



training



Sundström 

SR520

Supplied-air face shield





Companion module:

Sundström SR520 supplied air hood — **HOW TO...**

Related material:

Sundström SR507 supplied air regulator

Sundström SR99 supplied air filter

Sundström SR500 Powered Air Purifying Respirator (PAPR)

Sundström SR700 Powered Air Purifying Respirator (PAPR) for particles

About your SR520 supplied-air face shield:

What is it?

A supplied-air shield is a respiratory protection device that covers your face and head. A continuous flow of clean breathing air is fed into the loose-fitting head-top.



How does it work?

Clean air from a remote source (such as a compressor or a powered fan unit) is fed into the shield through the breathing hose at a constant flow rate. This keeps the head-top filled with clean breathing air at a higher pressure than outside air, preventing any contaminated air from entering the hood. The main advantage of this device is that it does not rely on a tight face seal and does not have to be fitted perfectly to the user's face. This means that even bearded people can use the SR520.



Advantages

There are many benefits associated with wearing a loose-fitting head-top as opposed to a tight-fitting respirator. Advantages include:

- Can be connected directly to a fan unit, such as SR500 or SR700
- Can be used with a fixed air supply through the SR507 regulator
- Often a good solution for bearded users or users with skin complaints, dentures, unusual face features or other problems that may hinder the use of tight-fitting masks
- Durable material
- Impact and chemical resistant visor



Drawbacks

If you decide to connect the SR520 to a fixed air supply, mobility can be restricted by the supply hose. In addition, the length of the hose limits the distance the wearer can move away from the source of the breathing air.

If a PAPR is chosen, the user is no longer limited in movement.



IMPORTANT: about the quality of remote supplied air for breathing:

- The intake air at the source (compressor etc.) must be free of contaminants, or at least kept to a minimum and never exceed hygienic limit levels
- Any mineral oil content must be kept below the smell threshold level (about 0.3 mg/m³)
- The air must not be so cold as to cause internal freezing of the equipment

If there are any doubts as to any of the points above, a supplied-air filter should be used, such as the Sundström SR99 airline filter in the picture



Where can the SR520 be used?

The SR520 supplied-air face shield can be used in more situations than negative-pressure filter respirators:

- Wherever negative-pressure filter respirators can be used
- Where the user has a beard, stubble, moustache, goatee, whiskers, sideburns or other facial hair that can interfere with the facial seal of a respirator
- Skin conditions, severe acne, dentures, unusual face shape/size, inability to wear a tight-fitting respirator for psychological or other reasons
- Where the contaminant has poor warning properties (smell or taste)
- Where the contaminant is particularly toxic (such as two-pack paint; toluene diethylamide and others)
- Where the concentration of the contaminant is so high that filter respirators are not permitted
- In flammable atmospheres (the SR520 is made from materials that cannot cause frictional sparks)



When should the SR520 NOT be used?

- If there is not enough oxygen for human breathing in the ambient atmosphere
- If the contaminant is unknown
- If the contaminant is Immediately Dangerous to Life and Health (IDLH)
- If the ambient atmosphere is oxygen-enriched or pure oxygen
- If breathing becomes difficult
- If you can smell or taste any contaminant
- If you feel dizzy or nauseous, or suffer any discomfort
- If the air-pressure warning sounds



Spray painting

If the work involves spattering and spraying, a practical accessory is protective film for the visor. The film covers the visor and can be torn off as soon as poor visibility becomes a problem. You can even attach several sheets of film to the visor and tear them off as you go.



Before fitting the head-top:

- Make sure the head-top is clean and intact
- Make sure it is securely connected to the air supply
- Make sure the quality of the breathing air is adequate
- Make sure you are familiar with the equipment and know how to use it

