



# **AYSAN REFUGE SYSTEMS**

## **PERMANENT REFUGE CHAMBER**

Greatest technology under the safest roof

**AYSAN**  
ENGINEERING DESIGN AND MECHANICS



Sealed structure

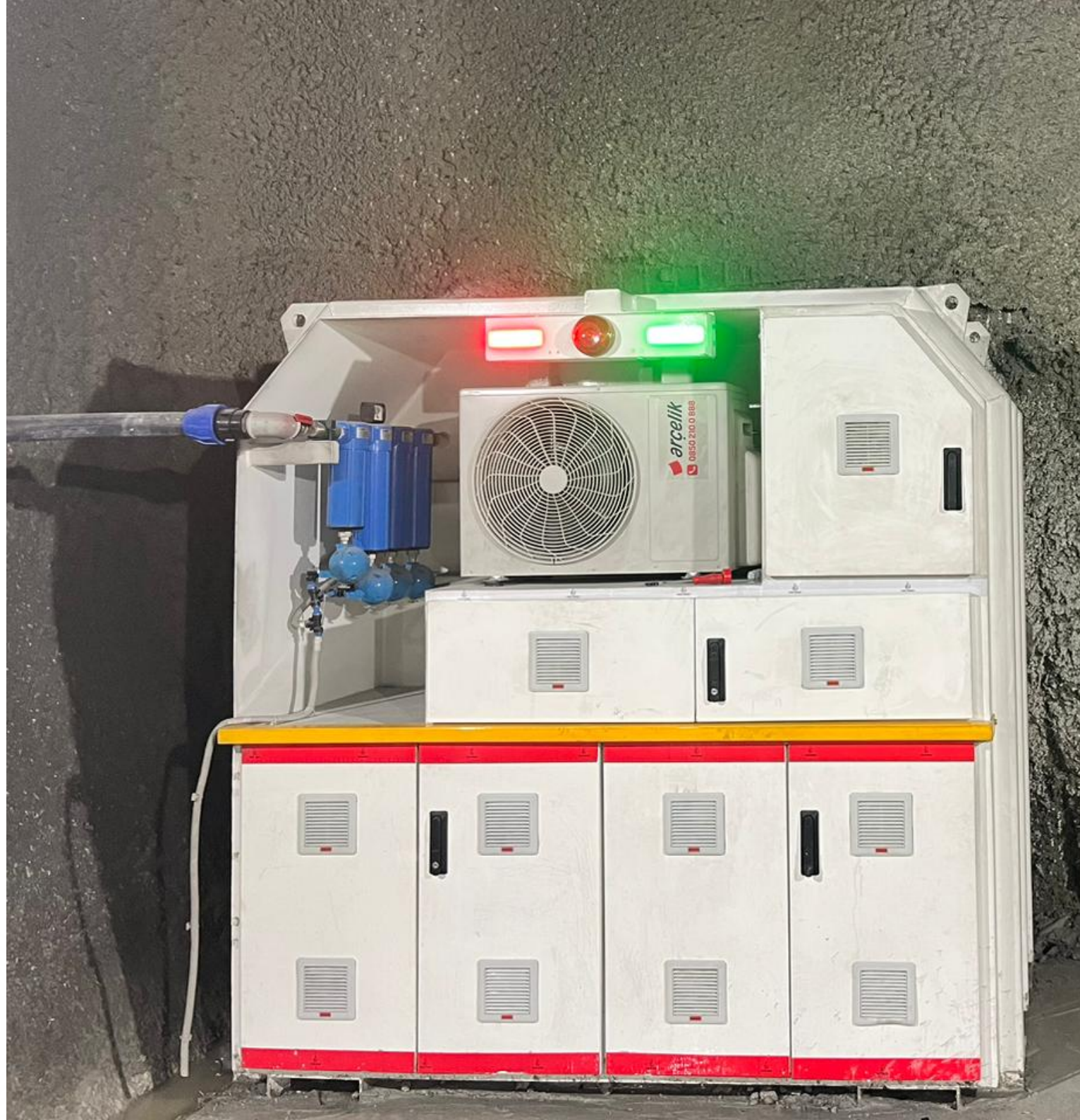
Continuous battery  
support  
up to 96 hours

Specially designed  
impermeable door seal

Air Conditioning

Observation window

Compressed Air  
Management







Permanent Refuge Chambers are formed by sealing concrete rooms formed in mines. In terms of cost-effectiveness, this system offers the best solution for large numbers of people underground at a time.

The refuge station is designed to provide a safe and secure location for personnel to gather during an emergency, when evacuation is no longer safe or practical.

Permanent Refuge Chambers can be used for secondary purposes such as refectory, first aid room and meeting point for the personnel.



The features we use as standard in all chambers are also valid in fixed refuge rooms. According to customers request, various engineering solutions can be developed depending on the desired number of people.

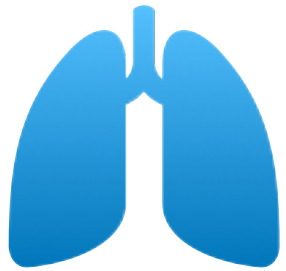
Custom-made seats do not compromise on safety while taking into account the comfort of the personnel in this area.





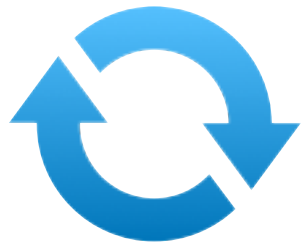


There is a constant buildup of heat caused by the refuge chamber's occupant's metabolic activity, scrub processes, electrical equipment, and any external heat. To combat the potentially fatal effects of heat stress inside an occupied refuge chamber, air conditioning is essential.



The Scrubber System remove the toxic air in the room through chemical cartridges and provides the breathable air. The system maintains gas levels acceptable within the station.

The System uses pre-packaged AYSAN chemical cartridges with a long shelf life, easily handled and usable. After the activation, the fans direct the air to pass through and clean the chemical packages that hold hazardous gases and toxins. The resulting purified air is directed from the system to the refuge chamber environment.



If the primary source of breathing air is compromised, you can safely use oxygen cylinders as a secondary oxygen supply.











## **AYSAN**

Engineering  
Design & Mechatronics

75. Yıl Mahallesi

11231. Sokak

No:27

Odunpazarı/Eskişehir

[www.minerefugechamber.com](http://www.minerefugechamber.com)



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