

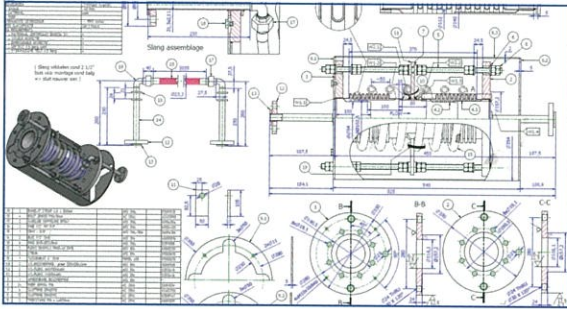


CREON

METALLIC EXPANSION JOINTS



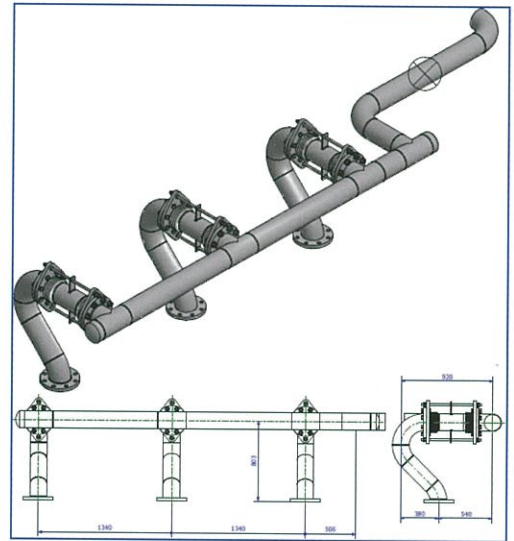
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ENGINEERING:

Our experienced team of engineers can advise on expansion joint selection and positioning for an optimal absorption of movements.

CREON can do this in either new or existing installations, so as to optimise the use of expansion joints for the absorption of thermal growth, movements due to building settlement, reduce system vibrations and to keep reaction forces on nozzles to a minimum, while ensuring a minimal requirement for ancillary piping components such as guides and anchors.



FABRICATION:

CREON expansion joints are manufactured to the highest standards by our own qualified and certified personnel in our extensive production facilities, thus ensuring that every expansion joint meets your requirements, regardless of the technical or quality constraints.

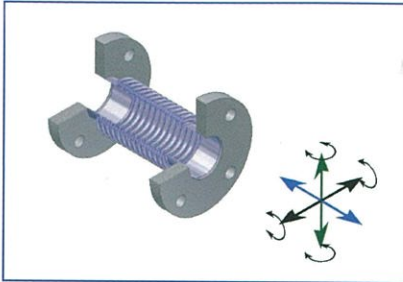
Our certified procedures and calculations, together with manufacturing methods in accordance with the most recent expansion joint standards make **CREON** your partner for every expansion joint.



Thanks to our extensive stock of expansion joints and bellow elements, **CREON** is also your ideal partner in keeping downtime to a minimum in the case of urgent breakdown situations. In urgent needs **CREON** is there for you!

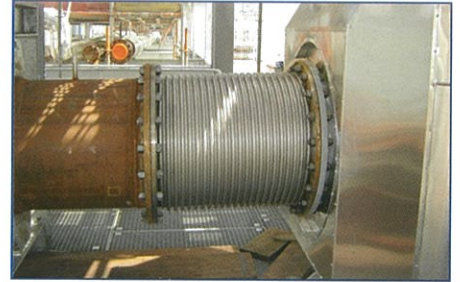


TYPES OF EXPANSION JOINTS:



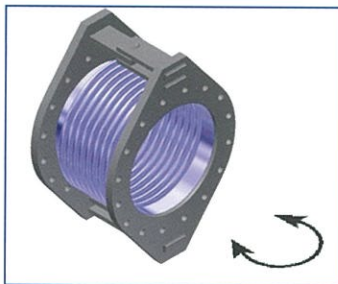
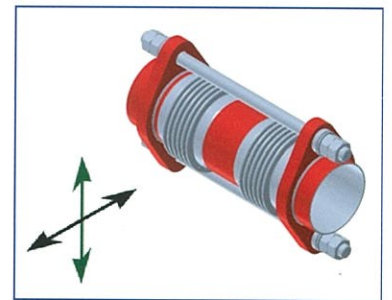
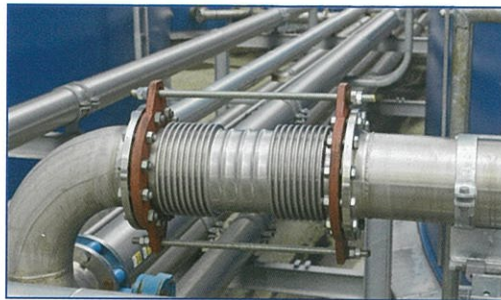
Unrestrained expansion joints:

Axial and universal expansion joints are designed to absorb movements in any direction, but will also impose pressure thrust on the adjacent pipework installation once pressurised.



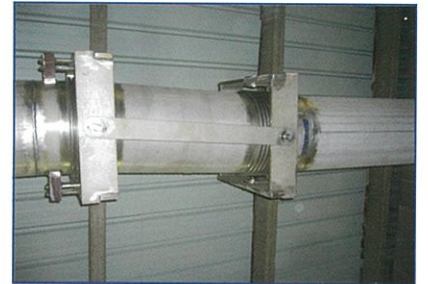
Lateral expansion joints:

Single or double expansion joints supplied with tie-rods and designed to absorb lateral (radial) movements, the pressure thrust is absorbed by the tie-rod arrangement.



Angular expansion joints:

Single or double hinged and gimbal expansion joints are designed to absorb angular movements and also absorb the pressure thrust through the hinge assembly.



Pressure balanced expansion joints:

Designed for movement absorption in any direction, including axial, a key feature of these units is that they also absorb the pressure thrust generated by pressurisation. An ideal solution for installations where the nozzles may not be charged, turbines as an example.

Special expansion joints / tailor made expansion joints:

There is a **CREON** expansion joint for every application. Depending on particular requirements and design specification, these expansion joints can be equipped with various non-standard couplings and accessories.

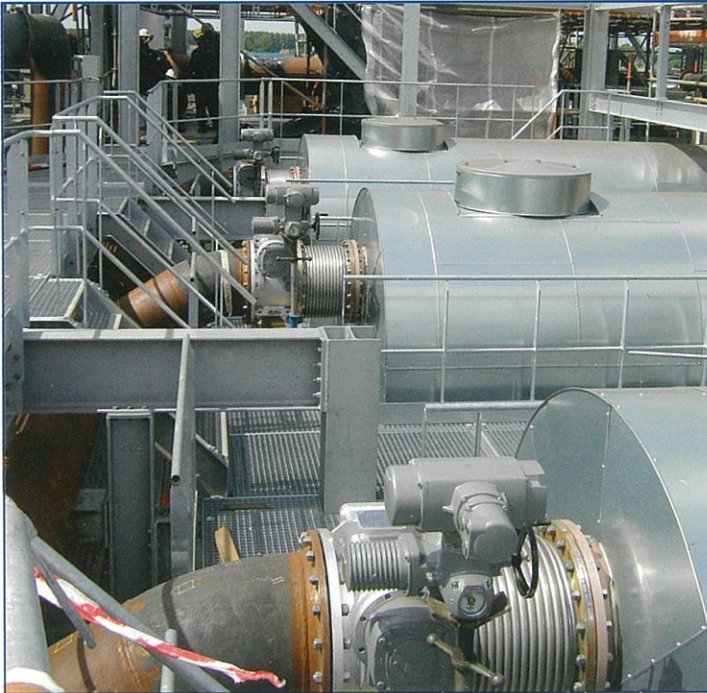


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APPLICATIONS:



Stainless steel expansion joint DN4000 for a cement factory, comprising an inner sleeve and insulation in the convolutions (to prevent ingress and settlement of dirt and dust particles).



CE-marked (CAT III) expansion joints (DN500) to absorb movements and vibrations in a chemical installation.

Replacement of the bellow element in an existing exhaust system. The bellow is made of ALLOY 625 to withstand elevated operating temperatures and pressures.



Axial expansion joint (DN200) for large movement absorption, comprising several bellow elements and equipped with movement limit rods and outer shroud for protection against mechanical damage and directional guidance.



3 pin 'hinged' expansion joint system to absorb large movements of the piping, without transmitting pressure thrust loads on adjacent pipework. This solution is ideal for suspended piping, where it can be difficult to position sufficiently strong fixed points.





Rapid repair in 24 hours of an expansion joint for an offshore application, with recuperation of non-standard couplings and flanges. Similar repairs keep unscheduled shutdown periods to an absolute minimum, ideal for emergencies such as marine applications and where unexpected leakages appear,...



Tailor made expansion joint according to the customer's model, ensuring an optimal replacement and exact fitting, including compliance with inspection and quality requirements.



Flexible rectangular expansion joint, suitable for relatively large movements for a 100% 'gas-tight' application in a steel plant.

Hydraustatic pressure test of a double metallic expansion joint (DN600).



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Expansion joint (DN900) for very large amounts of axial compression (940 mm) with a pantographic linkage design to evenly distribute the movement over the 6 bellow elements. This expansion joint is also jacketed, allowing the outer jacket to control the temperature of the inner jacket (600 °C).

Double expansion joint, with a double hinge system with swivel pins, permitting lateral movements in multiple planes while containing the pressure thrust generated when the system is pressurised.

This expansion joint has 2 bellow elements in ALLOY 625, ensuring a superior chemical resistance to the fluid media that contains chlorine vapours.

The critical application requires CE-marking according to PED, in full compliance with all the relevant quality requirements per CAT III.



Reference list:

CREON supplies metallic expansion joints for all possible applications, among others:

STEEL PLANTS — POWER PLANTS — REFINERIES — DISTRICT HEATING — CHEMICAL & PETROCHEMICAL — EXHAUST SYSTEMS — WATER DISTRIBUTION — CEMENT FACTORIES — PAPER MILLS — HEAT EXCHANGERS — PUMP CONNECTIONS — MARINE APPLICATIONS — ...

Some of our customers:

BASF — INEOS — SOLVAY — AJINOMOTO — LUBRIZOL — DSM — ARCELORMITTAL — ARBED — TATA — TENOVA — HEURBEL — DREVER — FIVES STEIN — ELECTRABEL — AGC — GLAVERBEL — YARA — TOTAL — JAN DE NUL — DEME — PROCTER&GAMBLE — TECHSPACE AERO — ...

CREON is also your supplier for:

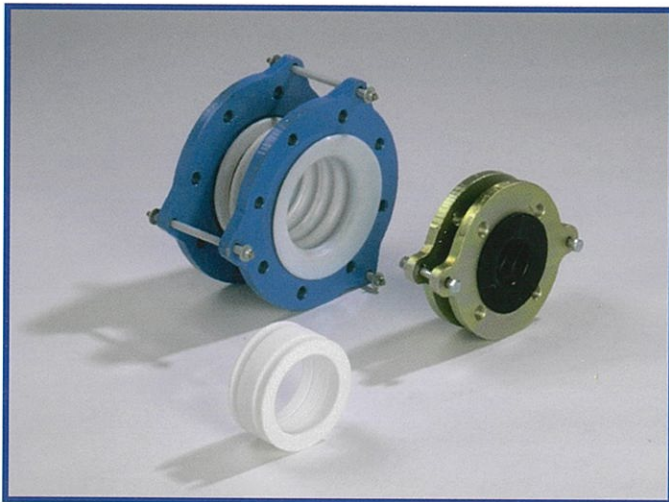
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rubber expansion joints



metallic flexible hoses



PTFE expansion joints



fabric expansion joints



composite hoses



flue gas valves



CREON

Koeweidestraat 31
ZONE C
1785 Merchtem
BELGIUM

Tel. +32 (0)52 37 41 11—Fax +32 (0)52 37 17 76
www.creon.be
flex@creon.be