GGG-M-125/1B
September 20, 1982
SUPERSEDING
GGG-M-125/1A
May 2, 1978

FEDERAL SPECIFICATION

RESPIRATOR ASSEMBLIES: AIR LINE, WITH FACEPIECE (SUPPLIED AIR)

This specification has approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.

The complete requirements for procuring the masks described herein shall consist of this document and the issue in effect of GGG-M-125/GEN.

1. SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers the specific requirements for half-mask and full-mask facepieces designed for use with supplied air.

1.2 Classification.

1.2.1 Types, models, and styles. Respirator assemblies shall be of the following types, models, and styles as specified (see 6.2).

Type I - Air line respirator without auxiliary self-contained cylinder containing compressed breathing air.

Type II - Air line respirator with auxiliary self-contained cylinder containing compressed breathing air.

Model 1 - Constant air flow (type I only).
Model 2 - Pressure-demand air flow.
Model 3 - Demand air flow.

Style A - Half-mask facepiece.
Style B - Half-mask facepiece (for use under welder's helmet).
Style C - Full facepiece.

2. APPLICABLE DOCUMENTS

2.1 Latest issue of GGG-M-125/GEN and documents referenced therein, and the additional documents specified herein.

Federal Specifications:

BB-A-1034 - Air, Compressed, for Breathing Purposes.
GGG-H-211 - Helmet, Welders, Handshield, Welding, and Plates, Welding.

(Activities outside the Federal Government may obtain copies of Federal specifications, standards, and commercial item descriptions as outlined under General Information in the Index of Federal Specifications, Standards, and Commercial Item Descriptions. The Index, which includes cumulative bimonthly supplements as issued, is for sale on a subscription basis by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

(Single copies of this specification and other Federal specifications and commercial item descriptions required by activities outside the Federal Government for bidding purposes are available without charge from General Services Administration Business Service Centers in Boston, MA; New York, NY; Philadelphia, PA; Washington, DC; Atlanta, GA; Chicago, IL; Kansas City, MO; Fort Worth, TX; Houston, TX; Denver, CO; San Francisco, CA; Los Angeles, CA; and Seattle, WA.

(Federal Government activities may obtain copies of Federal standardization documents, and the Index of Federal Specifications, Standards, and Commercial Item Descriptions from established distribution points in their agencies.)

Military Standard:

MIL-STD-101 - Color Code for Pipeline and for Compressed Gas Cylinders.

3. REQUIREMENTS

3.1 Approval and certification. (see GGG-M-125/GEN).

3.2 Design. Compressed respirable air supplied through a flexible hose to the facepiece of the respirator provides respiratory protection against air-borne particulate matter, vapors, and gases.

3.3 Principal parts.

3.3.1 Type I, models 1, 2, and 3, and styles A, B, and C. These respirators (see figures 1 and 2) shall consist of the following principal parts where required:

a. Air-line hose (see 3.3.3).
b. Detachable coupling (see 3.3.4).
c. Air flow control device (see 3.3.5).
d. Compressed air-purifying assembly (model 1 only, see 3.3.6 and 3.3.6.1).
e. Breathing tube (see 3.3.7).
f. Belt or harness (see 3.3.8).
g. Facepiece (see 3.3.9).
h. Head harness (see 3.3.10).
i. Exhalation valve(s) (see 3.3.11).

3.3.2 Type II, models 2 and 3, and styles A, B, and C. These respirators (see figure 3) shall consist of the following principal parts where required:

a. Air-line hose (see 3.3.3).
b. Detachable coupling (see 3.3.4).

c. Demand or pressure-demand regulator (see 3.3.5).
d. Breathing tube (see 3.3.7).
e. Belt or harness (see 3.3.8).
f. Facepiece (see 3.3.9).
g. Head harness (see 3.3.10).
h. Exhalation valve(s) in facepiece (see 3.3.11).
i. Auxiliary self-contained compressed breathing air cylinder and valve assembly with gage (see 3.3.12).

3.3.3 Air-line hose. When specified (see 6.2), a 25-foot air-line hose shall be furnished to connect the respirator to the air supply system.

3.3.4 Detachable coupling with automatic shut-off mechanism. The detachable coupling shall provide a manually operated means for severing the air-line hose from the breathing tube and facepiece assembly. The detachable coupling shall function without the aid of tools and shall sustain a tight union not readily broken by normal handling. The coupling shall be readily attachable to the air-line hose without recourse to fittings other than those supplied with the respirator assembly. The detachable coupling with automatic shut-off mechanism shall automatically shut off the air supply when the coupling is disconnected and it shall automatically open the air supply when the coupling is connected.

3.3.5 Air flow control device.

3.3.5.1 Air flow control device for model 1 respirator. A fixed orifice or air regulating valve shall be provided as specified (see 6.2). The valve shall be designed so that accidental bumping of the valve control shall not result in a change of air flow.

3.3.5.2 Pressure-demand type regulator for model 2 respirator. The pressure-demand regulator shall operate so that the air pressure inside the facepiece in relation to the air pressure of the immediate environment is positive during both exhalation and inhalation.

3.3.5.3 Demand type regulator for model 3 respirator. The demand regulator shall operate so that the air pressure inside the facepiece in relation to the air pressure of the immediate environment is positive during exhalation and negative during inhalation.

3.3.6 Compressed air-purifying assembly. When specified (see 6.2), an air-purifying assembly shall be provided for model 1 respirators. The air-purifying element shall be readily replaced in the assembly without the use of tools.

3.3.6.1 Air purifying element. An air-purifying element shall remove trace concentrations of some odors and/or particulate matter or any combination of them from air supplied to the facepiece.

3.3.7 Breathing tube. A flexible breathing tube shall be furnished to connect the facepiece air inlet opening to the air flow control device, demand regulator, or pressure-demand regulator when it is not located on the facepiece. Tubes, complete with fittings, shall show no signs of leakage when subjected to the leakage test specified in GGG-M-125/GEN.

3.3.8 Belt or harness assembly. When specified (see 6.2), each respirator shall be provided with an adjustable belt or harness assembly that will comfortably support the apparatus attached to it and/or act as a strain relief for the attached air-line hose. The belt shall support the air flow control device. The belt shall be permanently attached to the air flow control device or it shall be equipped so that the air flow control device may be attached to it without the use of tools.

3.3.9 Respiratory-inlet coverings.

3.3.9.1 Half-mask facepiece. The facepieces of these respirator assemblies shall cover the mouth and nose, leaving the eyes uncovered. The lower part of the half-mask facepiece makes facial contact under the chin. The design shall provide a gas-tight seal with the face, when worn.

3.3.9.2 Half-mask facepiece - welders. The facepieces of these respirator assemblies shall be similar to the facepieces described in 3.3.9.1 except that they shall be designed for use under a welder’s helmet conforming to GGG-H-211.

3.3.9.3 Full facepiece. The facepieces of these respirator assemblies shall cover the entire face. The facepiece shall be provided with one or two lenses conforming to GGG-M-125/GEN and of sufficient size and shape to provide a satisfactory field of vision for persons of widely varying facial shapes and sizes. The lens(es) shall form a gas-tight seal with the facepiece, and where replaceable, this shall be accomplished without the use of special tools and cements.

3.3.10 Head harness. The head harness shall be adjustable and secure the respirator facepiece to the wearer’s head.

3.3.11 Exhalation valve(s). The exhalation valve(s) shall be securely mounted on the facepiece and shall permit passage of the exhaled air from the facepiece and prevent entrance of ambient air into the facepiece during the inhalation.

3.3.12 Type II auxiliary self-contained compressed breathing air cylinder. An appropriate cylinder of compressed breathing air conforming to BB-A-1034, having a shutoff valve and pressure gage attached, shall be furnished as a component part of the apparatus covered by this specification. Cylinders shall be marked with the words "Breathing Air - For Egress Only" and the maximum pressure allowable. The service time capacity of the cylinder shall be 5-, 10-, 15-minutes, or longer as specified (see 6.2).

3.3.12.1 Color code of cylinders. In addition to the requirements of 3.3.12, cylinders for military agencies shall be color coded for cylinder identification and titled to show the exact identification of the material contained in accordance with the provisions of MIL-STD-101.

3.4 Cleaning and sanitization. Respirators shall conform to the requirements specified in GGG-M-125/GEN.

3.5 Spare parts. When specified (see 6.2), spare parts or accessories shall be furnished.

3.6 Interchangeability. Requirements in accordance with GGG-M-125/GEN.

3.7 Instructions. Requirements in accordance with GGG-M-125/GEN.

3.8 Marking. Requirements in accordance with GGG-M-125/GEN.

3.9 Workmanship. Requirements in accordance with GGG-M-125/GEN.

4. QUALITY ASSURANCE PROVISIONS

4.1 The quality assurance provisions shall be in accordance with the requirements of GGG-M-125/GEN and the additional requirements specified herein.

4.2 Examination. Respirators sampled in accordance with GGG-M-125/GEN shall be examined to verify compliance with this specification. Assemblies shall be examined for defects listed in table I.

TABLE I. Classification of defects.

Categories	Defects
Major	
101	Type, style, and model not as specified.
102	Respirator not in accordance with NIOSH/MSHA requirements.
103	Principal parts missing.
104	Detachable coupling not as specified.
105	Spare parts missing when specified.
106	Instructions missing.
107	Markings not as required.
108	Poor workmanship.

4.3 Tests. Respirator assemblies sampled in accordance with GGG-M-125/GEN shall be subjected to the following tests:

a. Cleaning and sanitizing test (see GGG-M-125/GEN).
b. Lens test (see GGG-M-125/GEN).
c. Leakage test (see GGG-M-125/GEN).

5. PREPARATION FOR DELIVERY (In accordance with GGG-M-125/GEN).

6. NOTES

6.1 Intended use.

6.1.1 Type I, models 1, 2, and 3, and styles A, B, and C. These respirators are intended to provide respiratory protection to the wearers against hazardous atmospheres containing toxic particulate matter, vapors, and gases having concentrations in air that are not immediately dangerous to life or health.

6.1.2 Type II, models 2 and 3, and styles A, B, and C. These respirators are intended to provide respiratory protection to the wearers against hazardous atmospheres containing toxic particulate matter, vapors, and gases having concentrations in air that are not immediately dangerous to life or health. If the supply of breathing air obtained from the air-line hose is interrupted,

the auxiliary self-contained cylinder containing compressed breathing air provides respiratory protection to the respirator wearer while he or she escapes from the hazardous atmosphere.

6.2 Ordering data. Purchasers should select the preferred options offered herein and include the following data in procurement documents:

a. Title, number, and date of this specification.
b. Title and date of general specification GGG-M-125/GEN.
c. Type, style, and model of respirator required (see 1.2.1).
d. Whether respirator is furnished with or without air-line hose (see 3.3.3).
e. Specify fixed orifice or air regulating valve of model 1 respirator (see 3.3.5.1).
f. Specify if compressed air-purifying assembly is required (see 3.3.6).
g. Specify if belt or harness is required (see 3.3.8).
h. Specify service time capacity of auxiliary self-contained cylinder for compressed breathing air for type II respirator (see 3.3.12).
i. Specify if spare parts are required and list quantity of each type of spare part required (see 3.5).
j. Specify level of packaging and level of packing required (see GGG-M-125/GEN).

MILITARY INTEREST:

Custodians

Army - EA
Navy - YD
Air Force - 99

Review Activities

Army - MD, ME
DLA - GS

User Activities

Navy - SH, CG, MC

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - FSS
TVA -
DCG

PREPARING ACTIVITY:

Navy - YD

Project No. 4240-0504

Orders for this publication are to be placed with General Services Administration, acting as an agent for the Superintendent of Documents. See section 2 of this specification to obtain extra copies and other documents referenced herein.

NOTICE OF
VALIDATION

GGG-M-125/1B
NOTICE 1
17 August 1987

FEDERAL SPECIFICATION

RESPIRATOR ASSEMBLIES: AIR LINE, WITH FACEPIECE (SUPPLIED AIR)

GGG-M-125/1B, dated September 20, 1982, has been reviewed and determined to be valid for use in acquisition.

Custodians:
Army - EA
Navy - YD
Air Force - 99

Preparing Activity:
Navy - YD

Civil Agency Coordinating Activities:
GSA - FSS
TVA
DCG

Review Activities:
Army - ME, MD
DLA - GS

User Activities:
Navy - CG, MC, SH

AMSC N/A

FSC 4240

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