

SR-100

60 Minute ESCBA

Since 1969, CSE Corporation has been providing quality, portable gas detection and breathing apparatus for mining applications all over the world. Thousands of miners depend on CSE equipment to alert and protect them against the hazards that could exist during a normal ten-hour work shift.

Today, CSE has a full range of products for mining and industrial applications. Our products meet strict OSHA, NIOSH and MSHA compliance standards and are built to endure the challenging conditions that are found in many confined spaces. CSE has a proven track record and has maintained the same commitment to quality, service and performance that has been demanded by our customers for the past 30 years.

The SR-100

The SR-100 self-contained oxygen breathing apparatus was designed with the cooperation of MSHA for the protection of workers in confined spaces against the dangers of toxic gases, oxygen deficiency and smoke inhalation. The unit uses a bi-directional rebreathing system in which exhaled gas makes two passes through a CO₂ absorption/oxygen generation canister before the gas returns to the user. Specific amounts of KO₂ (potassium superoxide) and LiOH (lithium hydroxide) are used to produce O₂ and scrub CO₂ respectively, resulting in the production of a minimum of 100 liters of oxygen. The unit is certified by

NIOSH/MSHA for a minimum of one hour of operation, however, the duration is dependent on the user's physical work rate.

Applications

Portable ESCBA's such as the SR-100 have successfully been used in mining and aboard submarines for emergency escape. They are now being used widely throughout the industrial sectors in areas such as these:

- Manholes
- Sewers
- Vaults
- Tanks, vessels
- Wet wells, waste water
- Clean rooms, semiconductor labs
- Tunnels
- Silos
- Mines

The SR-100 is approved by NIOSH/MSHA under CFR 30, part 75-1714, and OSHA CFR 29.1910.146 Appendix E. The approval is for escape only with a duration of one hour. Each unit is supplied complete with starter oxygen cylinder, goggles, case and approved pouch. Optional reflective belts are available in various sizes to accommodate most any user. Each SR-100 has a ten-year shelf life. There is no scheduled maintenance other than simple user inspection of the unit.



The 3+3 Donning Procedure

The SR-100 is easily donned by following the 3+3 procedure described below.

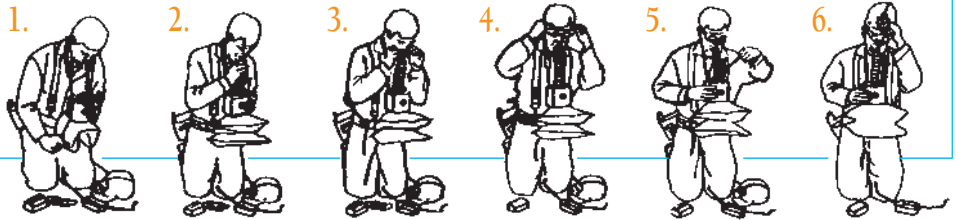
Weighing less than 6 lbs., the SR-100 is designed to be worn on the belt, or kept within arm's reach of workers exposed to dangerous hazards.

In emergencies, the user should position themselves kneeling on the ground removing the unit from the belt. Open the unit by lifting the latch on top, removing both top and bottom covers. Loop the neck strap over the head and begin the 3+3 donning procedure.

1. Pull orange actuator tag down to activate oxygen.
2. Remove plug and insert mouthpiece.
3. Pull apart nose pads and affix to nose so that both nostrils are completely closed.
4. Put on safety goggles.
5. Adjust neck strap so that the SR-100 unit rests on chest. Fasten waist strap around waist.

6. Replace hard hat if removed and move out.

By following these steps written by MSHA/NIOSH, the SR-100 can be donned in less than 20 seconds when worn on the worker's belt. Keeping the SR-100 within arm's reach ensures minimal donning time, and maximizes worker protection in emergency situations.



Technical Specifications – SR-100

Unit Description

SR-100:

1-hour Self-Contained SCBA

Weight Carried:

5.7 lbs/2.6 kg

Weight in use:

4.9 lbs/2.2 kg

Dimensions:

7-3/4" x 4" x 5-1/2"

Deliverable O2:

3.5 ft³/100 liters

Rated Duration:

60 minutes (minimum)

Storage Temperature:

32-130F/0-54 C

Approvals:

MSHA/NIOSH – TC-13F-239

Method of Operation:

Chemical based rebreather
-KO2/LiOH

Designed to meet:

CFR 30, Part 75 1714
CFR 29, 1910.146 App. E

Ordering Information

Part #	Description
Q152000006	SR-100
Q152090006	Training Unit
Q152090026	SR-100 Pouch
X151590398	Video Tape
X151590058	Suspenders
X151590108	Belt- Small 27"-33"
X151590118	Belt- Medium 33"-39"
X151590128	Belt- Large 39"-45"
X151590138	Belt- XL 45"-51"
X151590148	Belt- XXL 51"-57"
X151590158	Belt- XXXL 57"-63"
X151590298	Battery Pouch
Q152090046	4 Unit Storage Box
Q152090086	8 Unit Storage Box
Q152090066	10 Unit Storage Box
Q152090076	12 Unit Storage Box

Storage Life:

10 Years

Warranty:

1 Year

Readiness: The SR-100 can be checked instantly by visually inspecting the moisture indicators in the top and bottom covers. The indicators are blue as long as seals are intact. If the seal has been broken, and moisture has contaminated the unit, the moisture indicators will turn pink or white. The unit must then be taken out of service.



Made in the U.S.A.

Distributed By:

**PERMISSIBLE ONE HOUR
SELF-CONTAINED
OXYGEN-GENERATED
BREATHING APPARATUS
FOR ESCAPE ONLY**

MSHA
Mine Safety and Health Administration

APPROVAL NO.
TC-13F-239

MINE SAFETY AND HEALTH
ADMINISTRATION
NATIONAL INSTITUTE FOR
OCCUPATIONAL SAFETY
AND HEALTH

ISSUED TO
CSE CORPORATION-2/23/89



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