

FAQ'S VACONODOME

Q *Why would I want a VACONODOME?*

A **VACONODOME** is a cost effective alternative to a conventional steel roof on a fixed roof tank as well as the only practical means of converting an open top tank to a fixed roof tank. It is made entirely from aluminium and thus lightweight and maintenance free.

Q *Which is cheaper the VACONODOME or a conventional steel dome or cone roof?*

A For new tank constructions most international oil companies would prefer to specify an Aluminium Dome roof, where the tank diameter is in excess of 25m. Apart from the mere investment, our customers appreciate the fact that a **VACONODOME** is maintenance free during its whole lifetime.
For retrofitting of existing open roof tanks, there is no cost effective alternative to the **VACONODOME** (see next Question).

Q *Can you use the VACONODOME to convert an Open Top or External Floating Roof Tank to a Fixed Roof Tank?*

A Yes. In fact this is an excellent example of how the **VACONODOME** can be used as a cost effective alternative to the conventional steel roof. Because the **VACONODOME** is made entirely from aluminium this light weight structure is considerably lighter than a similar steel roof with the result that the tank shell does not require any stiffening and the tank foundations do not need to be improved. Furthermore because installation of the **VACONODOME** can be carried out typically in about four weeks this means the tank is out of service for a very short period of time. In fact where tank operators have decided to retain the floating roof and use it as a platform for erection of the **VACONODOME**, the tank does not have to be taken out of service.

Q *When was the first VACONODOME made?*

A The first **VACONODOME** was erected in Germany in 1984 and had a diameter of 14m. Since then VACONO has been supplying more than 130 **VACONODOME** s in a range of diameters from 12 meters to over 60 meters to more than 20 countries worldwide.

Q *What is the expected lifetime of a VACONODOME?*

A **VACONODOME** has got a design life of around 30 years, which is the same as the tank's design life time. For more than 18 years now **VACONODOME** s have been in continuous service without any sign of deterioration.

Q *Is there any maintenance work to be done regularly?*

A No.

Q *What is the maximum diameter of VACONODOME?*

A VACONO have the proven technology to design **VACONODOME** up to 120m diameter.

Q *Does VACONO install the VACONODOME?*

A VACONO supply the **VACONODOME** to most countries in the world and are therefore not able to maintain the necessary labour, plant and equipment to carry out the installation work in all locations. However VACONO can supply a competent Supervisor who will be able to assist the tank contractor with the complete installation. In some countries we may be able to recommend a suitable contractor who would be able to install the **VACONODOME**.

Q *What is the minimum information VACONO require to be able to prepare a Quotation for the VACONODOME?*

A Obviously the more information we have the more accurate our Quotation can be. Ideally we would like to receive a copy of the Tank Data Sheet as this usually give us most of the information required. However as a minimum we need to have the full contact details of the Customer as well as the tank diameter, details of the stored product, details of all fittings required to be installed on the **VACONODOME** (Walkways, Handrails, Vents Nozzles, etc.) and the Delivery Location (if a CIF Quote is requested).

Q *Is there any limit to the diameter of tank which can be fitted with a VACONODOME?*

A No. The **VACONODOME** can be fitted to any diameter of tank. Most **VACONODOME** are designed with a Diameter to Height Ratio of 6:1, therefore a **VACONODOME** fitted to a tank with a diameter of 60,000 mm would have a height from curb angle to crown of 10,000 mm.

Q *Are there any limitations on the various apertures/fittings which can be included in the VACONODOME?*

A Essentially No. Anything you have on a conventional steel cone or dome roof can be included in the **VACONODOME**.

Q *What is a skylight?*

A It's transparent panel in the roof structure which allows light into the tank . This can be useful for maintenance work inside the tank.

Q *What is the difference between Fixed and Sliding Supports?*

A The **VACONODOME** is either equipped with an Integral Aluminium Tension Ring to contain the roof forces within the **VACONODOME** and Sliding Supports to transfer these forces to the tank shell. Alternatively, the **VACONODOME** is equipped with Fixed Supports to transfer the forces to a Steel Tension Ring at the top of the tank shell. The most economical combination for diameters less than 30m is the Sliding Support Version. For larger diameters the Fixed Support would be the preferred option.

Q *How is the aluminium in the VACONODOME separated from the Steel Tank?*

A For the Sliding Support version a Teflon plate is used for Insulation. The Fixed Supports however are coated with zinc or an organic aluminium alloy. In any case there is no possibility for material related corrosion between aluminium and steel.