Acoustic Insulation – Bilfinger Lambda Products

Lambda is the brand name used on all insulation products marketed by Bilfinger Oil & Gas. All products are designed and documented to be used in high risk environments within the oil & gas industry, nuclear power plants and process industry. The products have been developed and tested as a consequence of the rigorous requirements oil & gas industry, meeting NORSOK and ISO standards.

All Lambda products are highly recognized among professional engineers as "state of the art" insulation systems. Each product is tailor made and pre-fabricated to fit the exact valve, flange or equipment to be protected.

In addition to meeting functional requirements, all products are designed for quick and easy removal and re-installation with a minimum use of personnel and tooling. Bilfinger Lambda is continuously and proactively recognizing customer demands and developing solutions to meet these requirements.

Lambda Acoustic Insulation

Lambda Acoustic insulation is used as both thermal protection, sound protection and personnel protection. This is a multi-purpose system that can apply to classes 1, 4 and 6, 7 and 8 according to NORSOK standard. The solution is applicable in different production environments such as process industry, power plants, marine industry and oil & gas.

Our acoustic insulation system is tailor-made and can be delivered as flexible jackets or boxes in stainless steel. Insulation material and thickness will vary with the requirements.

All seams in our acoustic jackets are sewn with Kevlar reinforced stainless steel thread and sealed with silicone. The outer silicone coated fabric has no penetrations that could cause water ingress.

All Bilfinger Lambda products are designed for quick and easy removal and re-installation with the use of minimum personnel, personal protection equipment and tooling.

Design and Test results

The Lambda Thermal / Acoustic products have been tested according to A / B1 and C1 Acoustic at Peutz Laboratories. The Lambda sound reduction system can also be designed as curtains surrounding a protected area which consists of both curtains and installation system. The reduction effect of the sound reduction curtains is up to 20 dB in high frequency environment.

Key Product Benefits

- Environmentally friendly
  - No halogens
  - Ceramic Fibre free
  - Re-use
- Maintenance free – stainless steel surface for Boxes, Strong Silicone Coated Fabric exterior for Flexible Jackets
- Easy to install, remove, inspect, and re-install
- Pre-fabricated solution → low installation cost
- Low Life Cycle Cost
- Combined classes (Norsok 1, 4 and 6, 7, 8)
- Weather proof materials testing
  - Norsok R-004
  - IACS UR S.14.2.3
- Acoustic Tests A1 / B1 / C1
  - ISO 15665:2003