Fibreglass Covers

Containing gases and odours

Sept 10

ARMATEC

FIBREGLASS COVERS

Light weight fibreglass covers for tanks and other equipment to contain corrosive and odourous gases. Covering and hooding of a noxious or odorous process is the first important step in controlling air pollution; contact ARMATEC for wet scrubbers, biological scrubbers, carbon beds, ducting systems, and fans.

BENEFITS OF FIBREGLASS

- **Light weight** for easy assembly, lifting into position, and removal if required to access equipment.
- **Corrosion resistant** to H_2S and many other corrosive gases. Ideal where the external chemical plant atmosphere is corrosive, e.g. wastewater treatment plants and marine environments.
- **Low maintenance** of fibreglass means minimal ongoing costs and long life.
- **Design flexibility** means that almost any design is possible to suit the particular site and operation. Ideal where compound curves are needed.
- **Ease of modification post installation** means extensions or adjustments can be done at any time as process requirements change.
- **Antislip walkways** can be moulded into flat covers.
- **Applied loads** including personnel, equipment, wind loads etc can be taken by the covers.

USES

- PSTs, thickeners, grit tanks and clarifiers
- Conveyor belts and transitions
- Pulp and paper pulp washers
- Fertiliser processing covers
- Food industry cookers and driers
- Rendering plant cookers and equipment
- Metal treatment tanks

Photos below: Segmented fibreglass covers at municipal wastewater treatment plants showing the wide range of designs and shapes possible with fibreglass.

ARMATEC Environmental Ltd

ISO 9001 BUREAU VERITAS Certification

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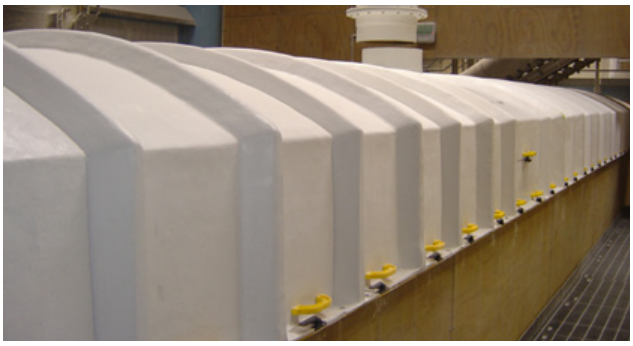
TYPICAL DESIGN FEATURES

- Covers are often supplied in multiple sections to provide for easy site assembly, and for later removal to access equipment for servicing.
- Ribs are used to provide stiffness to the overall cover so that it can withstand wind loads and the weight of personnel standing on it.
- Covers can be designed to achieve total enclosure when there is no air extraction provided.
- Design loads including personnel and wind are taken from approved standards, or customer requirements.
- When equipment is vented to an air pollution control system, hoods are designed to provide an air velocity of 0.5 to 1.0 metres per second through any openings. This ensures odorous and noxious gases are contained and thus captured.
- Mould finish can be either inside or outside, depending on design requirements or customer preference.
- When anti-slip surfaces are required, these can be moulded into the outer surface.
- Covers are designed after taking into account process requirements for access to the equipment. Design may require removable panels, or plastic strip curtains or other solutions. We work with the plant operators to develop an acceptable design.
- Lip extraction hoods are available for extracting gases from tanks which cannot be covered over, such as when overhead cranes are used to load and unload the tank.
- Air curtains can be used to minimise gases escaping from larger openings.
- Fibreglass is easily coloured with a permanent external colour coat for plant identification or safety purposes.
- Covers can be made in stainless steel if required for special food processing applications.

Segmented fibreglass covers are trial assembled at ARMATEC factory before despatch. This ensures dimensions are correct, and minimises installation time and difficulties at site.

Fibreglass cover over pulp washers for chlorine containing fumes. Covers are able to be lifted clear by overhead gantry when access is required to washers for maintenance.

Fibreglass cover over open sewage channels and grit separation tank to contain H_2S odours.



Segmented fibreglass cover over conveyor at biosoilds plant at municipal wastewater treatment plant.

Fibreglass lip extraction hoods on pelt and hide processors.

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