

ACTIVE GAS COMPRESSION SYSTEM

Small footprint, high-capacity storage system

The active gas compression system can be added to your hot cell configuration. It is designed to store radioactively contaminated exhaust air in buffer tanks for decay. The exhaust air is collected from one or more hot cells. This system is either activated by the operator or an activity sensor.

The system is normally connected to Von Gahlen synthesis boxes and waste compartments but can also be attached to other hot cells. The AGC system is PLC-controlled through the hot cell interface and is easy to use. It is equipped with several safety features to prevent contaminated air from being released into the atmosphere.

You can choose from a wide selection of drive power ratings, effectively supplemented by state-of-the-art gas-tight high-pressure treatment systems and high-performance gas metering technology.

The one-compressor solution can handle 2 compartments simultaneously. Two tanks in one bank is the standard system, but the amount of tanks and banks can be increased for more storage capacity.

A second compressor can be added for redundancy and/or up to four synthesis boxes parallel storage.

Variants / Run time	2 tanks	4 tanks	6 tanks
1 storage bank	3 hrs	6 hrs	10 hrs
2 storage banks	6 hrs	12 hrs	20 hrs
3 storage banks	10 hrs	20 hrs	30 hrs
4 storage banks	13 hrs	27 hrs	40 hrs

Based upon a single compressor system

High-pressure compressor

Super silent

Compact

Ergonomic design

Easy to maintain



Rack with high-pressure storage tanks

Small footprint



STANDARD FEATURES

General

- Innovative high-pressure system technology for the storage of radio-active contaminated air.
- Each box to be connected to the compression system is equipped with an additional on/off valves on the exhaust
- Tailor-made for the compression of radio-active gases, our compressors are equipped with fully automatic compressor control.
- The compressors are intelligently controlled based on storage system's final pressure, the gas balloon's level, or the intake pressure.
- Vapor recovery by the automatic condensate drain and integrated safety valves in the intake buffer and condensate vessels creates an enclosed circuit with virtually zero loss of gas.
- For particularly cost-effective operation, the compressor system has also been optimized for gas tightness:
- All gas compressors are tested under real conditions with helium and delivered ready for operation.

System operation / control

- A PLC is used to control the compression system.
- Operating the compression system via the hot cell control panel. This is a user-friendly, intuitive interface.
- An additional control panel close to the storage area is available to release (decayed) compressed gasses.
- Audit Trail, in accordance with risk management principles, captures general system events as well as any activities relating to the acquisition, deletion, overwriting, and changes to data for audit purposes.
- The implementation of software conforms to the SDLC [software development life cycle].
- Development and validation of software according to GAMP and is technically compliant with Eudralex V4 Annex 11 and 21 CFR Part 11.

OPTIONAL FEATURES

- Additional storage tanks.
- Second compressor.
- Dose alarm monitor decay room with possible entrance interlocking.
- Dose alarm on release with automatic shut-off.

