

CT-D

Dry Bed Absorber

Point-of-use abatement

Single Column System for Highly Toxic Gases

Overview

The centrotherm CT-D Dry Bed Absorber offers a safe, efficient and reliable point-of-use abatement solution for the semiconductor, photovoltaic and related industries.

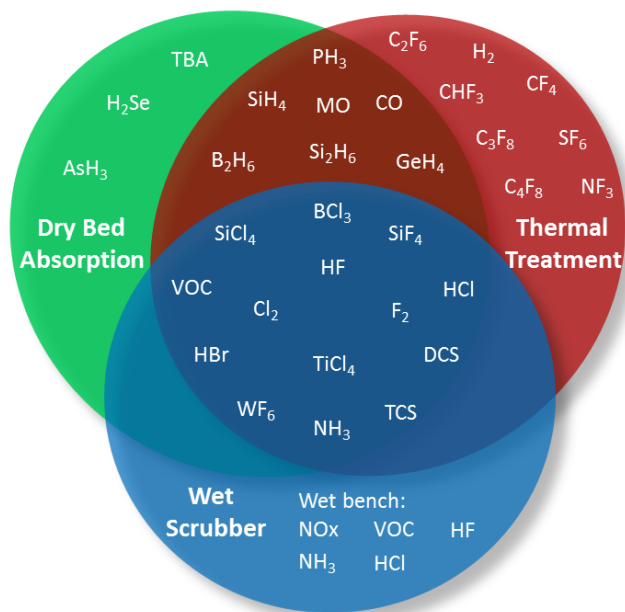
Chemisorptive resins are optimized to treat toxic, reactive, ignitable and corrosive components in process waste gases. The resins convert the gases into non-volatile, stable inorganic solids by irreversible chemical reaction at ambient temperatures. The centrotherm CT-D Dry Bed Absorber is a passive system that does not require additional resources such as water, fuel, etc. and will continue to remove toxic gases even in the case of a power failure.

The centrotherm CT-D Dry Bed Absorber can be configured to customer requirements and is available in three different cartridge sizes: 30, 60 and 120 liters [7.9, 15.8, 52.8 gal].

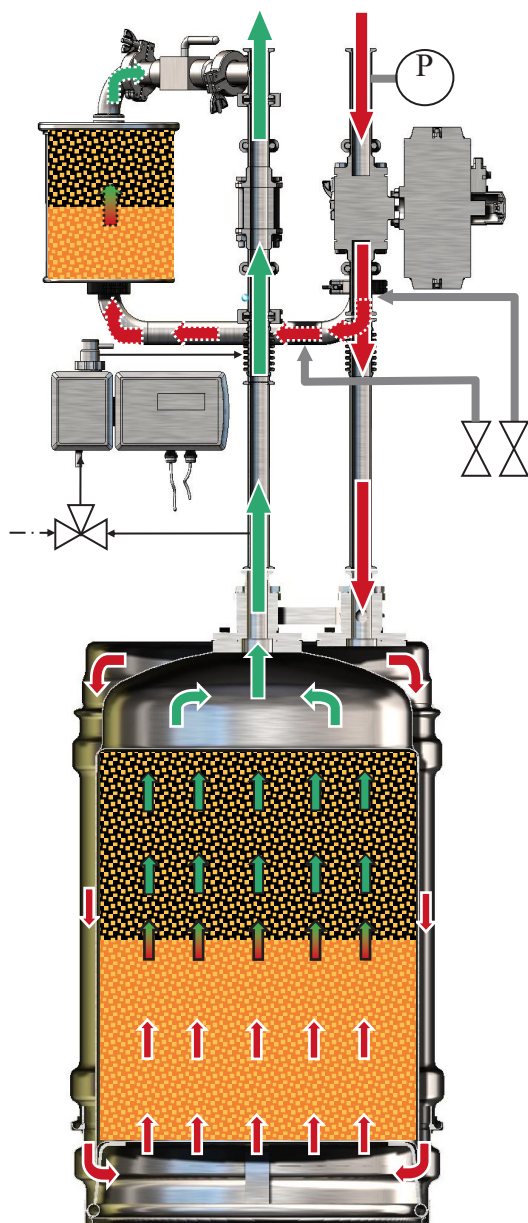


Process technology

- Destruction and removal efficiency (DRE) of up to 99.99 %
- Removal efficiency performance meets Threshold Limit Value (TLV) requirements
- Specifically designed granules for semiconductor and photovoltaic applications
- Irreversible conversion of hazardous gases to stable inorganic solids
- No waste gas desorption due to chemisorption
- Fast reaction rates require only short retention times
- Cartridge with patented double-wall design (cold trap functionality)



Schematic flow diagram



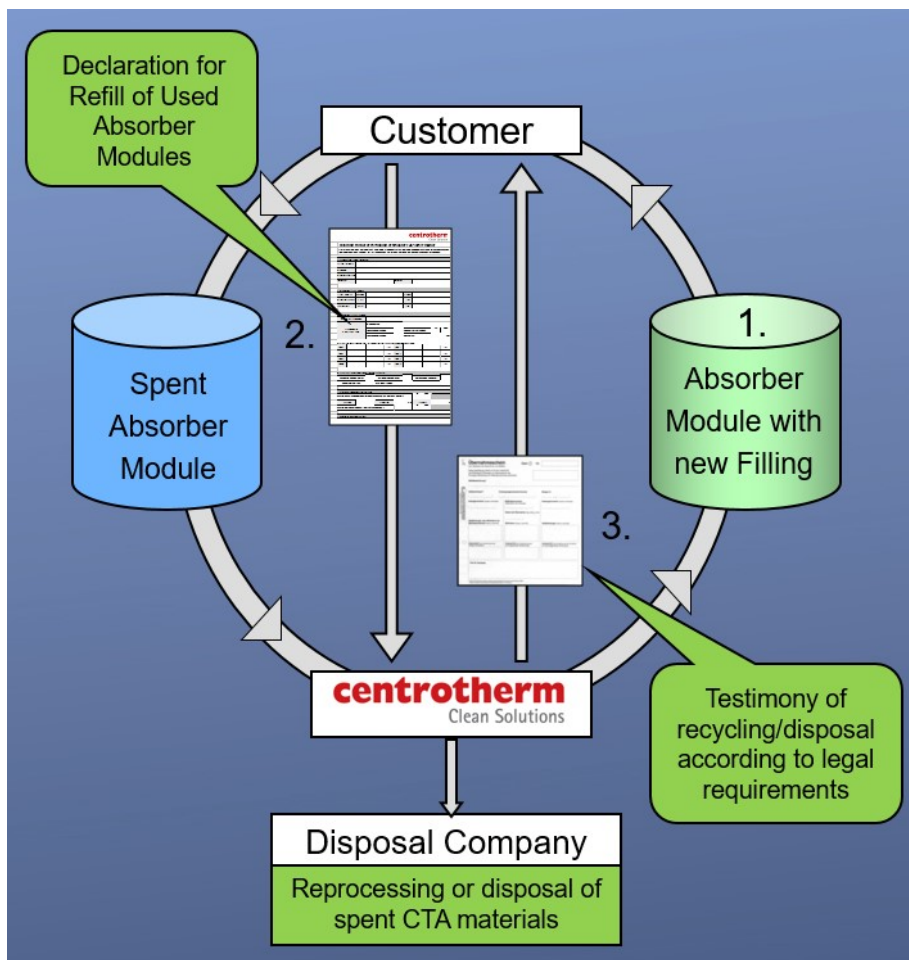
Features and benefits

- Integrated waste gas and inlet pressure monitoring
- Low media consumption
- Little maintenance requirements
- Cartridges are UN-approved containers for transportation of hazardous goods
- Easy and safe cartridge replacement
- Integrated bypass with optional bypass absorber
- Patented cartridge design with cold trap functionality prevents clogging
- Well-established refill and disposal concept - worldwide

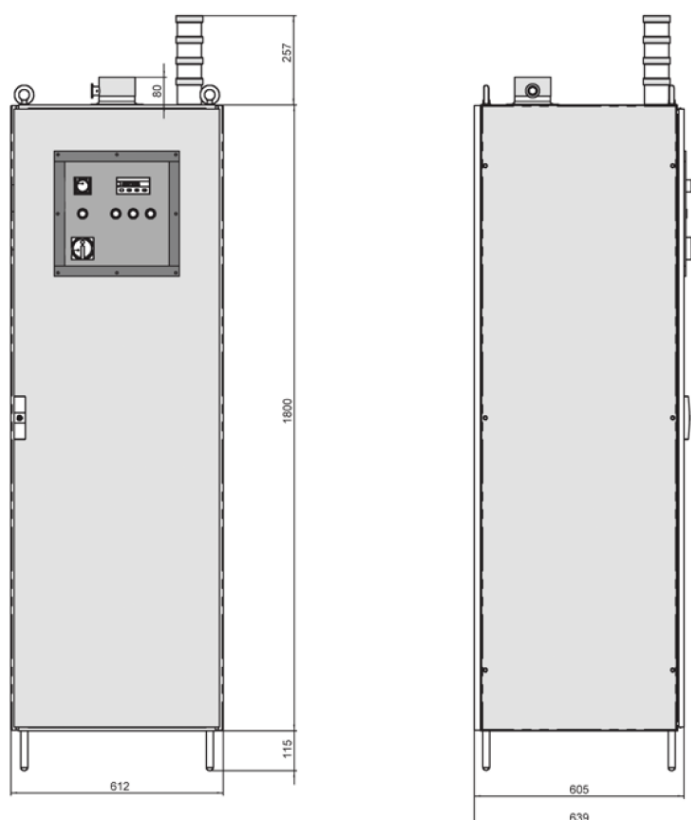


Refill and disposal concept

- Shipment of a fresh filled cartridge in advance and sending a testimony of recycling/disposal according to legal requirements
- Sending of the declaration for used absorber modules to centrotherm clean solutions by the customer
- Shipment of the spent absorber module to a manufacturer certified disposal company
- Reprocessing or disposal of spent centrotherm clean solutions Absorbent (CTA) material



Dimensions



All mesures in mm

Technical data

CT-D Dry Bed Absorber

Process flow	up to 50 slm	up to 100 slm	up to 200 slm
Cartridge size	30 liters	60 liters	120 liters
resin volume	[7.9 gallons]	[15.8 gallons]	[31.7 gallons]
Dimensions [W x D x H]	612 mm x 605 mm x 2,000 mm [24 inch x 23.8 inch x 78.7 inch]		
Maintenance area	front: 1,000 mm [39.4 inch], top: 500 mm [19.7 inch], rear: none, left: none, right: none		
Weight ¹	approx. 200 kg [440 lbs]	approx. 240 kg [529 lbs]	approx. 280 kg [617 lbs]
Power Supply	0.3 kW [1 phase], 100–240 VAC [50/60 Hz]		
Nitrogen supply	6 – 8 bar(g), connection 1/4" 2 ferrule fitting		
Dry air supply [option]	6 – 8 bar(g), connection 1/4" 2 ferrule fitting		
Standard accessories	bypass line with mini-absorber 3 liters [0.8 gallons], alarm/light tower including buzzer		
Option	H ₂ kit [temperature monitoring, gas sensor, N ₂ dilution]		

¹ including cartridge. Exact weight depending on resin type used.



centrotherm
clean solutions

centrotherm
clean solutions GmbH
Johannes-Schmid-Str. 3-5
D-89143 Blaubeuren
Germany

Phone: +49 7344/ 92494-0
Fax : +49 7344/ 92494-199
E-Mail: info@centrotherm-cs.de
Internet: www.centrotherm-cs.de