

MAXIMUM RESISTANCE

EXPANSION JOINTS

We always have the proper compensator,
even for the most extreme conditions



INDUSTRIES

Energy

Naval

Chemical &
Pharmaceutical

Oil & Gas

Steel

Cogeneration
& Renewables

Waste
treatment

NEW COMPONENT
textile solutions for heat treatment



WHEREVER THERE ARE HIGH TEMPERATURE TO MANAGE, **WE ARE THERE.**

Our company is specialized in custom-made solutions, for any problems related to **HEAT** and **TEMPERATURE CHANGES**, but also **NOISE**, **COLD** and **FIRE**.

For over **30 years** we have brought our engineering experience from **Cirimido** all the world, facing any **kind of plant problems** and finding innovative solutions:

- **Bench Test** up to **600 °C** of temperature: raw materials and products are tested in extreme conditions
- Technical team for **3D or 2D design**
- Our registered efficiency evaluation method **Efficiency Box®** to check, analyse and satisfy any need
- **Eiif accredited** for the evaluation of energy saving

Only *New Componit* fabric expansion joints are designed, produced and installed with **EXPANSION CONTROL SISTEM®**

Any *NEW COMPONIT* project follows a quality path. We patented proprietary processes for the design, **TESTING AND INSTALLATION** of our products: a further guarantee that no detail will be forgotten.



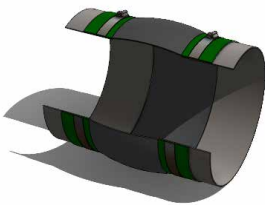
EXPANSION[®] CONTROL SYSTEM

- custom-made design with temperature or noise study, dimensional survey on site or 3D/2D engineering
- production with **first choice materials** and cutting-edge technologies
- installation performed by a **team of experts**

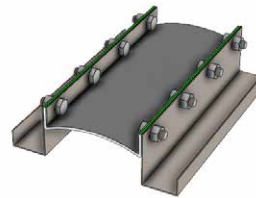


TEXTILE JOINT CONFIGURATIONS CLAMPING CONFIGURATIONS

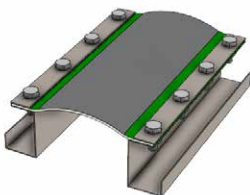
Textile expansion joints can be provided in one of the following configurations below; in addition they can be supplied open or closed, drilled or not in order to satisfy customer needs.



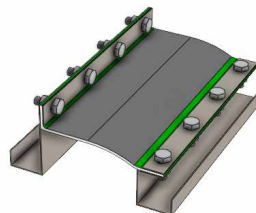
Belt connection
directly on duct



Vertical flange
connection



Horizontal flange
connection



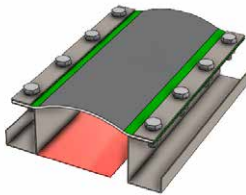
Horizontal/Vertical
flange

SLEEVE

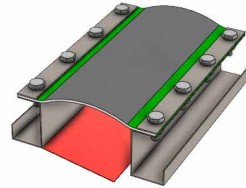
SUITABLE FOR FABRIC JOINTS

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.

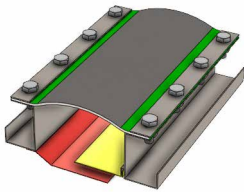
- SLEEVE ENSURES:**
- Mechanical protection against abrasion
 - Prevention from dust accumulation
 - Flow efficiency
 - Support for a bolster bag



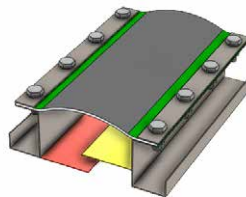
Single sleeve welded to the duct end



Single inner sleeve



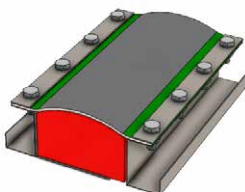
Floating sleeve



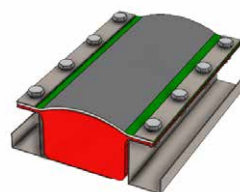
Double overlapped sleeve

BOLSTER BAG

- BOLSTER BAG ENSURES:**
- Protection from dust and ash
 - Temperature reduction
 - Noise reduction
 - Support for the joint in case of high mechanical stress



Bolster bag without flanges



Bolster bag flanged and fitted with the expansion joint

RESEARCH & DEVELOPMENT

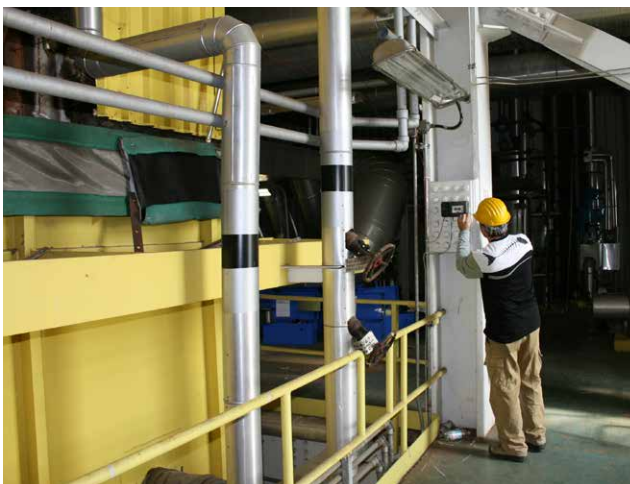
We test and analyze each product

We invest in research and development to guarantee the best solutions ever, today and tomorrow.

We designed and built a **test** bed where to test our products before delivery. In this way we are sure to achieve the best **reliability** and **safety** conditions.

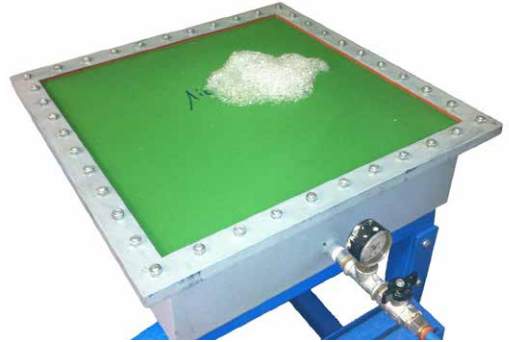
We can test raw materials and final products, from fabrics to joints, from blankets to pillows. Our test bench can work at **very high temperature**; your products can be tested to the extreme.

We also fit out an **acoustic bench** test to test **performances** of our sonic horns.



NEW COMPONIT LABS

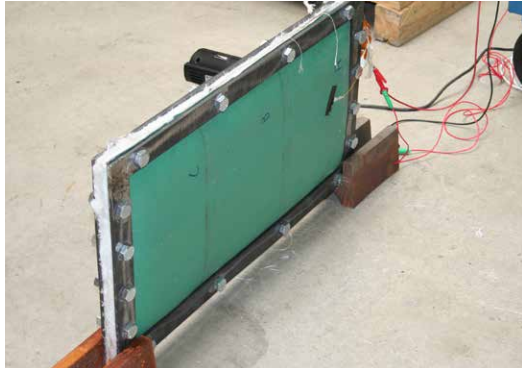
TEST BENCH to analyse temperatures



TEST BENCH for study of gas tightness and pressure



TEST BENCH



Study on the wear of materials

TEST BENCH for acoustic analysis



Acoustic cleaning system simulation
HORN 1



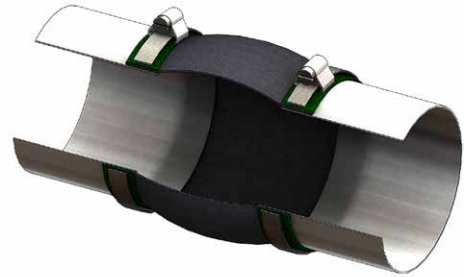
Acoustic cleaning system simulation
HORN 2

ADVANTAGES

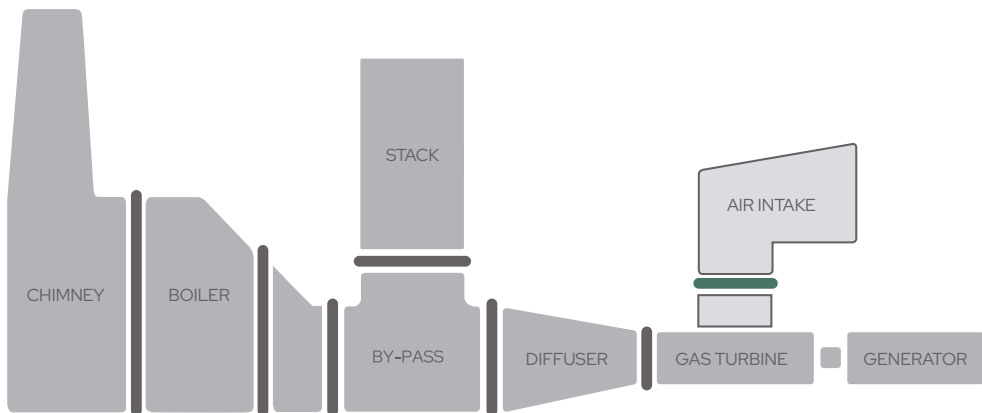
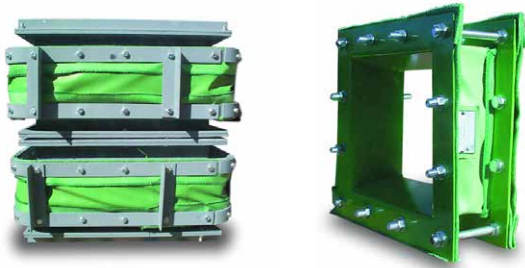
- Maximum resistance to high vibrations
- Temperature up to 280°C
- Soundproofing function with our Vibraflex Sound serie

MAIN APPLICATIONS

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



MINIMUM PROPAGATION OF VIBRATIONS



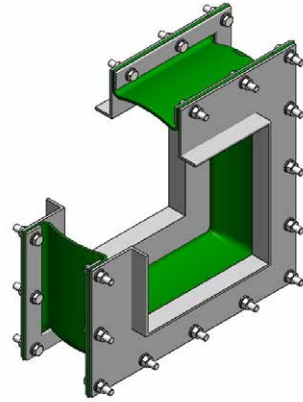
CONTINUOUS OPERATING TEMPERATURE (°C)	MAX. TEMPERATURE FOR SHORT TIME (°C)	PRESSURE LIMIT (mm/H ₂ O)	FLUID	VIBRATION RESISTANCE	SOUNDPROOFING FUNCTION
200	280	2500	AIR	YES	YES

ADVANTAGES

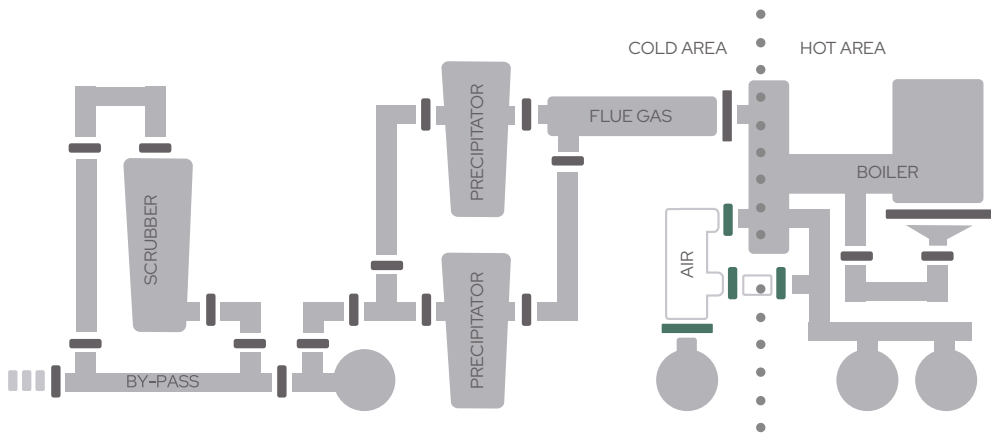
- Maximum application versatility
- Temperature up to 650°C
- Capability to compensate large movements

MAIN APPLICATIONS

- Air ducts
- Few aggressive fumes ducts



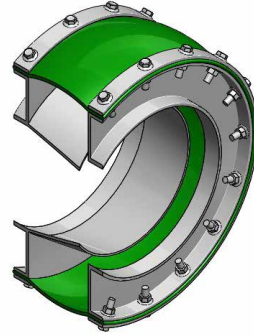
MAXIMUM APPLICATION VERSATILITY



CONTINUOUS OPERATING TEMPERATURE (°C)	MAX. TEMPERATURE FOR SHORT TIME (°C)	PRESSURE LIMIT (mm/H ₂ O)	FLUID	VIBRATION RESISTANCE	SOUNDPROOFING FUNCTION
550	650	2000	AIR	YES	NO

ADVANTAGES

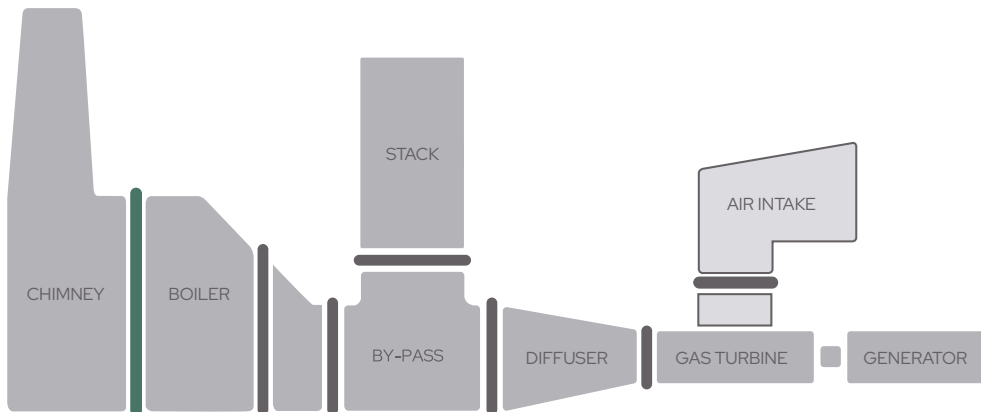
- Maximum chemical resistance to agents from combustion fumes
- Temperature up to 650°C
- High resistance to thermal stress



MAIN APPLICATIONS

- Exhaust combustion fumes ducts

MAXIMUM RESISTANCE



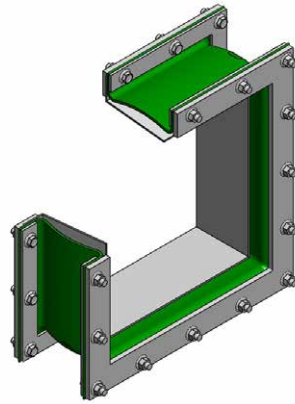
CONTINUOUS OPERATING TEMPERATURE (°C)	MAX. TEMPERATURE FOR SHORT TIME (°C)	PRESSURE LIMIT (mm/H ₂ O)	FLUID	VIBRATION RESISTANCE	SOUNDPROOFING FUNCTION
550	650	2000	FUMES	YES	NO

ADVANTAGES

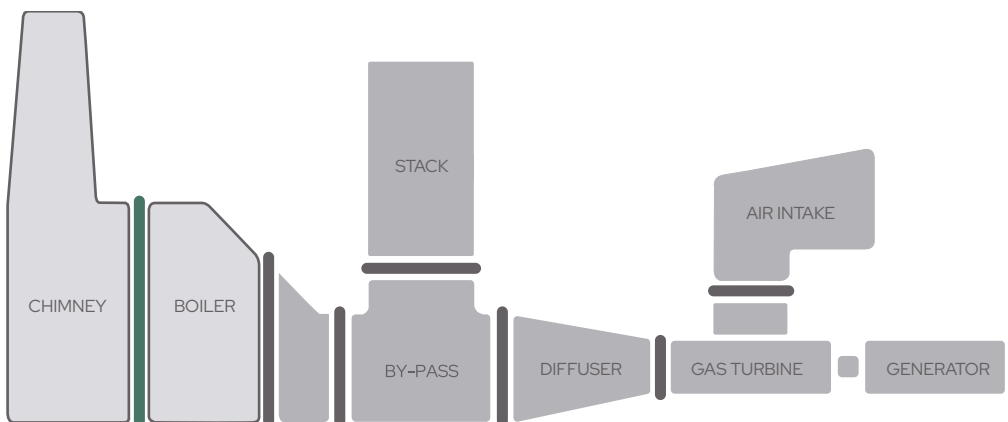
- Maximum chemical resistance to aggressive agents
- Temperature up to 300°C

MAIN APPLICATIONS

- Desox
- Denox
- Incinerators



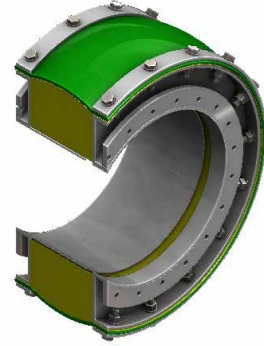
MAXIMUM CHEMICAL RESISTANCE



CONTINUOUS OPERATING TEMPERATURE (°C)	MAX. TEMPERATURE FOR SHORT TIME (°C)	PRESSURE LIMIT (mm/H ₂ O)	FLUID	VIBRATION RESISTANCE	SOUNDPROOFING FUNCTION
220	300	2000	AGGRESSIVE FUMES	YES	NO

ADVANTAGES

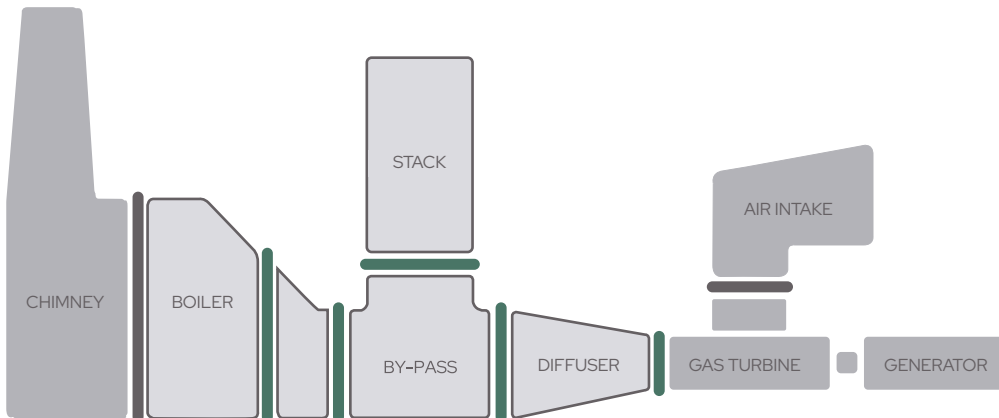
- Maximum resistance to pulsations and erosive events related to fumes turbulence and high speed
- Temperature up to 1000°C
- Good chemical resistance



MAIN APPLICATIONS

- Gas turbine exhaust pipes

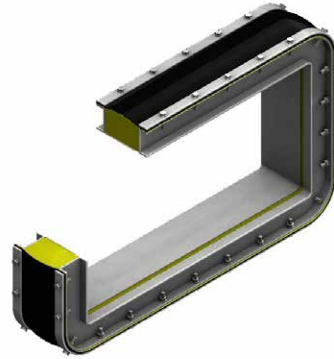
MAXIMUM MECHANICAL RESISTANCE



CONTINUOUS OPERATING TEMPERATURE (°C)	MAX. TEMPERATURE FOR SHORT TIME (°C)	PRESSURE LIMIT (mm/H ₂ O)	FLUID	VIBRATION RESISTANCE	SOUNDPROOFING FUNCTION
650	1000	2000	AGGRESSIVE FUMES	YES	YES

ADVANTAGES

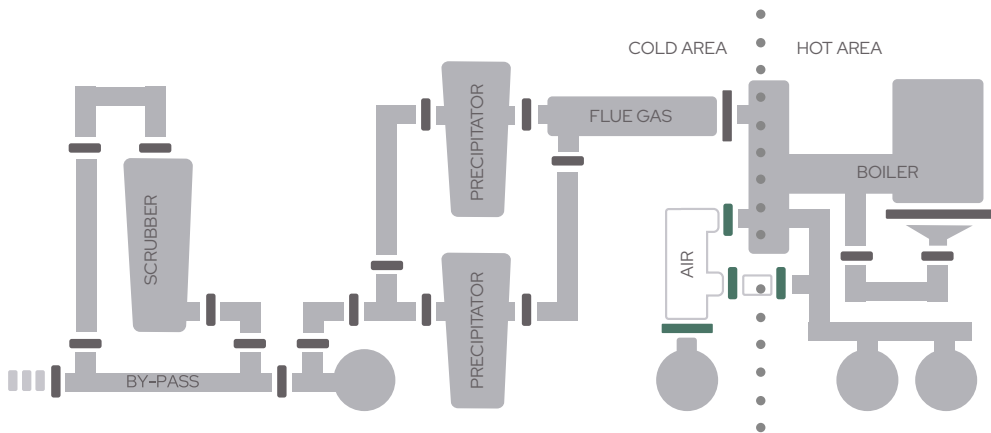
- Maximum resistance to extreme temperatures
- Excellent performances in aggressive environment
- Temperature up to 1300°C



MAIN APPLICATIONS

- Incinerator furnaces
- Catalytic Cracking post combustors

MAXIMUM RESISTANCE TO EXTREME TEMPERATURES



CONTINUOUS OPERATING TEMPERATURE (°C)	MAX. TEMPERATURE FOR SHORT TIME (°C)	PRESSURE LIMIT (mm/H ₂ O)	FLUID	VIBRATION RESISTANCE	SOUNDPROOFING FUNCTION
900	1300	2000	FUMES	NO	NO

ADVANTAGES

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

MAIN APPLICATIONS

- Marine engines



MAXIMUM PERFORMANCES IN MARINE APPLICATIONS



EXPANSION JOINTS ISMES CERTIFIED



CONTINUOUS OPERATING TEMPERATURE (°C)

550

MAX. TEMPERATURE FOR SHORT TIME (°C)

650

PRESSURE LIMIT (mm/H₂O)

2000

FLUID

AIR/FUMES

VIBRATION RESISTANCE

YES

SOUNDPROOFING FUNCTION

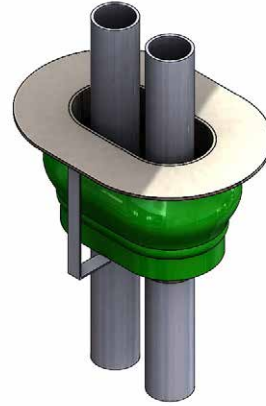
YES

ADVANTAGES

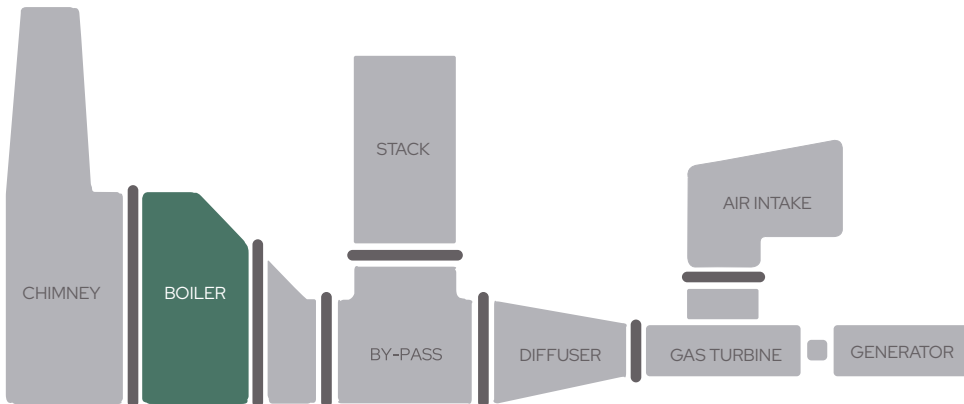
- Opportunity to compensate high movements
- Maximum heat reduction
- Temperature up to 850°C

MAIN APPLICATIONS

- Recovery boilers



MAXIMUM COMPENSATION AT HIGH TEMPERATURES



CONTINUOUS OPERATING TEMPERATURE (°C)	MAX. TEMPERATURE FOR SHORT TIME (°C)	PRESSURE LIMIT (mm/H ₂ O)	FLUID	VIBRATION RESISTANCE	SOUNDPROOFING FUNCTION
600	850	1000	FUMES	YES	NO

ADVANTAGES

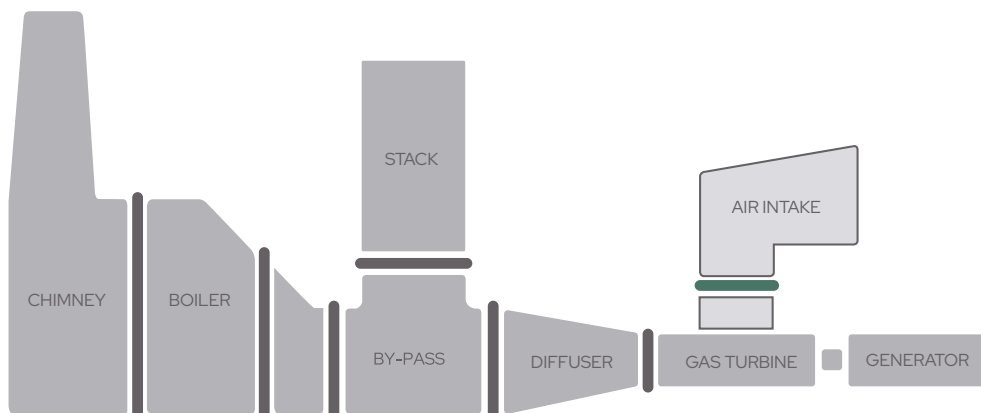
- Optimum noise reduction
- Maximum resistance to high pressure
- Temperature up to 250°C



MAXIMUM NOISE REDUCTION

MAIN APPLICATIONS

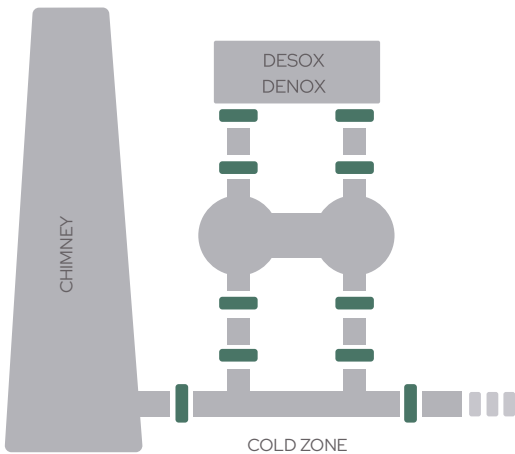
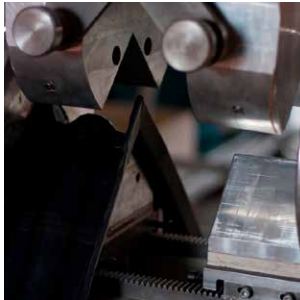
- Air intake
- Upstream and downstream of the fans



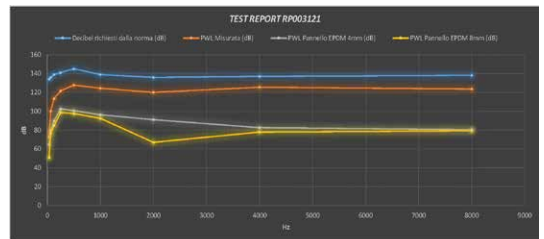
TEMPERATURA OPERATIVA (°C)	TEMPERATURA MASSIMA DI IMPIEGO (°C)	PRESSIONE LIMITE (mm/H ₂ O)	TIPOLOGIA FLUIDO	RESISTENZA A VIBRAZIONI	FUNZIONE INSONORIZZANTE
120	250	5000	ARIA	Sì	Sì

MATERIALS

- Viton
- Neoprene
- EPDM
- Silicone



NOISE REDUCTION



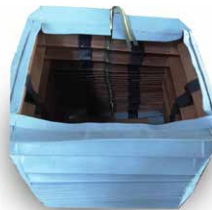
METAL EXPANSION JOINTS



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.

BELLOWS



The bellows are **products which can withstand great stress**; the materials used for their realization are chosen according to the environment and the process type. The fabrics used make the bellows a **barrier against liquids, shavings, dust and abrasive materials**.

They can be designed in **any shape and size** and produced with the following materials: fabric coated with polyurethane, silicone, teflon or PVC. They can be supplied with a zip closure.

ALWAYS AT YOUR DISPOSAL, EVERYWHERE WORLDWILDE

360 DEGREE SERVICES

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

New Composit 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 team, **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

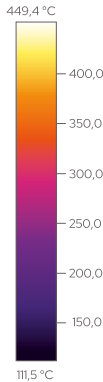
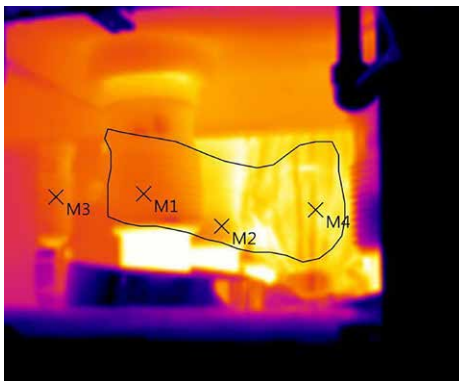
- Supervision
- Monitoring assistance
- Repair service
- Maintenance service
- Thermography service
- Engineering



Our registered efficiency evaluation method to check, analyse and satisfy any need.



TERMOGRAPHIC ANALYSIS ON PIPERFLEX JOINTS

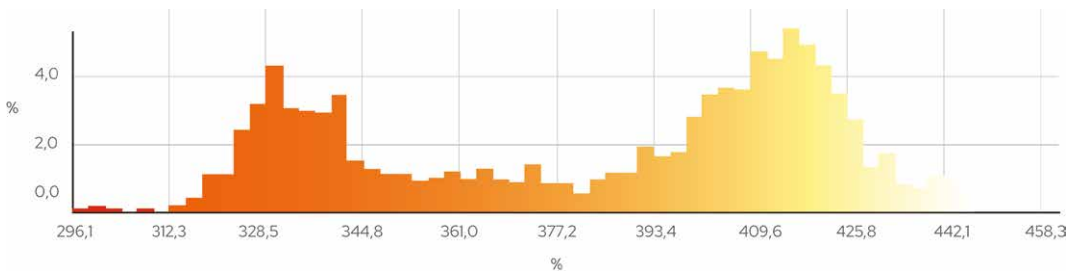


Parameters EMISSION VALUE: 0,90 REFLECTION TEMP. [C°]: 20,0

Measuring points

OBJECT	TEMP. [C°]	EMISSION	REFLECTED TEMP. [C°]	NOTES
Point 1	325,5	0,90	20,0	-
Point 2	375,7	0,90	20,0	-
Point 3	324,9	0,90	20,0	-
Point 4	400,0	0,90	20,0	-

HISTOGRAM: Minimum: 296,1C° Maximal: 458,3 C° Average value: 384,8 C°



REFERENCE LIST

Some of our customers

- AC Boilers
- Alstom Power Italia
- Amsa
- Ansaldo Boiler
- ArcelorMittal
- A2A Gencogas
- Boldrocchi
- Burgo Group
- Cannon Bono Energia
- Cefla
- Cerrey
- Clyde Bergmann
- Danieli
- Demont
- Edipower
- Edison
- Ekoplant
- Endesa
- Enel
- Engie
- Eni
- Enipower
- E-ON
- EP Produzione
- Erg
- Fenice
- Fincantieri
- Foster Wheeler
- Franco Tosi Meccanica
- Nuovo Pignone
- GE Power
- Hera
- Isab
- Kirchner
- Kronstadt
- KT
- Macchi
- Magaldi
- Mapna
- Nooter/Eriksen
- Q-Power
- Saipem
- Selas Linde
- Siemens Energy
- Soler & Palau
- Sorgenia
- STF Balcke-Dürr
- Maire Tecnimont
- Termokimik
- Valmet
- Wartsila
- Zhejiang Namag



FABRIC EXPANSION JOINTS

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

NAVIFLEX Maximum performances in marine applications

PIPERFLEX Maximum compensation at high temperatures

RUBBER EXPANSION JOINTS

ACUFLEX Maximum noise reduction

METAL EXPANSION JOINTS

CERTIFICATIONS

Ours is a choice of safety and quality

A further guarantee for those who work with us

- **ISO9001:2015**
Quality System
- **ISO14001:2015**
Environmental Management System
- **ISO45001:2018**
Systems for Health and Safety Management of Workers





ENERGY SAVING

ENVIRONMENTAL SUSTAINABILITY AND THE FUTURE

We want to improve our climate by **promoting sustainable insulation systems** with the goal of **saving energy and reducing CO₂ emissions.**

NEW **COMPONIT**
textile solutions for heat treatment



WE KNOW HOW **TO PROTECT YOU**

expansion joints



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