Airlocks are pressure vessels with two airtight doors penetrating the containment to permit access to the reactor building and to maintain the sealing off from the outside atmosphere.

Airlocks permit controlled transfer of personnel and/or material into and from the containment and thus ensure that the operating conditions inside the containment are maintained.

The airlock is designed to prevent uncontrolled pressure loss and contamination leakage from the reactor building.

Various systems of lock opening mechanisms are available depending on customer requirements.

Airlock Functions

- Personnel access to the containment
- Emergency exit and rescue from the containment
- Prevention of uncontrolled access to the containment
- Prevention of uncontrolled contamination leaks
- Material transfer into and out of the containment
- Integrity in case of incidents
Technical Data

Weight: approx. 28 t
Length: approx. 7.5 m
Diameter: 3.1 m
Design pressure (abs): 5.3 bar
Design temperature: 170 °C
Design sub pressure: -40 mbar
Normal working temp.: 30°C
Capacity: 40 persons

References

- Germany: NPPs Gundremmingen, Philippsburg, Grafenrheinfeld, Grohnde, etc.
- Finland: NPP Olkiluoto 3
- Spain: NPP Trillo
- Switzerland: NPP Gösgen
- France: NPP Grenoble
- Brazil: NPP Angra 2 & 3