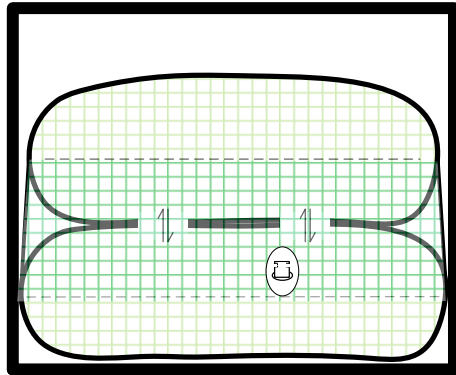




Technical Information on Positive Pressure Inside E-flex Easy Flexitank

The E-Flex Easy Flexitank presents a paradigm shift and a fundamentally different design compared with all other conventional flexitanks. Basically it is made out of two integrated



compartments. It does not exert pressure on the side walls of the container. It is effectively a self-supporting product. The outer heavy duty woven fabric combined with the internal baffle system stabilizes the liquid in the flexitank.

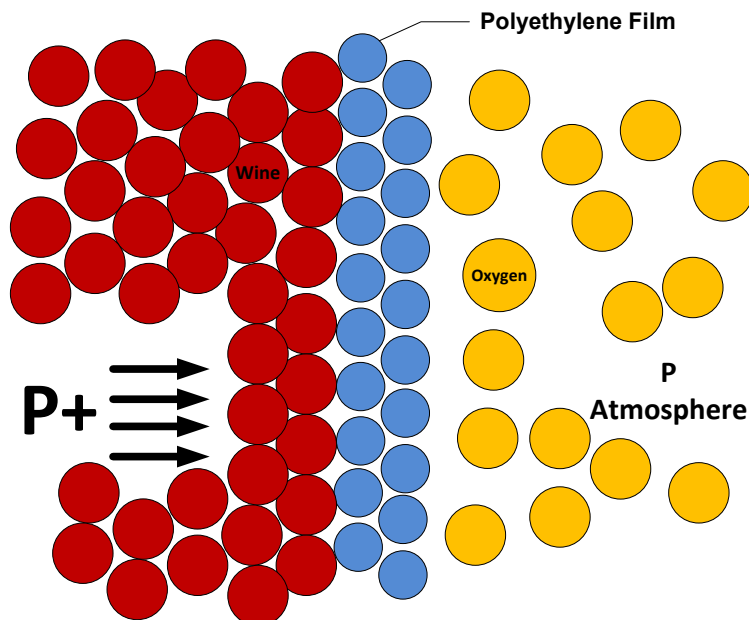
The E-flex is not a rigid tank. When the E-flex is empty, it is air tight. The volume of the tank is determined by the quantity of liquid loaded into it. That is to say, when E-flex is loaded to half of its original capacity, there will be no air in the tank. Once it is filled up to full capacity, the E-flex always has 0.3 bar inner positive pressure. It can be likened to a balloon filled with water.

The uniquely different design of E-flex provides two main benefits for wine. Stability and extremely low oxygen transmission.

Stability; the E-flex Easy Flexitank has **anti-sloshing** technology. Wine remains still/stable during the journey at all times.

Oxygen Blockage; the principles of diffusion are applicable for E-flex. Specifically Fick's laws of diffusion are to be used for better explanation.

"If the pressure of the liquid is greater on one side than the other side of a membrane, liquid will flow from the higher pressure side to the lower pressure side until the pressure of both sides are in equilibrium."



Based on the above principal, due to positive inner pressure of the wine, oxygen molecules on the air CANNOT penetrate through our liquid film and CANNOT cause any bacterial activity in the wine. This is also the case even if there is no special oxygen barrier such as EVOH or Aluminum. A simpler example to that would be a balloon filled with water. If a pin hole is opened on the surface of a balloon, due to inner pressure, only water comes out but air cannot get into the balloon.

Conventional flexitanks do not have any inner positive pressure and therefore do not have the oxygen blocking feature. The



positive inner pressure feature for Oxygen Blockage is unique to Liquatrans E-Flex.