

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# Foreword

This standard is intended to verify that the products and services described will meet stated conditions of performance, safety, and quality useful to the ends of property conservation. The purpose of this standard is to present the criteria for examination of various types of products and services.

Examination in accordance with this standard shall demonstrate compliance and verify that quality control in manufacturing shall ensure a consistent and reliable product

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# Table of Contents

<b>1.</b>	<b>INTRODUCTION</b> .....	1
1.1	Purpose.....	1
1.2	Scope.....	1
1.3	Basis for Requirements .....	1
1.4	Basis for Certification .....	1
1.5	Basis for Continued Certification .....	2
1.6	Effective Date.....	2
1.7	System of Units .....	2
1.8	Normative References .....	2
1.9	Definitions.....	3
<b>2.</b>	<b>GENERAL INFORMATION</b> .....	8
2.1	Application Requirements .....	8
2.2	Requirements for Samples for Examination.....	8
<b>3.</b>	<b>GENERAL REQUIREMENTS</b> .....	9
3.1	Review of Documentation .....	9
3.2	Physical or Structural Construction Features .....	9
3.2.1	Operating Range .....	9
3.2.2	Materials .....	9
3.2.3	Controls .....	9
3.2.4	Pressure Vessels .....	10
3.2.5	Valves .....	10
3.2.6	Gauges and Indicators.....	10
3.2.7	Siphon Tubes .....	11
3.2.8	Pressure Relief Devices .....	11
3.2.9	Anti-Recoil Devices .....	11
3.2.10	Discharge Heads and Connectors .....	11
3.2.11	Manifolds and Piping.....	12
3.2.12	Cylinder Supports.....	12
3.2.13	Protective Coverings.....	12
3.2.14	Actuation Devices.....	12
3.2.15	Auxiliary Manual Controls.....	13
3.2.16	Selector and Lockout Valves .....	13
3.2.17	Nozzles .....	13
3.2.18	Nozzle Caps, Frangible Seals, and Material Plugs .....	13
3.2.19	Clean Agents.....	14
3.2.20	Expellant Gases .....	14
3.2.21	Auxiliary Equipment .....	14
3.2.21.1	Pressure Operated Releases .....	14
3.2.21.2	Pressure Operated Switches .....	14
3.2.21.3	Time Delays.....	14
3.2.21.4	Alarms.....	14
3.2.21.5	Check Valves .....	15
3.2.21.6	Pressure Venting Devices (Pneumatic Control Lines).....	15
3.2.21.7	Changeover Devices .....	15
3.2.22	Hazardous Location Rating of Components.....	15
3.3	Markings.....	15
3.4	Manufacturer's Design, Installation, Operation, and Maintenance Instructions.....	16
3.5	Calibration .....	16
3.6	Tolerances .....	17
<b>4.</b>	<b>PERFORMANCE REQUIREMENTS</b> .....	18
4.1	Class A and B Fire Extinguishment Tests .....	18
4.2	Nozzle Distribution Verification Tests.....	23
4.3	Discharge Tests.....	26

<b>4.4</b>	<b>High Pressure Discharge Integrity Test</b> .....	26
<b>4.5</b>	<b>Verification of Flow Calculation Limits</b> .....	27
<b>4.6</b>	<b>Verification of Flow Calculation Method Tests</b> .....	28
<b>4.7</b>	<b>Cycle Operation Tests</b> .....	29
<b>4.8</b>	<b>Equivalent Length Determination</b> .....	30
<b>4.9</b>	<b>Agent Storage Containers</b> .....	31
4.9.1	Construction Design .....	31
4.9.2	Long Term Leakage Test .....	31
4.9.3	30-Day Maximum Temperature Leakage Test .....	32
4.9.4	30-Day Minimum Temperature Leakage Test .....	32
4.9.5	Hydrostatic Integrity .....	33
4.9.6	Permanent Volumetric Expansion .....	33
4.9.7	Shock and Vibration for Horizontal Transport .....	34
<b>4.10</b>	<b>Valve Leakage Test</b> .....	34
<b>4.11</b>	<b>Hydrostatic Pressure Test</b> .....	35
<b>4.12</b>	<b>Pressure Relief Devices</b> .....	35
4.12.1	Pressure Relief Operation .....	35
4.12.2	Pressure Relief Calculations .....	36
<b>4.13</b>	<b>Mounting Device Test</b> .....	36
<b>4.14</b>	<b>Flexible Hoses</b> .....	36
4.14.1	Low Temperature Resistance .....	36
4.14.2	Resilience .....	37
<b>4.15</b>	<b>Liquid Level Indicators</b> .....	37
<b>4.16</b>	<b>Control and Actuator Operation</b> .....	37
4.16.1	General .....	37
4.16.2	Electrically Operated Devices .....	38
4.16.3	Manually Operated Controls .....	38
4.16.4	Pneumatically Operated Controls .....	38
4.16.5	Mechanical Time Delay Assemblies .....	39
4.16.6	Pressure Operated Audible Alarm Devices .....	40
<b>4.17</b>	<b>Dielectric Withstand</b> .....	40
<b>4.18</b>	<b>Corrosion – Salt Spray</b> .....	40
<b>4.19</b>	<b>Corrosion – Stress Cracking</b> .....	41
<b>4.20</b>	<b>High Temperature Exposure</b> .....	42
<b>4.21</b>	<b>Aging Tests – Plastic Materials</b> .....	42
4.21.1	Air-Oven Aging Test .....	42
4.21.2	Ultraviolet Light and Water Test .....	43
4.21.3	Exposure to Clean Agent Test .....	43
<b>4.22</b>	<b>Sound Power Level Determination for Noise-Reducing Discharge Nozzles</b> .....	43
<b>4.23</b>	<b>Pressure Gauges and Indicators and Supervisory Pressure Switches</b> .....	44
4.23.1	Accuracy .....	44
4.23.2	Impulse Resistance .....	45
<b>4.24</b>	<b>Automatic Extinguisher Unit Tests</b> .....	45
4.24.1	Assembly Load/Frame Strength .....	45
4.24.2	Strength of Heat Responsive Element .....	45
4.24.3	Hydrostatic Strength .....	46
4.24.4	Operating Temperature (Liquid Bath) .....	46
4.24.5	Pneumatic Detection Tubing .....	46
<b>4.25</b>	<b>Supplemental Tests for Marine Applications</b> .....	47
4.25.1	Wiring .....	47
4.25.2	Controls and Indicators .....	47
4.25.3	Vibration and Shock Resistance Tests .....	47
4.25.4	Nozzle Distribution Verification Tests .....	48
4.25.5	Minimum Floor Clearance .....	49
<b>4.26</b>	<b>Agent Component Certification Tests</b> .....	49
4.26.1	Agent Acceptability for Use by Authorities Having Jurisdiction .....	49
4.26.2	Metals Compatibility .....	49
4.26.3	Polymer Compatibility .....	50

4.26.4	Agent Suitability Tests .....	50
4.26.5	Agent Quality .....	50
4.26.6	Agent Identification Benchmarking.....	51
4.26.7	Class A Extinguishing Capability.....	51
<b>4.27</b>	<b>Class C Extinguishing Capability and Products of Decomposition .....</b>	<b>51</b>
<b>4.28</b>	<b>Additional Tests.....</b>	<b>52</b>
<b>5.</b>	<b>OPERATIONS REQUIREMENTS .....</b>	<b>53</b>
5.1	Demonstrated Quality Control Program .....	53
5.2	Surveillance Audits – General.....	53
5.3	Surveillance Audits – Filling Facilities .....	54
5.4	Manufacturer's Responsibilities .....	54
5.5	Manufacturing and Production .....	54
5.6	Design, Installation, Operating, and Maintenance Manual.....	55
<b>6.</b>	<b>BIBLIOGRAPHY.....</b>	<b>57</b>
<b>APPENDIX A:.....</b>		<b>58</b>
<b>APPENDIX B: Tolerances.....</b>		<b>59</b>
<b>APPENDIX C:.....</b>		<b>60</b>
<b>APPENDIX D: Tolerance Limit Calculations .....</b>		<b>61</b>
<b>APPENDIX E: Figures .....</b>		<b>62</b>
	Figure E-1. Fuel Array and Inner Baffle - Front View .....	62
	Figure E-2. Fuel Array and Inner Baffle - Side View .....	63
	Figure E-3. Fuel Array and Inner Baffle - Detail View .....	64
	Figure E-4. Fuel Guides.....	65
	Figure E-5. Outer Baffle .....	66
	Figure E-6. Test Enclosure.....	67
	Figure E-7: Bulb Crush Inserts For Strength of Element Test .....	68
<b>APPENDIX F: .....</b>		<b>69</b>
<b>APPENDIX G: A Method of Testing the Effectiveness of Clean Agents in Suppressing Cable Fires Ignited by a Sustained Electrical Arc.....</b>		<b>70</b>
	Figure G-1: Test Apparatus.....	71

## 1. INTRODUCTION

### 1.1 Purpose

- 1.1.1 This standard states testing and certification requirements for fixed fire extinguishing systems that use vaporizing liquid or inert gas clean agents as the extinguishant.
- 1.1.2 Testing and certification criteria may include, but are not limited to, performance requirements, marking requirements, examination of manufacturing and filling facilities, audit of quality assurance procedures, and a surveillance program.

### 1.2 Scope

- 1.2.1 This standard contains requirements for vaporizing liquid and inert gas clean agent extinguishing systems for total flooding protection. Extinguishing systems shall be designed for automatic control to protect single or multiple hazard areas. The following product categories and class numbers are included in the scope of this standard.

Table 1.2.1 - *Product Categories and Class Numbers*

<i>Class</i>	<i>Product Category</i>
5611	Inert Gas Extinguishing Systems
5612	Liquefied Gas Extinguishing Systems
5613	Clean Agents

- 1.2.2 A basic vaporizing liquid or inert gas clean agent extinguishing system comprises one or more agent storage containers, discharge control valves arranged for automatic or manual/automatic control, lockout valves (when required), piping, and discharge nozzles. Compatible certified detectors and detection and release controls are required for automatic electrical operation of these systems but are not included in the scope of this standard. If a system uses an integral detection and actuation system, it may be evaluated as a part of that system, using criteria derived from those used for standalone detection and control systems.
- 1.2.3 With the exception of Class 5613 clean agents, this standard requires the examination of complete systems. Complete systems shall be submitted along with design, installation, operation, and maintenance instructions for certification. However, the manufacturer may, at any time, submit additional components or auxiliary equipment for use on the certified system. Purchased devices such as thermostats, releases, and timers shall also be submitted by the system manufacturer for evaluation as a part of the system, even though such devices may already be certified and listed by the certification agency. At minimum, a system shall consist of those components and auxiliary equipment considered necessary by the certification agency for the system to operate properly when connected to a certified detection and control system. Incomplete systems shall not be certified.

### 1.3 Basis for Requirements

- 1.3.1 The requirements of this standard are based on experience, research and testing, and/or the standards of other organizations. The advice of manufacturers, users, trade associations, jurisdictions, and/or loss control specialists was also considered.
- 1.3.2 The requirements of this standard reflect tests and practices used to examine characteristics of clean agent fire extinguishing systems (hereinafter referred to as “systems”) for the purpose of obtaining certification. Systems having characteristics not anticipated by this standard may be certified if performance equal or superior to that required by this standard is demonstrated.

### 1.4 Basis for Certification

Certification is based on satisfactory evaluation of the product and the manufacturer in the following major areas:

- 1.4.1 Examination and tests on production samples shall be performed to evaluate: