

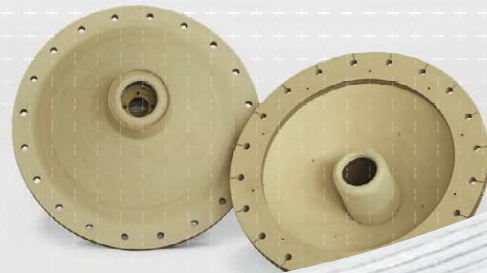
## MAKING YOUR TRANSFORMERS BETTER

### Technology

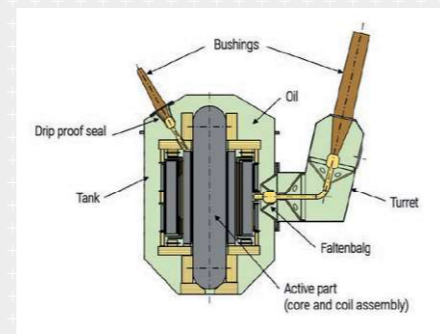
The Weidmann Faltenbalg is a diaphragm made of Transformerboard providing a drip-proof separation of the oil in the main tank from the oil in the bushing turret. The Faltenbalg is used in oil-filled transformers where current-carrying leads run from the sealed main tank into an adjacent compartment containing, for example, a bushing, a connection to a series transformer, or a regulator.

### Features & Benefits

- Protects the core and coil assembly against the ingress of moisture and dirt during the bushing assembly.
- More accurate location of PD sources as DGA tests can be taken from the main tanks and the other compartment (e.g. the bushing turret) separately.
- Protects the windings during the dismantling of the bushing for servicing.
- Provides an optimized design for the mid-winding lead passing through the tank wall; a benefit when there are weight or road/rail clearance restrictions.
- Reduction in commissioning time due to the on-site oil filling operations being limited to a small amount at the bushing turrets.
- Standard designs available for AC power transformers up to 500 kV ( $\leq 1,5$  bar) and special, customized designs available for DC applications (converter transformers).
- Each production series of Faltenbalgs is over-pressure tested in Weidmann's special test tank.
- Using our significant experience in the design and manufacture of hundreds of Faltenbalgs for installation in transformers around the world, our customers can be assured of safe installation and use of this crucial insulation component.



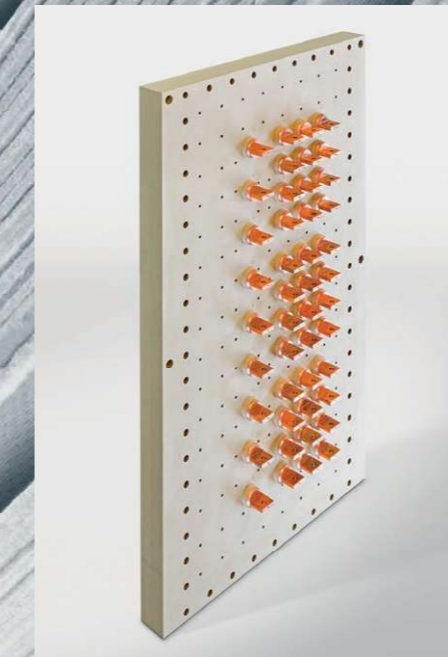
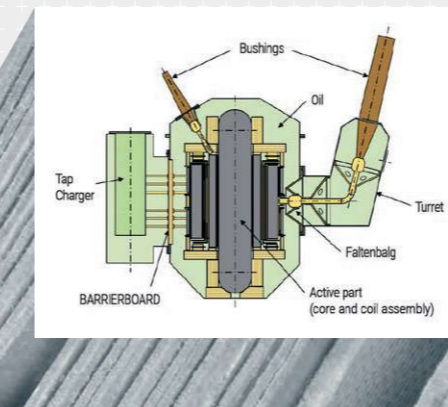
For decades, Weidmann has been helping transformer manufacturers and utility companies add value to their transformers. Using our advanced manufacturing technology, the Faltenbalg is a reliable insulation structure made from our superior insulation material and is shaped like 'folded bellows'.



## WEIDMANN BARRIERBOARD

### Technology

Over 60 years ago, Weidmann, the inventor of precompressed Transformerboard, developed polyester laminated board. Its unique characteristics of high electric and mechanical strength and dimensional stability make it the best choice of material for Barrierboards.



Weidmann Barrierboards provide a leakproof separation of the oil in the transformer tank from the oil in the tap changer chamber. The separation of these elements provides a range of benefits:

- Maintenance on the tap changer can be done without emptying the main tank.
- Significantly reduced risk of a tap changer failure impacting the transformer's active part.
- Possible to conduct separate oil sampling in the main and the tap changer tanks.

Using laminated board of a thickness of 50mm and more, Barrierboards are designed in various forms to meet specific installation requirements. Typical voltage and current requirements range from  $U_N = 70$  to 420 kV;  $I_N = 50$  to 4400 A ( $\leq 1,5$  bar).

The cylindrical shapes of the contact sockets or pins are designed to cope with often high electrical voltage stresses. The contacts are designed for connecting at both ends so that the tap connections can be easily attached.

### Features & Benefits

- Oil in the main tank does not need to be drained during maintenance of the tap changer ensuring the transformer's active part remains protected from moisture and dust pollution.
- Quick and efficient drying, vacuum treatment, and oil filling of the tap changer compartment, keeping outage times to a minimum.
- Plug-in connections are available to significantly reduce the transformer assembly time.
- The configuration of the terminals creates a smooth field pattern and facilitates minimum clearances to earth and consequently reduces overall dimensions.
- Flexible designs (rectangular, round, oval) to meet specific installation requirements.
- Weidmann's 40+ years of experience designing and manufacturing hundreds of crucial Barrierboards guarantees our customers proven safe installation and high performance over many years of use in transformers around the world.

## WEIDMANN

website: [weidmann-electrical.com](http://weidmann-electrical.com) e-mail: [electrical@weidmann-group.com](mailto:electrical@weidmann-group.com)

WEIDMANN

Accelerated aging test:

a determination of Transformerboard thermal class



view on  
demand  
webinar



Photo: Weidmann



## Transformer Services

Weidmann offer insulation engineering & design services for enhanced transformer performance.

Visit the website to view our services.  
[weidmann-electrical.com/transformer-services](http://weidmann-electrical.com/transformer-services)

