



LBH INTERNATIONAL A/S

Catalogue

6.0

INVOLVED IN EXPANSION

Production

LBH products are hand-made according to customer specifications. The common factor is always the craftsmanship and the use of superior materials. It is given a high priority that all raw materials and manufacturing procedures are environmentally compatible.



Testing



All LBH raw materials and end products are continuously tested, either by the LBH Control Dept. or by internationally recognized institutes. A number of test rigs and other testing equipment are used to investigate the effect of thermal loads, pressure, movements etc. on fabrics and expansion joints. Additionally, the equipment is a vital part of the numerous tests being performed in connection with our extensive research and development projects.

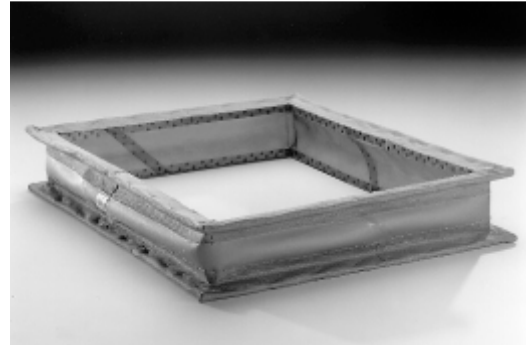
When you choose LBH as supplier, you can benefit from several advantages, such as:

- The flexibility of a highly specialized company providing expert advice based on know-how gained from many years of experience in the field of expansion joint technology.
- Professional advice on the project stage is combined with world-wide consultations.
- A complete manufacturing range of proven quality products covering every application.

PRODUCT RANGE

❶ LBH Fabric Expansion Joints

The fabric expansion joint is the main LBH product. LBH fabric expansion joints are available in virtually any size and shape. 28 standard types, covering every medium from clean air to highly aggressive flue gases. LBH fabric expansion joints are also available as units including steel parts and ready for installation.



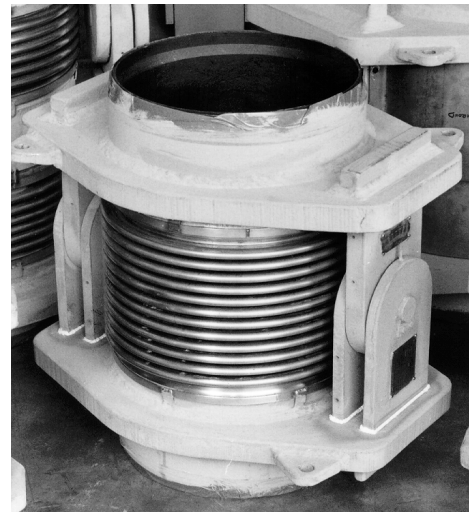
❷ LBH Elastomeric Expansion Joints

LBH vulcanized elastomeric expansion joints are available in 4 different standard types. Elastomeric expansion joints are especially suitable for wet chemical service and for applications in flue gas desulphurisation plants. Available in numerous shapes and sizes.



❸ Metal Expansion Joints

LBH Metal Expansion Joints are a range covering any Application, where LBH Fabric Expansion Joints are not suitable due to pressure conditions. As for all other LBH products, the common factor is the superior quality and the focus on special design solutions.



④ LBH Fire Seals

LBH fire seals are designed to prevent the escape of fire and toxic fumes through pipe penetrations in bulkheads, decks and fire walls. Additionally, they compensate for installation misalignment, thermal movement and vibration of the piping system.



⑤ LBH Pipe Insulation

LBH pipe insulation is a product range designed to prevent thermal losses from pipe systems and to protect personnel from burns.

Each insulator is custom-made, and the product has especially gained distinction for being extremely easy to install, and therefore cost-saving.



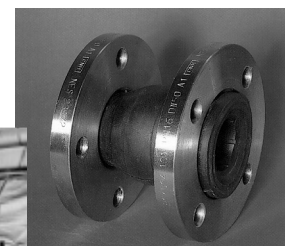
⑥ LBH Valve Insulation

LBH ready-to-use valve insulators have also the function as a heat protector, but are primarily designed in order to prevent thermal losses from valves. The heat dissipation, which hereby can be avoided, provides a considerable energy saving.



⑦ High-Pressure Rubber Compensators Dampers

In order to be capable of meeting any demand for a total scope of supply, LBH co-operates closely with partners specializing in the design and manufacture of high-pressure rubber compensators and dampers.



Function of Fabric Expansion Joints

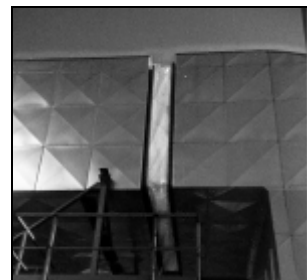
Fabric expansion joints are used for absorbing movements between joining connections in gas conveying ducts and pipe-lines. The movements can be caused by thermal expansion of the ducting system, wind conditions or vibrations from other system components or machines. In addition, fabric expansion joints can serve as seals and compensate for installation misalignments.



Advantages of Fabric Expansion Joints

The implementation of fabric expansion joints provides a number of advantages, which are technically and economically important. They are:

- Extremely flexible
- Absorbing large movements
- Absorbing different movements simultaneously
- Only requiring a limited building length
- Lightweight
- Easy to handle, store, install, repair, replace
- Not transmitting noise or vibrations
- Reducing the necessary strength of fix-points and supports
- Not corroding
- Dimensionally stable
- Cost effective



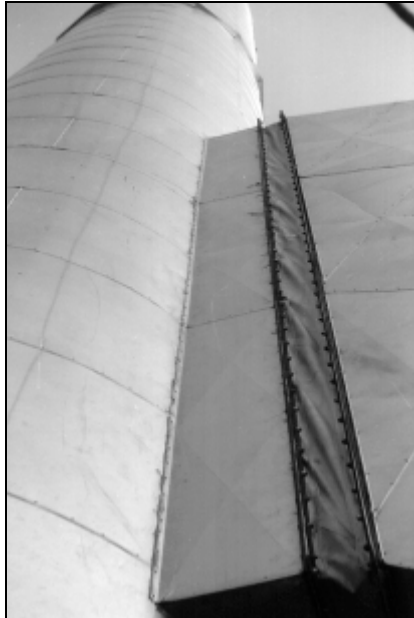
Applications

Fabric expansion joints are widely used for a large number of industrial applications, such as:

- Power Plants
- Boiler Systems
- Flue Gas Desulphurization Systems (FGD)
- Nitrogen Oxide Reduction Systems (DeNox)
- Gas Turbines
- Nuclear Power Plants
- Incinerator Plants
- Cement Industry
- Filter Systems
- Ventilators
- Ventilation Systems
- Dust Suction Systems
- Offshore Installations
- Shipbuilding
- Chemical Industry
- Paper Industry
- Limeworks
- Steelworks
- Industrial Furnaces
- Painting-& Drying Systems



Application Examples



**B C. Sugar Refinery.
Holland. Chimney Inlet. Type
II**



**B D. Incinerator Plant. Denmark. Exp.
Joints for DeNox System**

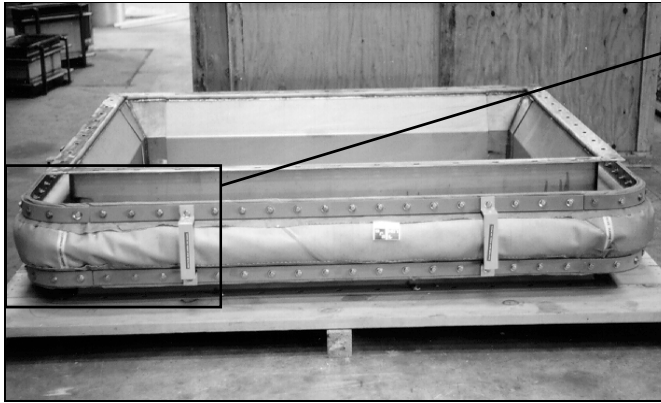


**B A. Incinerator Plant. Denmark. Flue Gas
Fan. Outlet**



**B B. Copper Mine.
Botswana. Gas Cleaning.
Main Duct. Type IV**

FABRIC EXPANSION JOINTS



B E. Gas Turbine Unit, complete with inner sleeve



B F. Small Type IV Unit



B G. LBH Unit For Gas Turbine. ø 5000



B H. Typical Type IV Unit