EXPANSION JOINTS

FABRIC
RUBBER
METAL

NEW COMPONIT
una leadership italiana nel mondo
TEXTILE JOINT CONFIGURATIONS

Textile expansion joints can be provided in one of the following configurations below; in addition they can be supplied open or closed, drilled or not in order to satisfy customer needs.

CLAMPING CONFIGURATIONS:

- Belt connection directly on duct
- Vertical flange connection
- Horizontal flange connection
- Horizontal/Vertical flange connection
It is recommended the use of a metal sleeve in presence of dust and very abrasive particles, in case of intense mechanical stress and high gas speed.

**SLEEVE ENSURES:**

- Mechanical protection against abrasion
- Prevention from dust accumulation
- Flow efficiency
- Support for a bolster bag

**BOLSTER BAG ENSURES:**

- Protection from dust and ash
- Temperature reduction
- Noise reduction
- Support for the joint in case of high mechanical stress
RESEARCH & DEVELOPMENT

We engineered a test bench where to try our products before delivery. In this way we are sure to achieve the best reliability and safety conditions.

We can test raw materials and final products, from fabrics to expansion joints, from blankets to insulating pillows. Our test bench can work with very high temperatures, we reach almost 600 °C; your products can be tested to the extreme...

We also fit out an acoustic test bench to try performances of our acoustic cleaning systems.
NEW COMONIT LABS

TEST BENCH TO ANALYSE TEMPERATURES

ENERFLEX + ENERSAVE SYSTEM SIMULATION

PIPERFLEX SYSTEM SIMULATION

TEST BENCH FOR PRESSURE AND GAS-TIGHT

STUDY ON MATERIALS SUBJECT TO CONTINUOUS WEAR THROUGH HIGH TEMPERATURE USE

ACOUSTIC LAB

ACOUSTIC CLEANING SYSTEM SIMULATIONS - HORN 1

ACOUSTIC CLEANING SYSTEM SIMULATIONS - HORN 2
ADVANTAGES

- Maximum resistance to high vibrations
- Temperature up to 280°C
- Soundproofing function with our Vibraflex Sound serie

MAIN APPLICATIONS

- Air intake ducts
- Air ventilation ducts
- Vibraflex Sound where an acoustic insulation is required

<table>
<thead>
<tr>
<th>CONTINUOUS OPERATING TEMPERATURE (°C)</th>
<th>MAX. TEMPERATURE FOR SHORT TIME (°C)</th>
<th>PRESSURE LIMIT (mm/H₂O)</th>
<th>FLUID</th>
<th>VIBRATION RESISTANCE</th>
<th>SOUNDPROOFING FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>280</td>
<td>2500</td>
<td>AIR</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>
Enerflex
Maximum application versatility

ADVANTAGES
- Maximum application versatility
- Temperature up to **650°C**
- Capability to compensate large movements

MAIN APPLICATIONS
- Air ducts
- Few aggressive fumes ducts

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<tbody>
<tr>
<td>550</td>
<td>650</td>
<td>2000</td>
<td>AIR</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>
### ADVANTAGES
- **Maximum chemical resistance** to agents from combustion fumes
- Temperature up to **650°C**
- **High resistance** to thermal stress

### MAIN APPLICATIONS
- Exhaust combustion fumes ducts

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<tr>
<td>550</td>
<td>650</td>
<td>2000</td>
<td>FUMES</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>
**CHEMFLEX**

Maximum chemical resistance

**ADVANTAGES**

Maximum chemical resistance to aggressive agents

Temperature up to **270°C**

**MAIN APPLICATIONS**

- Desox
- Denox
- Incinerators

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<th>FLUID</th>
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<th>SOUNDPROOFING FUNCTION</th>
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</thead>
<tbody>
<tr>
<td>220</td>
<td>270</td>
<td>2000</td>
<td>AGGRESSIVE FUMES</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>
Turboflex

Maximum mechanical resistance

Advantages

- Maximum resistance to pulsations and erosive events related to fumes turbulence and high speed
- Temperature up to 700°C
- Good chemical resistance

Main applications

- Gas turbine exhaust pipes

<table>
<thead>
<tr>
<th>Continuous operating temperature (°C)</th>
<th>Max. temperature for short time (°C)</th>
<th>Pressure limit (mm/H2O)</th>
<th>Fluid</th>
<th>Vibration resistance</th>
<th>Soundproofing function</th>
</tr>
</thead>
<tbody>
<tr>
<td>650</td>
<td>700</td>
<td>2000</td>
<td>Aggressive fumes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
PETROFLEX

Maximum resistance to extreme temperatures

Maximum resistance to extreme temperatures
Temperature up to 1200°C
Excellent performances in aggressive environment

MAIN APPLICATIONS
Incenerator furnaces
Catalytic Cracking

CONTINUOUS OPERATING TEMPERATURE (°C)  MAX. TEMPERATURE FOR SHORT TIME (°C)  PRESSURE LIMIT (mm/H₂O)  FLUID  VIBRATION RESISTANCE  SOUNDPROOFING FUNCTION

900  1200  2000  FUMES  NO  NO
NAVIFLEX
Maximum performances in marine applications

ADVANTAGES
Maximum noise reduction
Temperature up to 650°C
Maximum pressure tightness

MAIN APPLICATIONS
Marine engines

EXPANSION JOINTS ISMES CERTIFIED

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<tr>
<td>550</td>
<td>650</td>
<td>2000</td>
<td>AIR / FUMES</td>
<td>YES</td>
<td>YES</td>
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PIPERFLEX

Maximum compensation at high temperatures

ADVANTAGES

Opportunity to compensate high movements

Maximum heat reduction

Temperature up to 700°C

MAIN APPLICATIONS

Recovery boilers

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<tr>
<td>600</td>
<td>700</td>
<td>1000</td>
<td>FUMES</td>
<td>YES</td>
<td>NO</td>
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</table>
**ADVANTAGES**

- Optimum noise reduction
- Maximum resistance to high pressure
- Temperature up to 250°C

**MAIN APPLICATIONS**

- Air intake
  - Upstream and downstream of the fans

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<tr>
<td>120</td>
<td>250</td>
<td>5000</td>
<td>AIR</td>
<td>YES</td>
<td>YES</td>
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</table>
MATERIALS:
- Viton
- Neoprene
- EPDM
- Silicone

NOISE REDUCTION
We complete our range of products with metal expansion joints that we sell entrusting us to the most reliable producers and experts. With this type of joint we want to complete the range of compensators in order to fully supply our customers.
SERVICES

Expansion joints and insulating blankets must be installed very accurately in order to assure their maximum effectiveness.

New Componit is aware that big industrial plants are inclined to outsource the installation activities; therefore our organization provides a fully support service, composed by various professional teams, ready to promptly reach any site of the world.

In addition to the common installation activities, our specialists can also perform all the complementary activities, such as: structural works, welding and thermographic analysis.
Accidental shocks, unexpected harsh operational conditions and previous installation mistakes can cause damages to the expansion joints or to thermal insulation, with consequent undesirable down time. Sometimes it is possible to repair the damaged products avoiding their total replacement.

New Componit offers a maintenance service which allows to minimize the expensive production plant downtime.

OUR PROPOSAL

Supervising
Monitoring
Assembly assistance
Repair and maintenance service
Maintenance service
Thermography service
Engineering processes

TERMOGRAPHIC ANALYSIS ON PIPERFLEX JOINTS

Parametri dell’immagine:
Grado di emissione: 0,94
Temp. riflessa [°C]: 100,0

Istogramma:
REFERENCE LIST

Some of our customers...

- Alstom Power
- Amsa
- Ansaldo Boiler
- ArcelorMittal
- Avio
- A2A Gencogas
- Bateman Eurasia
- Bechtel
- Boldrocchi
- Bono Energia
- Burgo Group
- BWE
- Cefla
- Cerrey
- Clyde Bergmann
- Cnooc Ltd
- Danieli
- Demont
- Edf Fenice
- Edipower
- Edison
- Electrowatt – Ekono
- Endesa
- Enel
- Engie Group
- Eni
- Enipower
- E-ON
- EP Produzione
- Erg
- Fincantieri
- Foster Wheeler
- Franco Tosi
- GE Oil&Gas
- GE Energy
- Hera
- Fisia
- FWI
- Idreco
- Isab
- Italcementi
- JGC – KBR
- John Zinc
- Kirchner
- KTI
- Linde Impianti
- Macchi Caldaia
- Magaldi
- Mapna
- Metso Paper
- Namag
- Nem
- Nooter Eriksen
- Nuovo Pignone
- P Gesco
- Pan American Energy
- Q-Power
- Remazel Engineering
- Repsol
- Riva Group
- Selas Linde
- Siemens
- Soler & Palau
- Sorgenia
- Stejasa
- STF
- Tecnimont KT
- Termokimik
- Wartsila
EXPANSION JOINTS

FABRIC

VIBRAFLEX - Minimum propagation of vibrations
ENERFLEX - Maximum application versatility
POWERFLEX - Maximum resistance
CHEMFLEX - Maximum chemical resistance
TURBOFLEX - Maximum mechanical resistance
PETROFLEX - Maximum resistance to extreme temperatures
NAVYFLEX - Maximum performances in marine applications
PIPERFLEX - Maximum compensation at high temperatures

RUBBER

ACUFLEX - Maximum noise reduction

METAL