

FLOATING ARCH-RIB COVER

The floating arch-rib cover from Evoqua is the most economical solution for handling variable sludge levels. It is also available with a gas storage option that provides flexibility in gas utilization for downstream equipment.

COVER DESIGN

The arch-rib cover consists of a center gas dome with integral compression ring, radial beams, cover plates, and rim skirt assembly with integral thrust ring. Operating pressure is achieved via a concrete ballast ring as an integral part of the rim skirt assembly. The center gas dome extends below the rim skirt level to form a liquid seal, trapping gas within the cover and allowing it to float.

The floating cover is held in position with a slide guide system which utilizes fabricated steel guide assemblies anchored to the tank wall. The slide guides prevent rotation and binding of the cover, which is especially important since the cover is floating on gas and can be unstable if not properly restrained.

Each Arch Rib Cover is custom designed based on customer specified loading. The structural integrity of the cover is optimized using finite element analysis (FEA) to ensure the most efficient use of materials for reduced shipping costs and ease of handling by on-site field-erection crews.

FIELD EXECUTION ADVANTAGES

- Approximately 50 percent less field weld length than truss style covers
- Cover is shipped as factory welded sub-assemblies
 - Alternating "pie" sections installed in place with rim skirt sections and center gas dome
 - Intermediate roof plates placed between the rim skirt sections and welded to form a sealed shell
 - Each sub-assembly includes two beams and one cover plate
- Easy application of spray insulation on top of the cover

FLOATING COVER ADVANTAGES

- Robust and durable
- Allows for variable sludge levels
- Gas storage option for flexibility
- Economical design

www.evoqua.com

FLOATING ARCH-RIB COVER



EVOQUA SERVICES

Evoqua offers on-site inspection services and can replace any existing digester cover. Our technical experts can assist you in selecting the best solution for your application. Evoqua also provides custom design, manufacturing and installation services to meet your needs.

FOR MORE INFORMATION

www.evoqua.com/retrofit



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