

INTRODUCTION

THERMOSEL™ PROFILE

Thermosel branded products have been synonymous with high quality and competitive pricing for the last 50 years. *Thermosel* products are represented in over forty countries world-wide with manufacturing facilities in both our 10,000 sq/m UK Head Office & our 4,000 sq/m factory in Singapore.

Thermosel metallic bellows were used exclusively for the first British nuclear power stations in the early sixties and are still operating perfectly to this day, hence *Thermosel* bellows being used in well over 500 power stations world-wide.

Leading companies throughout the world recognise the integrity and quality associated with the *Thermosel* name, whose comprehensive range of expansion joints and applications are widely used in the oil, petrochemical, power generation, marine, steel and mineral processing industries, as well as in heating and ventilation systems.

SAFETY FACTOR: DESIGN

We make no compromises where the safety of *Thermosel* expansion joints is concerned. That is why we design expansion joint bellows using only recognised design methods such as EJMA (Expansion Joints Manufacturing Association) and conform to the pressure and temperature ratings in BS4504 and DIN2401. In accordance with this insistence on high standards, *Thermosel Solutions* recommends that bellows expansion joints are selected and applied in accordance with British Standard Code of Practice BS6129: Part 1.

Bellows expansion joints can be the most highly stressed parts of a piping system. *Thermosel* has developed convolution designs that combine safety, performance and economy. Convolution design is essentially a compromise involving pressure, temperature, movement, convolution size and material thickness. As convolution height increases, so does its ability to deflect, whilst its pressure retaining capacity decreases. If material thickness is increased to compensate for the reduction in pressure, then movement capacity is reduced. By using more than one thickness of material to permit increased pressure retaining characteristics without loss of flexibility, *Thermosel* has developed a comprehensive range of multi-ply bellows convolutions for a wide variety of applications.

QUALITY CONTROL

Thermosel expansion joints are manufactured to high standards from top quality materials supplied to rigid specifications. Throughout manufacture random tests are made to ensure that standards are being maintained, and on completion all expansion joint assemblies are pressure-tested. Gas and vacuum testing is carried out whenever necessary and selected expansion joints are subjected to cyclic testing as a check on computer calculated data.

Rigid dimensional checks are made on all sub-assembly items at every stage of manufacture. An inspector witnesses each pressure test, and a certificate is issued accordingly.

Thermosel Solutions has access to metallurgical and mechanical test laboratories, which undertake both quality control and development work. Facilities include gas leak detection, penetrant dye testing, hydrostatic pressure and vacuum test rigs.

Thermosel Solutions is an ISO9000 registered company.