

## Gaskets

### INSTRUCTIONS

#### GENERAL

It is very important that all openings in the case be tightly closed before putting a transformer into operation. This is necessary whether the transformer is for indoor or outdoor operation. For either expansion tank or Inertiaire type transformers, the bushing flanges, main cover, manhole cover, etc. must be oil and gas tight. This requires great care in preparing and placing all gaskets and tightening all nuts.

#### Oil Insulated Transformers

The gaskets used on oil insulated transformers are made of either cork or a neoprene-cork composition. Cork gaskets are used generally for tank sizes up to those having a maximum dimension of approximately 70 inches. For larger transformer tanks neoprene-cork gaskets are usually used. Cork gaskets are compressed to approximately one-half their original thickness, while neoprene-cork gaskets are compressed to approximately two-thirds of their original thickness.

#### Inerteen Transformers

Cork gaskets are used on inerteen transformers. The neoprene-cork composition gasket is unsuitable because inerteen dissolves neoprene. The cork gaskets are generally compressed to one-half their original thickness.

#### GASKETING PROCEDURE

The gasket material should be cut into strips of the proper width to conform to the contour of the parts to be joined together. Where it is necessary to use spliced pieces, their ends should be scarfed permitting an overlap of 4 times the thickness of the gasket, maintaining full thickness along the lap.

Both metal surfaces must be thoroughly cleaned of old varnish, scale etc. Manhole, handhole and small cover plate gaskets may be used repeatedly if cemented only to the removable cover and if care is used when cover is removed. Inspect before resealing to make sure that the gasket has not cracked or peeled.

For other sealed joints, it is recommended that both surfaces of gasket and metal be coated with cement. Apply a liberal coating of gasket cement Style No. 471880-E and allow it to become tacky before putting the gasket in place. Lapped joints must be liberally coated with cement. When the parts are put together, make sure that the gasket has not moved out of place. Tighten bolts uniformly.

To prevent gaskets from crushing, as well as to insure a uniform fixed seating, where heavy parts are joined, metal beads or "stops" are welded on the flanges. The "stops" permit the gasket to be compressed to the proper thickness. When stops are omitted full width gaskets are used with bolts through the gasket material. On small parts an effect similar to stops is achieved by recessing the gaskets.

**Note:** The Westinghouse Company has developed a cleaning outfit powered with an electric motor which is adapted to the cleaning of gasket contact surfaces. Write to Renewal Parts Section for details.

#### Leaks

The best insurance against leaks after opening a transformer is to use a new gasket properly cemented to thoroughly cleaned surfaces.

Inertiaire transformers must be carefully tested for leaks before putting into service. Complete instructions for the method of testing is included in the Instruction Book furnished with the Inertiaire equipment.

Fluid filled transformer tanks the nameplates of which indicate that they are good for vacuum filling, may be tested in the field under a pressure of 12 pounds per square inch. All other tanks may be tested in the field at a pressure of 5 pounds per square inch.

Open air transformers and those having dehydrating breathers must have the openings to the air closed before test. Inerteen transformers must have the glass relief diaphragm replaced by a steel diaphragm before testing.

Inertiaire transformers must have the pipe couplings to the Inertiaire equipment closed before testing. The relief diaphragm should be replaced by a steel diaphragm when the testing pressure is liable to exceed the rupturing pressure of the relief diaphragm.

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