

STANDARD INFORMATION

Standard Number: NFPA 37

Standard Name: Installation and Use of Stationary Combustion Engines and Gas Turbines
Standard Edition and Issue Date: 2018 Edition dated September 6, 2017
Date of Revision: July 29, 2014 and September 6, 2017
Date of Previous Revision of Standard: December 5, 2009

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: September 6, 2020

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revised requirements and which products will require re-evaluation. **NOTE:** Effective immediately, this revised standard will be exclusively used for evaluation of new products unless the Applicant requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.

Overview of Changes:

July 29, 2014

- Revision of requirements to specify the type of regulator required
- Addition of requirements for purge cycle in the start cycle for combustion gas turbines

September 6, 2017

- New requirements for flexible connectors
- New requirements for overpressure protection

Specific details of new/revised requirements are found in table below.

If the applicable requirements noted in the table are not described in your report(s), these requirements will need to be confirmed as met and added to your report(s) such as markings, instructions, test results, etc. (as required).

Client Action:

Information – To assist our Engineer with review of your Listing Reports, please submit technical information in response to the new/revised paragraphs noted in the attached or explain why these new/revised requirements do not apply to your product (s).

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.

STANDARD INFORMATION

| CLAUSE | VERDICT | COMMENT |
|---------|---------|---|
| | | Additions to existing requirements are <u>underlined</u> and deletions are shown lined out below. |
| | | |
| | | The following changes reflect the July 29, 2014 revision |
| | | |
| 5 | Info | Fuel Supply — Gaseous |
| 5.2 | Info | Gas Trains |
| | | Gas trains, as defined in 3.3.5, shall contain at least the following safety components: |
| 5.2.1 | | (7) A vent valve or a valve proving system (VPS) for inlet gas pressures greater than a gauge pressure of 14 kPa (gauge pressure of 2 psi) (8) A flame arrester, where biogases are used and there is risk of having oxygen in the biogas (9) A gas filter or strainer |
| 8 | Info | Engine Exhaust Systems |
| 8.2 | Info | Installation |
| 8.2.3 | Info | Exhaust System Termination |
| 8.2.3.3 | | Exhaust systems equipped with spark-arresting mufflers shall be permitted to terminate in Division 2 locations or Zone 2 locations, as defined in Article 500 and <u>Article 505</u> of NFPA 70, National Electrical Code. |
| 9 | Info | Control and Instrumentation |
| 9.3 | Info | Combustion Gas Turbines |
| | | New clause added; |
| 9.3.3 | | The combustion gas turbine starting sequence shall include a purge cycle that will result in a nonignitible atmosphere in the turbine and its exhaust system prior to the start of the ignition sequence and the introduction of fuel. |
| 11 | Info | Fire Protection Features |
| 11.4 | Info | Fire Suppression Systems and Equipment |
| | | New clause added; |
| 11.4.8 | | Retrotit of Fire Suppression Systems. Where retrotit of a fire suppression system is undertaken, the minimum discharge duration shall be 20 minutes, unless manufacturer or laboratory fire test data demonstrate that a different discharge duration ensures extinguishment and cool-down to below the autoignition temperature of combustible materials present. |



| CLAUSE | VERDICT | COMMENT |
|-----------|---------|--|
| | | The following changes reflect the September 6, 2017 revision |
| | | |
| 5 | Info | Fuel Supply — Gaseous |
| 5.1 | Info | Gas Piping |
| 5.1.5.1 | | New clause added; |
| | | Raised-face flanges shall not be joined to flat-faced flanges |
| 5.1.6 | | New clause added |
| | | |
| | | Connectors used for vibration dampening shall be properly anchored and installed according to manufacturer's instructions. |
| | | New section added; |
| 5.6 | | Averages are protection |
| | | Overpressure protection shall be required for any fuel gas train subject to either of |
| | | the following conditions: |
| | | |
| 5.6.1 | | (1) The inlet gas pressure exceeds both 14 kPa (2 psi) and the rated pressure of any downstream component |
| | | (2) The failure of a single upstream line pressure regulator results in an inlet gas |
| | | pressure exceeding the rated pressure of any downstream component |
| | | When an overpressure protection device is required in 5.6.1, it shall be set to not exceed the following pressures: |
| | | (1) The set point of the device shall not exceed 150 percent of the rated pressure of |
| | | the lowest rated component when the rated pressure of any component is less |
| 5.6.1.1 | | (2) The set point of the device shall not exceed 41 kPa (6 psi) above the rated |
| | | pressure of the lowest rated component when the rated pressure of any |
| | | component is equal to or greater than 83 kPa (12 psi) but less than 414 kPa (60 psi). |
| | | the lowest rated component when the rated pressure of any component is equal to |
| | | or greater than 414 kPa (60 psi). |
| 5.6.1.1.1 | | The overpressure protection device required in 5.6.1.1(3) shall also comply with the following: |
| | | (1) The overpressure protection device shall be any one device permitted in Section |
| | | 5.9 of NFPA 54. (2)* There shall be an active or passive means by which the activation of the |
| | | overpressure protection device is detectable. |
| | | (3) Where a pressure relief valve(s) is used as the overpressure protection device, |
| | | the relief valve and all connected vent piping shall be sized to accommodate the |
| | | regulator. |
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| CLAUSE | VERDICT | COMMENT |
|--------|---------|---|
| 9 | Info | Control and Instrumentation |
| 9.1 | Info | All Engines |
| 9.1.2 | | <i>New clause added;</i> Where a high-pressure limit control is required by 5.2.1(6), the conditions that result in a tripping of the control shall be investigated before a manual reset of the |
| | | safety function is performed. |
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| | | CUSTOMERS PLEASE NOTE: This Table and column "Verdict" can be used in determining how your current or future production is or will be in compliance with new/revised requirements. |