



# Specific Technical Requirements STR-4

Date:05.10.2001

## Portable Gaseous Oxygen Supply

### 1 Definition

The Portable Gaseous Oxygen Supply is intended for use as first aid oxygen per JAR 25.1443 (d) with at least two outlets for passengers of aircrafts. Therefore the Portable Gaseous Oxygen Supply must have a 2 L/min STPD and 4 L/min STPD constant flow outlet.

An optional constant pressure outlet may be installed for the supply of oxygen regulators per JTSO-C89 and by this fulfil the requirements of JAR 25.1443 (e).

### 2 Requirements and Acceptable Means of Compliance

Standards set forth in JAR 25, Change 15  
SAE Aerospace Standard AS 1046, Rev. B  
RTCA-DO 160 D Environmental Conditions and Test Procedures for Airborne Equipment

Requirement	Title
JAR 25.1301	Function and Installation
JAR 25.1301, § (a)	Intended Function
JAR 25.1301, § (b)	Labelling
JAR 25.1301, § (c)	Installation Limitations
JAR 25.1301, § (d)	Proper Function
JAR 25.1441	Oxygen Equipment and Supply
JAR 25.1441, § (a)	Cross reference to JAR 25.1443 to 25.1453
JAR 25.1441, § (b)	Free of Hazards
JAR 25.1441, § (c)	Means to Determine Quantity
JAR 25.1441, § (d)	Flow Rates above 40000 ft
JAR 25.1443	Minimum Mass Flow of Supplemental Oxygen
JAR 25.1443, § (a)	Continuous Flow Equipment for Flight Crew Members
JAR 25.1443, § (b)	Demand Equipment for Flight Crew Members
JAR 25.1443, § (c)	Supplemental Oxygen for Passengers and Cabin Attendants
JAR 25.1443, § (c)(1) to (c)(2)	10000 ft to 18500 ft 18500 ft to 40000 ft
JAR 25.1443, § (d)	First-Aid Oxygen

<b>Requirement</b>	<b>Title</b>
JAR 25.1443, § (e)	Portable Oxygen
JAR 25.1453	Protection of Oxygen Equipment from Rupture
JAR 25.1453, § (a)	Sufficient Strength
JAR 25.1453, § (b)	Requirements for Sources and Pipelines
JAR 25.1453 (b)(1) to (b)(2)	Protection from Unsafe Temperatures
RTCA/DO 160 D	Environmental Conditions and Test Procedures for Airborne Equipment
SAE AS 1046 B	Minimum Standard for Portable Gaseous Oxygen Equipment
AS 1046, § 1.	Scope
AS 1046, § 2.	Purpose
AS 1046, § 3.	References
AS 1046, § 4.	Requirements
AS 1046, § 4.1	Detail Requirements
AS 1046, § 4.2	Oxygen Cylinder
AS 1046, § 4.2.1	Filling Pressure
AS 1046, § 4.2.1.1	Gas
AS 1046, § 4.2.2	Size and Shape
AS 1046, § 4.2.2.1	Protrusions
AS 1046, § 4.2.3	Capacity
AS 1046, § 4.2.4	Duration
AS 1046, § 4.2.5	Colour
AS 1046, § 4.2.6	Cylinder to Regulator Attachment
AS 1046, § 4.3	Regulator
AS 1046, § 4.3.1	Regulator Performance
AS 1046, §, 4.3.1.1	Pre-Set Continuous-Flow Type
AS 1046, § 4.3.1.2	Adjustable Continuous-Flow Type
AS 1046, § 4.3.1.3	Automatic Continuous-Flow Type
AS 1046, § 4.3.1.4	Demand Type
AS 1046, § 4.3.1.5	Diluter-Demand Type
AS 1046, § 4.3.1.6	Pressure Demand Type
AS 1046, § 4.3.2	ON-OFF Valve
AS 1046, § 4.3.2.1	High Pressure Valve
AS 1046, § 4.3.2.2	Valve-Regulator Combination

<b>Requirement</b>	<b>Title</b>
AS 1046, § 4.3.2.3	Low Pressure Valve
AS 1046, § 4.3.3	Valve Design, Construction and Materials
AS 1046, § 4.3.4	Valve Control
AS 1046, § 4.3.5	Cylinder Contents Indicator
AS 1046, § 4.3.6	High Pressure Safety Device
AS 1046, § 4.3.7	Low Pressure Relief Device
AS 1046, § 4.3.8	Outlet Connection
AS 1046, § 4.3.9	Filler Fitting
AS 1046, § 4.4	Flow Indicator
AS 1046, § 4.5	Harness
AS 1046, § 4.6	Overall Container
AS 1046, § 4.7	Mask
AS 1046, § 4.7.1	Continuous Flow
AS 1046, § 4.7.2	Demand and Pressure-Demand
AS 1046, § 5.	Quality Assurance Provisions
AS 1046, § 5.1.	Classification and Scope
AS 1046, § 5.1.1	Qualification Testing
AS 1046, § 5.1.2	Acceptance Testing
AS 1046, § 5.2	Test Media
AS 1046, § 5.2.1	Other than Oxygen
AS 1046, § 5.2.1	Filling with Oxygen
AS 1046, § 5.3	Test Methods
AS 1046, § 5.3.1	Product Examination
AS 1046, § 5.3.2	Leakage
AS 1046, § 5.3.3	Performance Testing
AS 1046, § 5.3.4	High and Low Temperature Testing
AS 1046, § 5.3.5	High and Low Temperature Exposure Testing
AS 1046, § 5.3.6	Endurance and Vibration Testing
AS 1046, § 5.3.7	Environmental Exposure Testing
AS 1046, § 6.	Identification and Packaging
AS 1046, § 6.1	Identification
AS 1046, § 6.2	Contamination Control

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<b>Requirement</b>	<b>Title</b>
AS 1046, § 6.3	Final Packaging
AS 1046, § 7.	Notes
AS 1046, § 7.1	Phi symbol

Acceptable means but not the only means of compliance are given in the applicable JAR 25 ACJ's.