

Engineering Standard

SAES-T-637

28 January, 2004

Communications Cable Pressure Testing

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Saudi Aramco DeskTop Standards

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Previous Issue: 31 October, 2000 Next Planned Update: 1 February, 2009

Revised paragraphs are indicated in the right margin

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1 Scope

This standard prescribes compliance governing Cable Pressurization Continuous Feed Systems Pressure Testing, and it is recognized as the engineering criteria to be applied to Saudi Aramco Communication Pressurized Cable System installation.

2 Conflicts and Deviations

Any deviations, providing less than the mandatory requirements of this standard require written waiver approval as per Saudi Aramco Engineering Procedure [SAEP-302](#).

3 References

The selection of material and equipment and the design, construction, maintenance and repair of equipment and facilities covered by this Standard shall comply with the latest edition of the references listed below, unless otherwise noted.

3.1 Saudi Aramco References

[SAEP-302](#)

*Instructions for Obtaining a Waiver of a
Mandatory Saudi Aramco Engineering
Requirement*

3.2 Industry Codes and Standards

General Telephone & Electronics

GTE SEC 637

Continuous Feed Systems

4 Design

The General Telephone and Electronics (GTE) Series 637 on "Cable Pressurization Pressure Testing" is hereby recognized as Saudi Aramco Engineering Standard SAES-T-637. The following specifications refer to General Telephone and Electronics Practice GTE 637 Series, which is part of this standard.

5 Specifications

The text in each paragraph below is an addition, exception, modification, or deletion to GTE 637 as noted.

637-000-001

Issue 1, August 1986

General Description & Characteristic of Cable Pressurization in Pipe Systems

Exception:

This section is issued for informational purposes only.

637-000-002 Issue 1, November 1986
Cable Pressurization Pipe System Installation

Exception:

This section is issued for informational purposes only.

637-000-201 Issue 1, September 1986
Model 100-F Pressure Transducer System Installation and Operation

Exception:

None.

637-020-001 Issue 2, February 1986
Continuous Feed Systems; Definitions and Terminology

Exception:

None.

637-025-500 Issue 3, May 1986
Continuous Feed Systems; Pressure Testing - Precautions

Exception:

None.

637-110-100 Issue 3, August 1986
Pressure Testing; Pneumatic Resistance of Cables

Exception:

None.

637-120-100 Issue 5, September 1985
Continuous Feed Systems;
Pressure Testing Concentrates, Solutions and Accessories - Description

Exception:

None.

637-125-200 Issue 3, September 1986
Continuous Feed Systems; Pressure Testing Fittings - Lead Cables

Exception:

None.

637-125-200 (Addendum) Issue 1, June 1982
Continuous Feed Systems; Pressure Testing Fittings - Lead Cables

Exception:

None.

637-125-201 Issue 4, October 1979
Pressure Testing Fittings; Stalpeth and Alpeth Cable

Exception:

None.

637-130-100 Issue 3, September 1986
Continuous Feed Systems; Meter Panel Description

Exception:

None.

637-135-206 Issue 4, August 1986
Continuous Feed Systems;
Reducer, Regulator Valve and 289A 2563 Relief Valve - Installation

Exception:

None.

637-140-100 Issue 5, May 1977
Continuous Feed Systems; Contactors and Contactor Terminals

Exception:

This section is issued for informational purposes only.

637-145-201 Issue 1, January 1992
Cable Pressure Systems; Using PR-868 Plugging

Exception:

References to specific product types are for purposes of illustration only.

637-145-300 Issue 1, October 1968
Insulated Conductor Junction Splices;
Model 60000-D Moisture Separator; PIC, Paper or Pulp Cable - Maintenance

Exception:

This section is issued for informational purposes only.

637-200-200 Issue 4, January 1986
Continuous Feed Systems; Bypass Arrangements and Valve Locations - Aerial

Exception:

None.

637-600-500 Issue 3, September 1986
Continuous Feed Systems; Pressure Testing - Construction Tests

Exception:

Page 15, Step 5; delete reference to GSP section 637-125-200; insert in its place a reference to SAES-T-637 section 637-125-200.

637-800-501 Issue 2, September 1975
Continuous Feed Systems; Pressure Gradients and Analysis

Exception:

Paragraph 2.05; Delete reference to "GAS PRESSURE FORMS" being available, (all forms used will have to be produced locally by the user).

637-800-507 Issue 2, February 1986
Continuous Feed Systems; Leak Location-Helium Method

Exception:

None.

639-900-040 Issue 3, September 1987
Continuous Feed Systems; Pressurized Cable Layout Drawings

Exception:

None.

637-900-100 Issue 1, December 1962
Continuous Feed Systems; Compressor-Dehydrator,
Description and Installation - Models 5000, 1500, 750 and 600 PM

Exception:

This section is issued for informational purposes only, all references to specific models or manufactures types are for purposes of illustration.

637-900-101 Issue 1, October 1968
Continuous Feed Systems;
Compressor Dehydrator- Model 1400 PM - Description and Installation

Exception:

This section is issued for informational purposes only, all references to specific models or manufactures types are for purposes of illustration.

637-900-102 Issue 1, October 1968
Continuous Feed Systems;
Portable Compressor - Dehydrator-Model 8542 - Description and Installation

Exceptions:

General; this section is issued for informational purposes only.

Paragraph 5.09; delete existing text of paragraph and in its place insert the following:

5.09 - A humidity alarm will be caused by wet air. Wet air can be caused by low delivered air pressure to the dehydrator. If a wet air condition cannot be corrected by air compressor maintenance, the trouble lies in the dehydrator. Prior to checking out the dehydrator insure that none of the air fittings leak.

637-900-102 (Addendum) Issue 2, November 1969
Continuous Feed Systems;
Portable Compressor - Dehydrator-Model 8542 - Description and Installation

Exception:

None.

637-900-103 Issue 2, June 1978
Continuous Feed Systems; Compressor-Dehydrator-Model 2000 PM
and Model 3500 PM Air Dryers (General Cable, "Puregas")

Exception:

This section is issued for informational purposes only, all references to specific models or manufactures types are for purposes of illustration.

637-900-110 Issue 2, May 1986
Continuous Feed Systems; Pressure Contractors - Location

Exception:

None.

637-900-111 Issue 2, November 1986
Cable Pressurization Sheath Feed Methods, Pressure Transducers Location

Exception:

None.

637-900-111 (Addendum) Issue 1, August 1987
Cable Pressurization Sheath Feed Methods, Pressure Transducers Location

Exception:

None.

637-900-301 Issue 3, September 1986
Continuous Feed Systems; Initial Phase Procedures

Exception:

None.

637-900-302 Issue 2, November 1985
Continuous Feed Systems Follow-Up Phase

Exception:

None.

637-900-305 Issue 3, August 1981
Continuous Feed Systems; Models 5000, 1500,
and 750, Compressor-Dehydrators - Maintenance Procedures (General Cable, Puregas)

Exception:

This section is issued for informational purposes only, all references to specific models or manufacture type are for the purpose of illustration.

637-900-306 Issue 1, January 1963
Continuous Feed Systems;
Compressor-Dehydrator, Model 600 PM - Maintenance Procedures

Exceptions:

General; this section is issued for informational purposes only, all references to specific models or manufactures type are for the purpose of illustration.

- Paragraph 1.03; delete reference to GSP section 637-900-100; insert, in its place, a reference to SAES-T Section 637-900-100.

637-900-306 (Addendum) Issue 1, April 1963
Continuous Feed Systems;
Compressors-Dehydrator, Model 600 PM - Maintenance Procedures

Exception:

None; this addendum is issued for informational purposes only, and is issued as a supplement to section 637-900-306 of this standard, only.

637-900-307 Issue 1, July 1968
Alarms: Pressure and Humidity-Puregas Compressor-Dehydrators,
(Models 750, 1500, and 5000) - Functional Testing

Exceptions:

This section is issued for informational purposes only, all reference to specific models or manufacture type is for purposes of illustration.

637-900-308 Issue 1, October 1968
Continuous Feed Systems; Model 1400 PM - Maintenance

Exception:

This section is issued for informational purposes only, all references to specific models or manufacture type are for purpose of illustration.

637-900-502 Issue 3, September 1986
Continuous Feed Systems;
Cable Condition Monitoring - Gas Meters and Air Rate Indicators

Exception:

Page 3, Step 4; delete reference to "Section 637-900-300 of GTE practices; in its place insert reference to section 637-900-300 of this standard.

637-900-700 Issue 2, June 1986
Continuous Feed Systems; Procedure for Placing Air Dryer in Operation

Exception:

Page 1, delete reference to 637-900 subdivision of GTE practices, in its place insert reference to "637-900 subdivision of SAES-T Standards".

Reference in this standard to any particular manufacturer by name in connection with any product is intended for the purpose of example or description (i.e., type, specifications, and quality), of that product and items actual may be of any manufacture that meets technical requirements.

Revision Summary

28 January, 2004 Revised the "Next Planned Update". Reaffirmed the contents of the document, and reissued with minor changes.