# CamCarb CG Specifications

* 1. **General**

1.1 Cylinders shall be a combination of PP copolymer and ABS plastic refillable loose-fill

molecular media cylinders to be installed on matching holding frames.

1.2 Sizes shall be as noted on enclosed drawings or other supporting materials.

# Construction

* 1. Manufacturer shall provide evidence of facility certification to ISO 9001:2008.
  2. Molecular media cylinders shall be constructed of high impact ABS plastic and shall be enclosed with a plastic end cap. The cap shall be disposable and replaced during every molecular media replacement interval.
  3. The air inlet of the cylinder shall be conical in shape to facilitate uniform airflow across the entire surface of the molecular media.
  4. Each cylinder shall include a minimum of 4.2 slots per square inch of cylinder surface area each slot measuring 32 mm long by 2.3 mm wide. There shall be a minimum of 200 slots per 2” of cylinder length.
  5. System pressure drop shall not exceed (*choose one)* [0.50, 0.63]” w.g. at a velocity of 500 fpm, with granulated activated carbon when mounted to matching cylinder holding frame(s).
  6. Each cylinder shall include a mounting assembly with three integral stainless steel bayonet stubs for mounting to matching cylinder mounting flange. Cylinder to mounting hardware procedure shall form a mechanical connection with a seal limiting air bypass across canister mounting assembly.
  7. Each cylinder shall contain at least 1.5 pounds of molecular media per 6” of cylinder length.
  8. Molecular media shall be Camfil:

*(Choose one media per stage of molecular filtration required)*

**2.8.1** [ACIDS]; [ACIDS\_NO2]; [ACIDS\_H2S]; [ALDEHYDES]; [BASES]; [ETHYLENE]; [DECONTAMINATE]; [H2S\_MERCAPTANS]; [O3]; [SO2\_H2S]; [TERPENES]; [VOC]; [VOC\_ALDEHYDES]; [VOC\_H2S\_SO2]; [VOC\_O3\_ACID\_H2S]; [VOC\_O3\_H2S\_SO2]; [VOC\_O3\_NO2\_SO2]

# Molecular Performance Testing

# Filters to be tested by the manufacturer using a protocol in accordance with ASHRAE 145.2 or ISO 10121-2. Full details of test protocol to be included with photographic evidence. Results from ASTM D6646 or similar high challenge concentration tests are not admissible

# A full size, 24” x 24” filter, shall be tested at a flow rate of 2,000 CFM, temperature of 73F (23C), and a relative humidity of 50%.

# Gas detectors must have lower level of detection (LLoD) values <1 ppb.

# At a minimum the initial removal efficiency and test concentration shall be provided for:

# *Chemical A*

# *Chemical B*

# *Chemical C*

# *Chemical D*

# *Chemical E*

*Please identify the contaminants that are the most applicable to your project. Please note that some chemicals are difficult to acquire, hazardous, and/or expensive to test. Surrogate gases may be deemed necessary tests subjects.*