

VACONODOME

Product Description

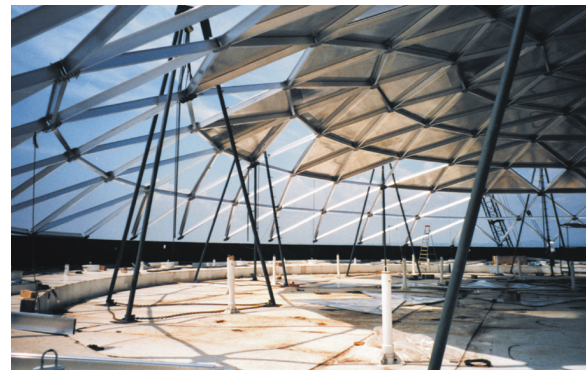
VACONODOME - Aluminium geodesic dome roofs used for the covering of cylindrical open structures of up to 120 m diameter in the water treatment sector and especially in the petroleum industry. They are usually applied in refineries and tank farms, where both the storage product and the structural tank components must be protected from atmospheric and environmental influences. **VACONODOME** combines ecological aspects with economic benefits as it prevents the contamination of the storage product by e.g. rainwater, sand and other foreign matters, and reduces evaporation loss caused by wind or direct exposure to sunlight.



This is what makes the **VACONODOME** so economically interesting:

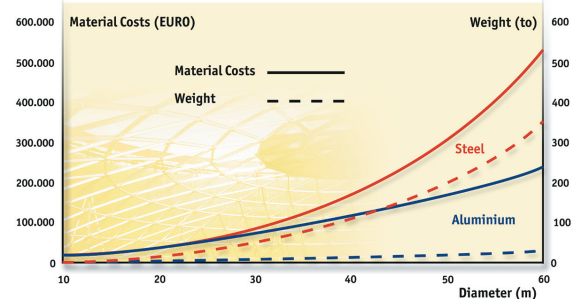
Self-Supporting Aluminium Dome Roof

VACONODOME is designed as a self-supporting dome roof whereby only its outer edge is connected to the tank shell around the outer rim. Central struts, which would have to pass through erected floating roofs or decks and would diminish the efficiency of the system, are no longer required. This advanced constructional design results in an important reduction of evaporation loss.

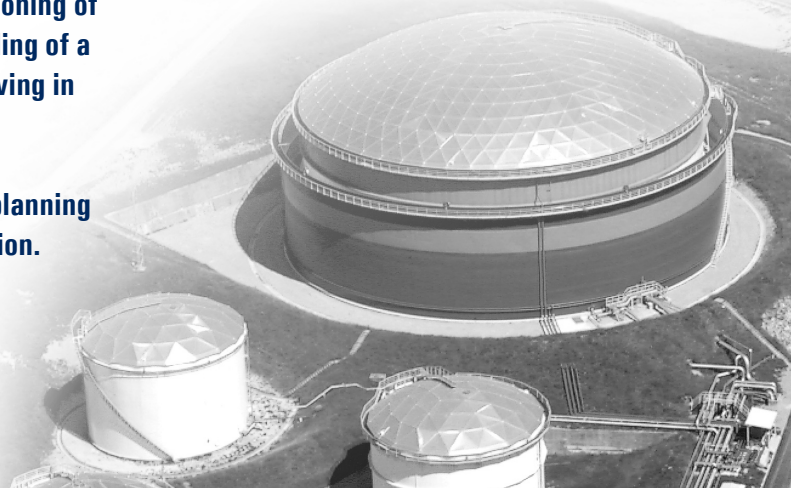


Extreme Light-Weight Construction

The weight of the **VACONODOME** self supporting steel roof (of approx. 60 m diameter) is only 10-15% of a comparable, self-supporting steel roof. The system therefore offers a cost-optimised solution by saving the weight of the tank cover and is also suitable for the retrofitting of existing floating roof tanks, which are designed to function without a steel roof. The storage product is thus completely protected from contamination by rainwater as a malfunctioning of the floating roof drainage system is eliminated. For the building of a new tank, the light weight of the **VACONODOME** allows a saving in expenditure for the foundations as well as the tank shell.

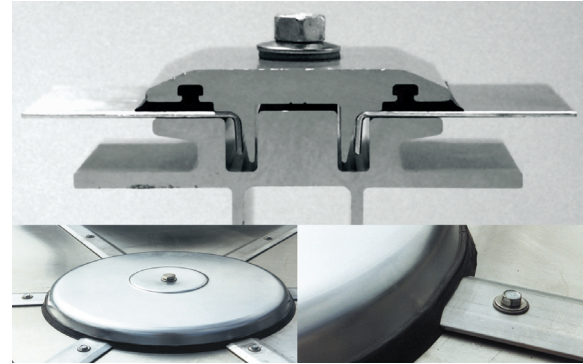


Use the know-how of our experienced engineers during the planning stage for new or already existing tanks even being in operation.



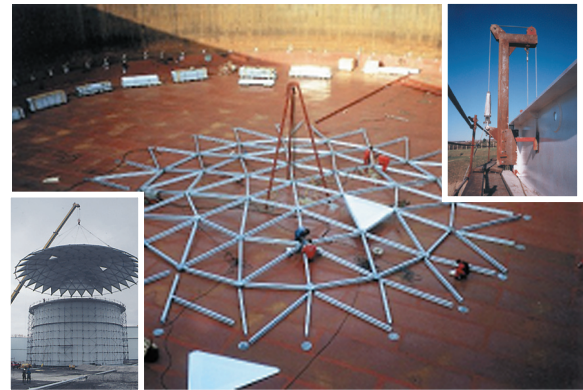
Corrosion Resistance And Low Maintenance Expenditure

All structural components of the **VACONODOME** are fabricated from highly-tensile aluminium alloys and possess excellent corrosion-resistant features. An additional protective coating is not required, even after decades of operation, as our aluminium constructions are characterised by an extremely long service life. These features are derived from our track record covering more than 100 years of aluminium production and processing and the continuous further development of the single structural components. For example, this is reflected by the customary selection of aluminised fasteners which exhibit an excellent resistance to corrosion, especially in an aggressive humid or saline atmosphere. These characteristics have been confirmed in the course of numerous tests in cooperation with internationally accepted research departments of the aluminium industry.



Low Erection Cost

As a consequence of the simple, well-developed design, the **VACONODOME** aluminium construction can be erected very quickly by local crews, without the demand for specially trained personnel. Our specialists can supervise the on-site erection worldwide, if this is required.



Standards

The **VACONODOME** is designed and fabricated in compliance with the national and international industrial standards recommended for the petroleum industry or chemical industry and erected on site. Great significance is paid to the American API 650 standard which is accepted in most countries all over the world. Moreover the latest European standards (Eurocode) as well as the local valid industrial standards are of course complied within the scope of the structural calculations.



Accessories

If required by the customer, installations, components and additional accessories can be fitted to the dome to ensure an optimal functioning of the entire tank construction.

Please contact us: www.vacono.com

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