

AIRCELL

FOR OIL FILLED TRANSFORMERS



OVERVIEW

The Air Cell (Flexible Separator) is fitted inside a conservator tank, isolating insulating oil from the atmosphere, and thus preventing contamination of gas and/or moisture from coming into contact with the transformer oil due to oxidation and hydrolysis. The bag is vented on the transformer through flange type mounting such that it inflates or deflates to accommodate oil volume displacements due to changes in the transformer temperature.

The Air Cells are manufactured using time tested combination of Nylon (Polyamide) fabric and a thick coating of Elastomers i.e. Acrylonitrile Butadiene Rubber (NBR), Polychloroprene (CR) and Hypalon (CSM) . The rubber compounds are so formulated, so as to minimize separator degradation and resist leakage of air through membranes thus reducing the amount of air in the transformer oil. Over a period of time this air/gases can reduce dielectric strength and thereby accelerate the aging of the insulation system.

Air-Cell Advantages

Simple design with no expandable parts.

Needs negligible man hours for inspection.

Extended service life.

Economical.

Prevents corrosion.

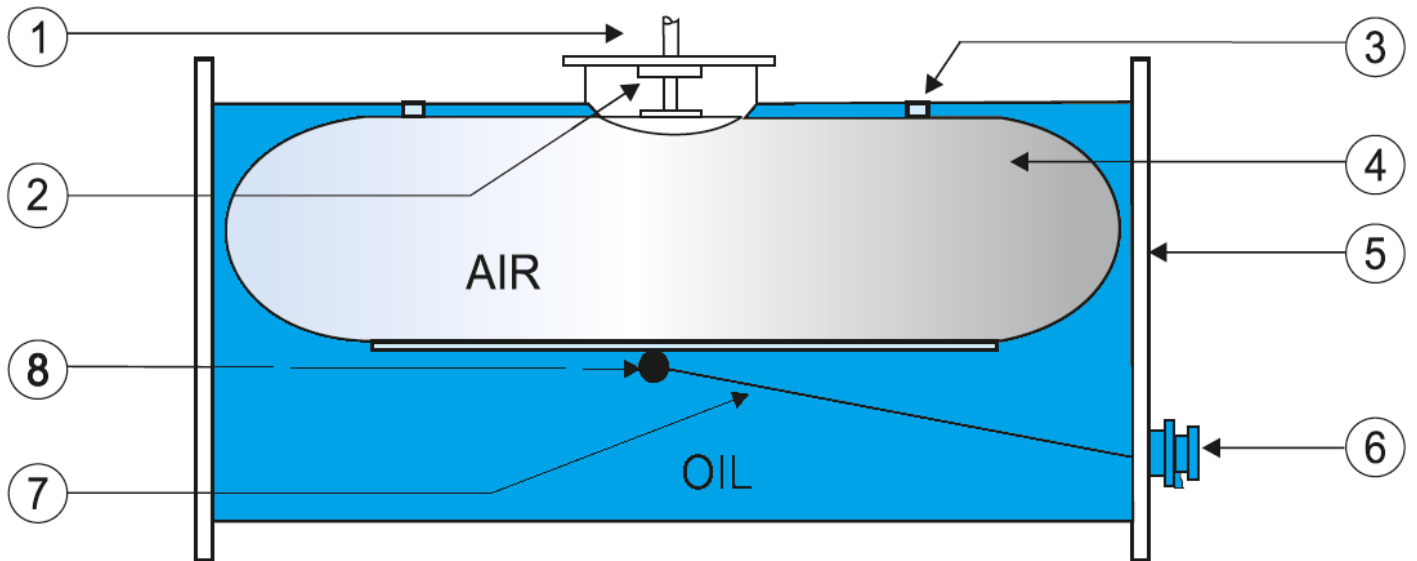
Oil can be filled into the transformer tank without being exposed to the air

Since insulating oil is completely isolated from the atmosphere by an air cell, there is no possibility of oxygen or moisture penetrating the oil.

Pressure on the surface of the oil is constantly maintained at the atmospheric pressure, offering no possibility of the oil becoming supersaturated and forming bubbles; thus, high dielectric strength can be maintained



OMLAA METAL
— INTERNATIONAL —



- 1-Connecting Flange
- 2-Pipe Connecting Breather
- 3-Loops
- 4-Air Cell Beg
- 5- Transformer Conservator
- 6-Oil Level Indicator
- 7-Float Arm
- 8-Float

The Aircell Beg Polymer Material

Aircell are manufactured by using combination of various Elastomers. The inside of the fabric is coated with the combination of Green –Hypalon (CSM) & Black – Polychloroprene (CR) for the better ozone resistance. Whereas the outer side is coated with the Black-Acrylonitrile Butadiene Rubber (NBR) for the oil resistance.

Aircell Fabric Construction

