

# EXPANSION JOINTS

TEXTILES

RUBBER

METAL



**NEW** **COMPONIT**  
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**

**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.

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

## EXPANSION<sup>®</sup> CONTROL SYSTEM

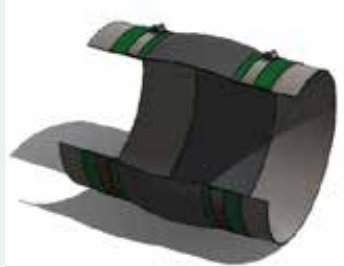
- Custom-made design with temperature or noise study, dimensional survey on site or 3D/2D engineering
- Production with first choice materials and cutting-edge technologies
- Installation performed by a team of experts



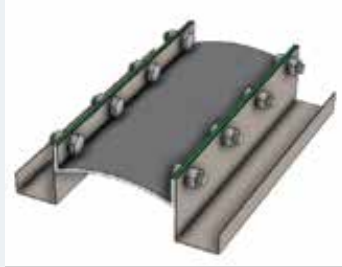
# TEXTILE JOINT CONFIGURATIONS

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.

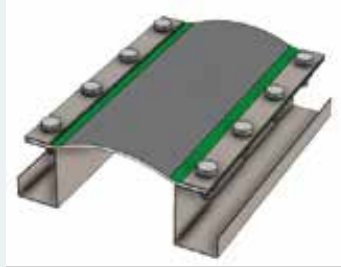
## CLAMPING CONFIGURATIONS:



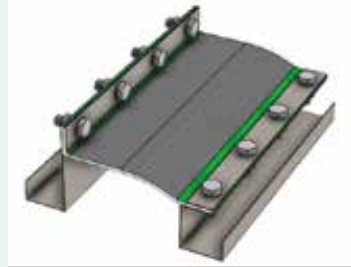
Belt connection directly on duct



vertical flange connection



Horizontal flange connection



Horizontal/Vertical flange

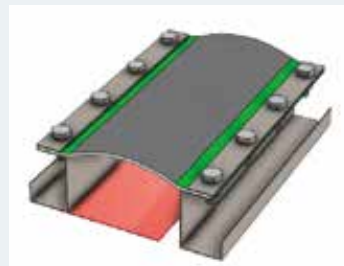
## SLEEVE

## SUITABLE FOR FABRIC JOINTS

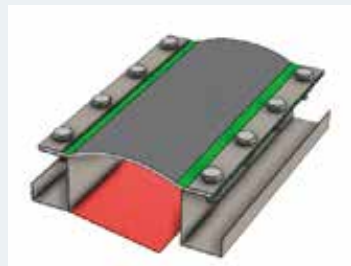
It is recommended the use of a metal sleeve in presence of dust and very abrasive particles, in case of intense mechanical stress and high gas speed.

### SLEEVE ENSURES:

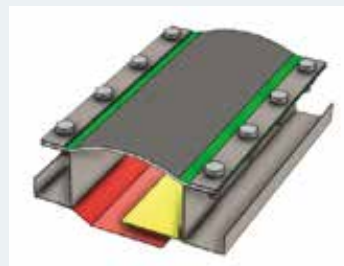
- Mechanical protection against abrasion
- Prevention from dust accumulation
- Flow efficiency
- Support for a bolster bag



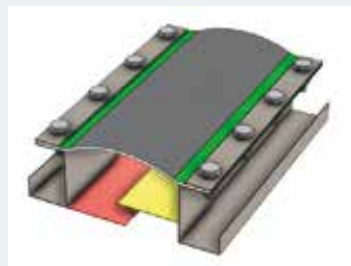
Single sleeve welded to the duct end



Single inner sleeve



Floating sleeve

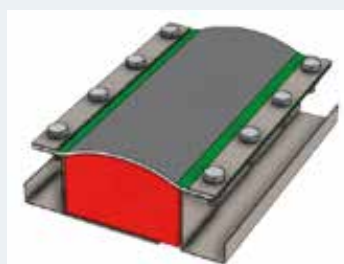


Double overlapped sleeve

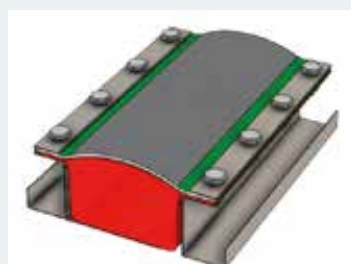
## BOLSTER BAG

### BOLTER 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 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.

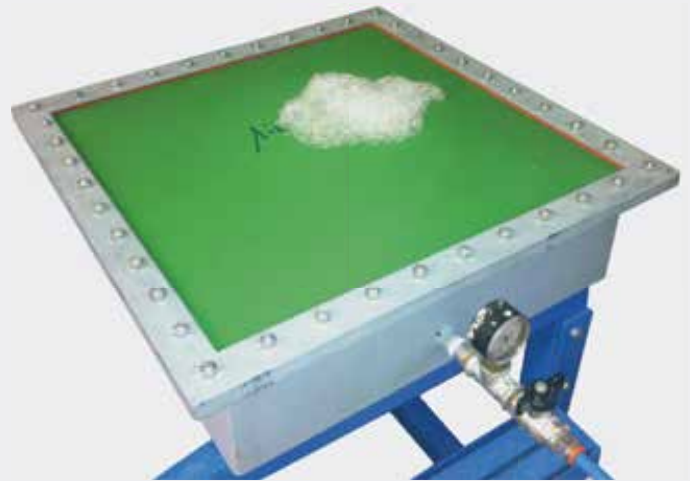
We can test raw materials and final products, from fabrics to expansion joints, from blankets to insulating pillows. Our test bench can work with very high temperatures, we reach almost 600 °C; your products can be tested to the extreme...

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

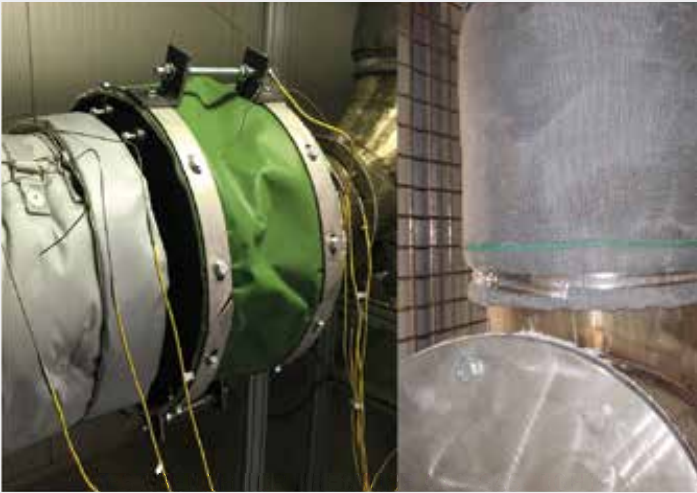


# NEW COMPOSIT LABS

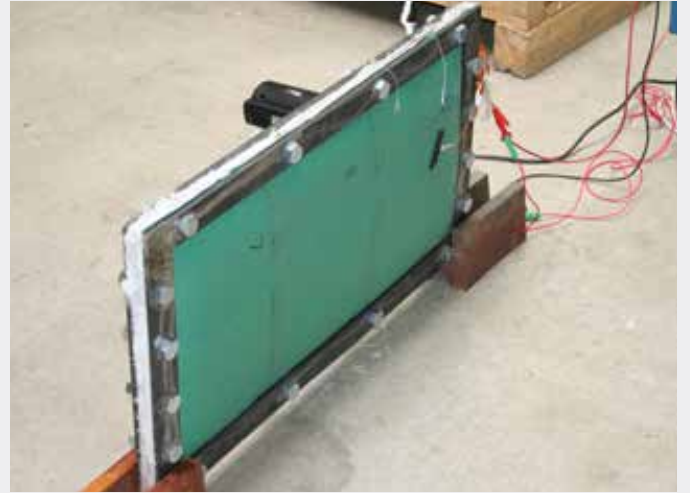
## TEST BENCH TO ANALYSE TEMPERATURES



TEST BENCH FOR STUDY OF GAS TIGHTNESS AND PRESSURE



TEST BENCH



STUDY ON THE WEAR OF MATERIALS

## TEST BENCH FOR ACOUSTIC ANALYSIS



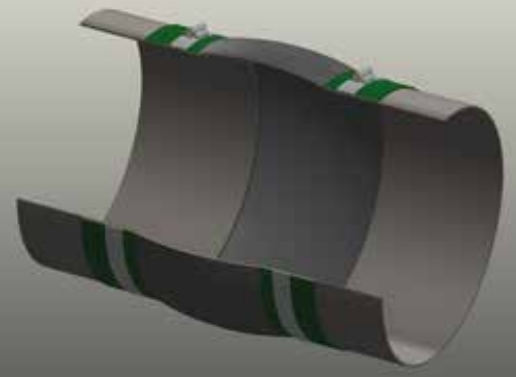
ACOUSTIC CLEANING SYSTEM SIMULATIONS - HORN 1



ACOUSTIC CLEANING SYSTEM SIMULATIONS - HORN 2

# FABRIC EXPANSION JOINTS VIBRAFLEX

Minimum propagation of vibrations



## ADVANTAGES

Maximum resistance to **high vibrations**

Temperature up to **280°C**

**Soundproofing function** with our Vibraflex Sound serie

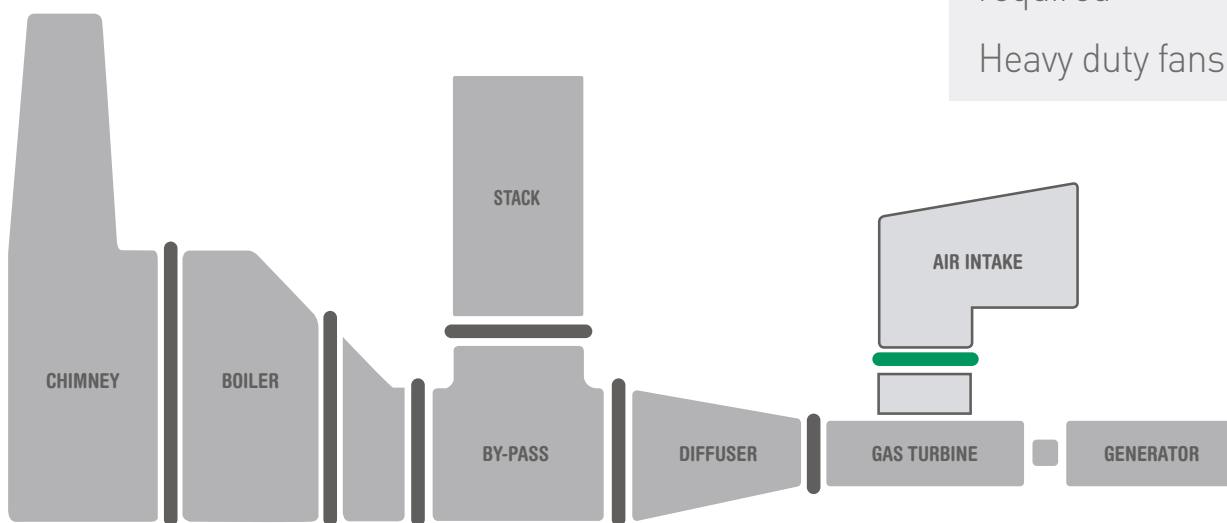
## MAIN APPLICATIONS

**Air intake** ducts

**Air ventilation** ducts

Vibraflex Sound where an **acoustic insulation** is required

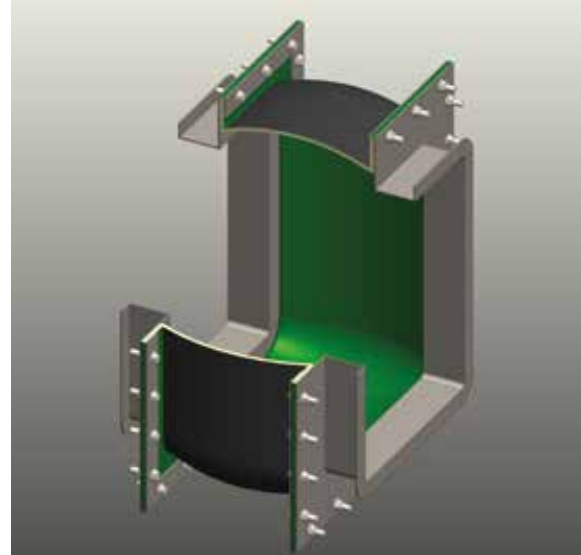
Heavy duty fans



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

# ENERFLEX

Maximum application versatility



## ADVANTAGES

Maximum application **versatility**

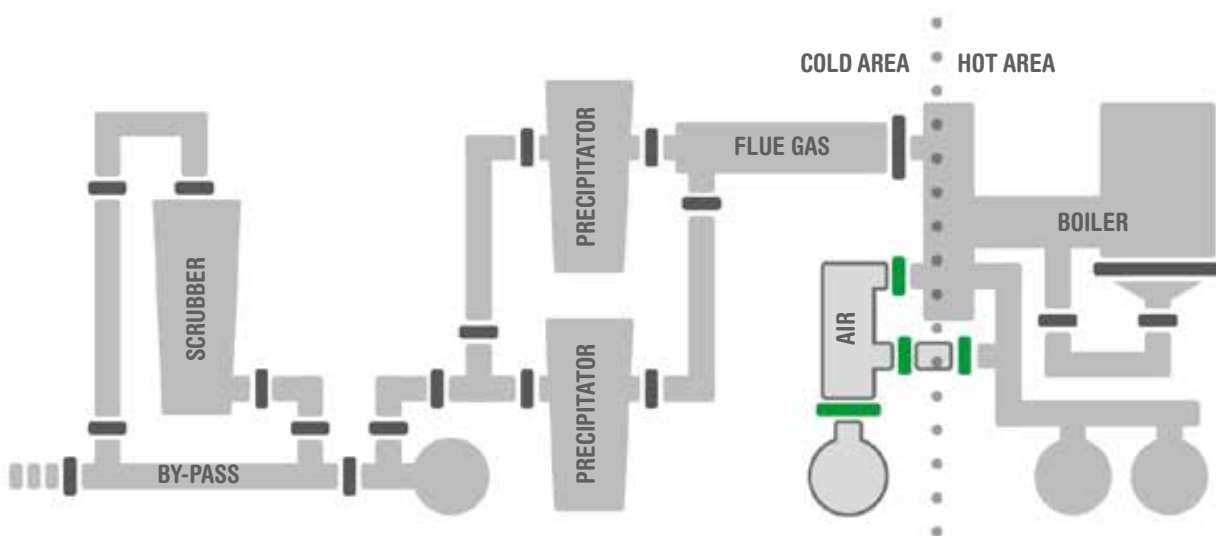
Temperature up to **650°C**

**Capability to compensate** large movements

## MAIN APPLICATIONS

Air ducts

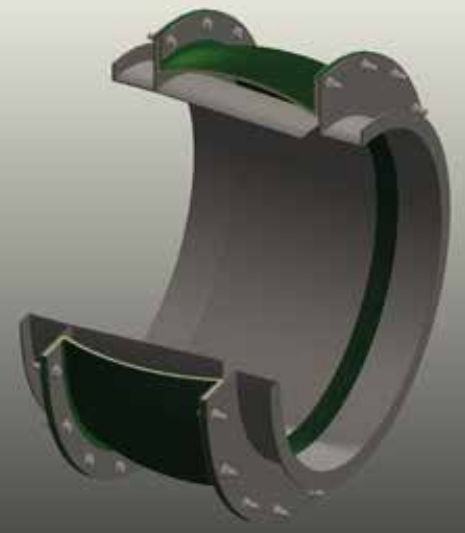
Few aggressive **fumes** ducts



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

# POWERFLEX

Maximum resistance



## ADVANTAGES

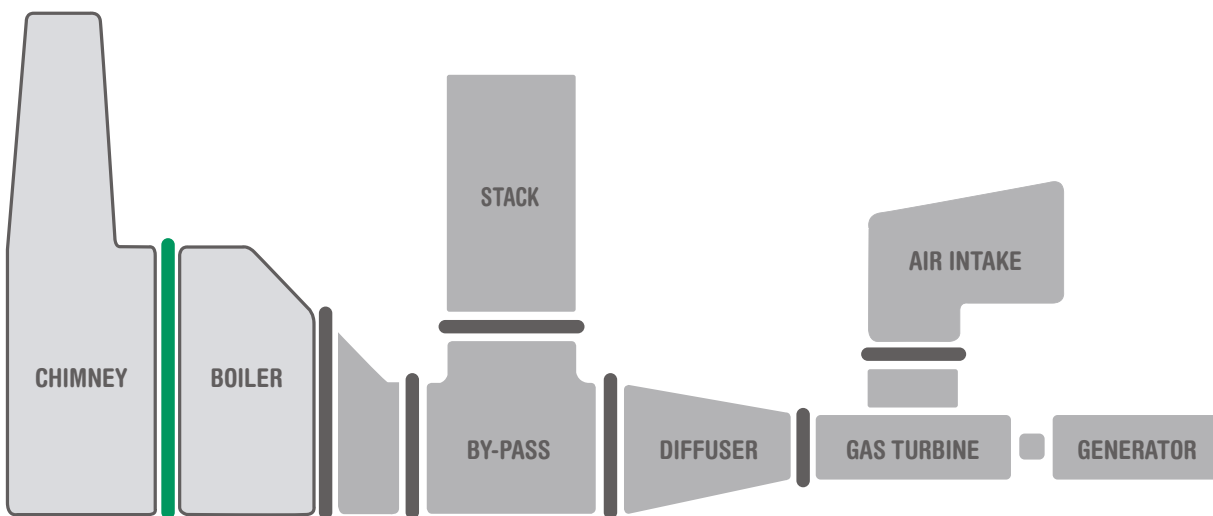
Maximum **chemical resistance** to agents from combustion fumes

Temperature up to **650°C**

**High resistance to thermal stress**

## MAIN APPLICATIONS

Exhaust combustion fumes ducts

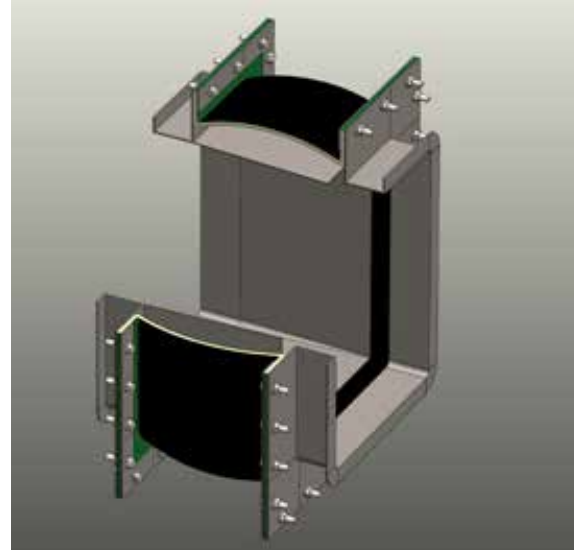


CONTINUOUS OPERATING TEMPERATURE (°C)	MAX. TEMPERATURE FOR SHORT TIME (°C)	PRESSURE LIMIT (mm/H <sub>2</sub> O)	FLUID	VIBRATION RESISTANCE	SOUNDPROOFING FUNCTION
550	650	2000	FUMES	YES	NO



# CHEMFLEX

Maximum chemical resistance



## ADVANTAGES

Maximum chemical resistance to aggressive agents

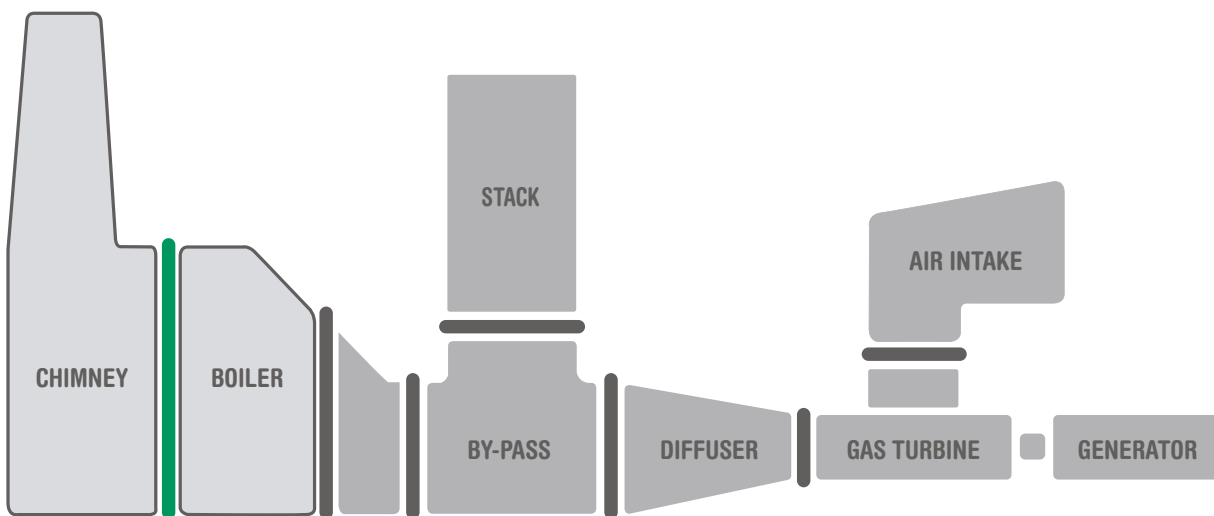
Temperature up to 300°C

## MAIN APPLICATIONS

Desox

Denox

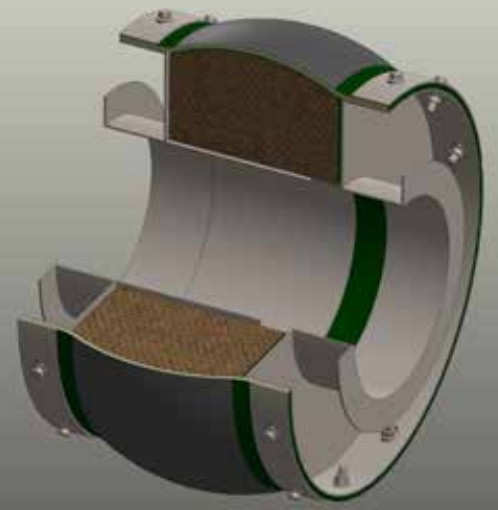
Incinerators



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

# TURBOFLEX

Maximum mechanical resistance



## ADVANTAGES

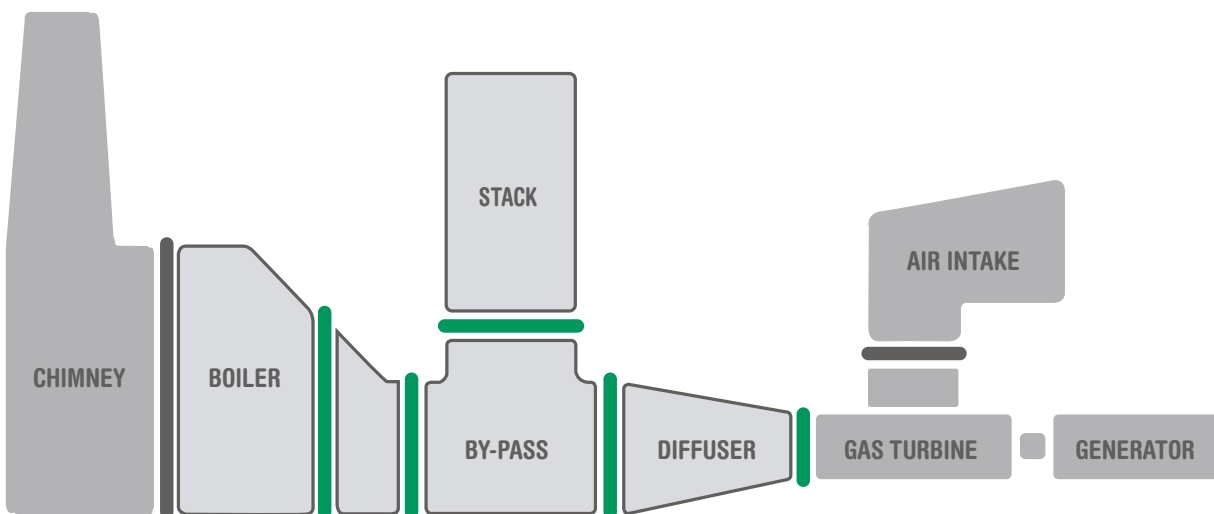
Maximum **resistance** to **pulsations** and **erosive events** related to fumes turbulence and high speed

Temperature up to **1000°C**

Good **chemical resistance**

## MAIN APPLICATIONS

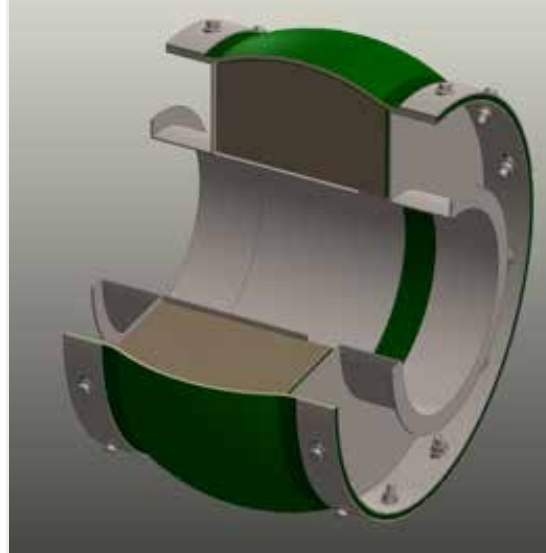
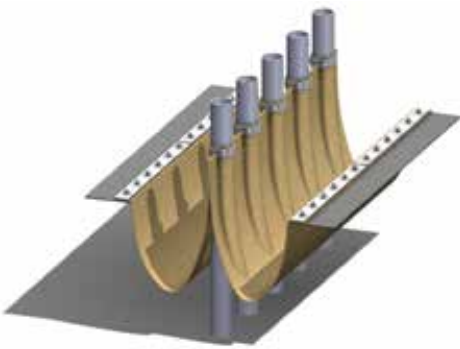
Gas turbine **exhaust pipes**



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

# PETROFLEX

Maximum resistance to extreme temperatures



## ADVANTAGES

**Maximum resistance** to extreme temperatures

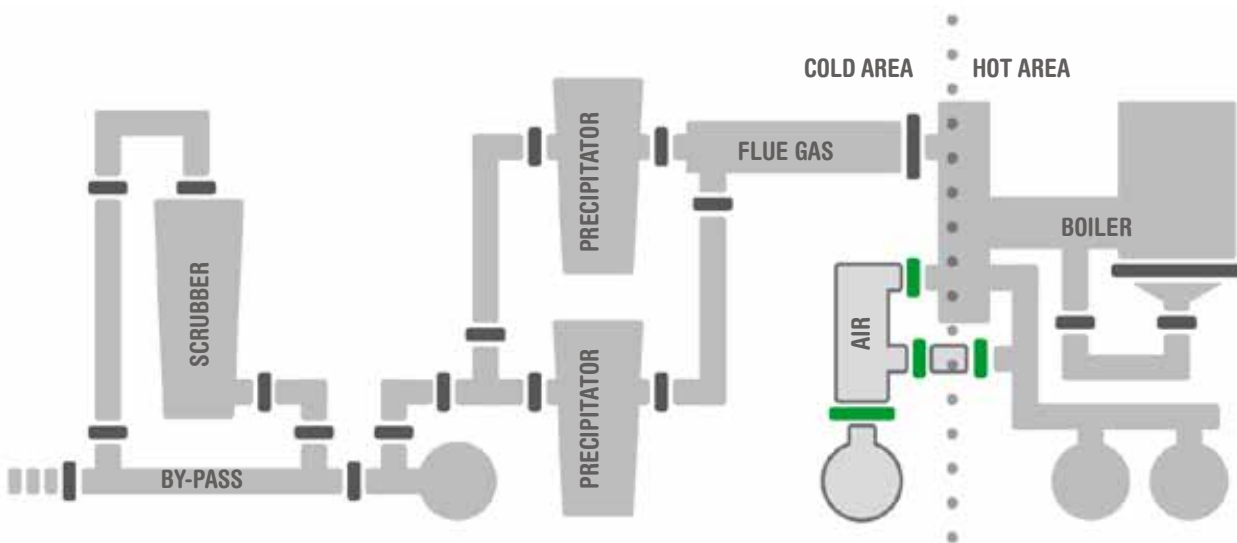
**Excellent performances** in aggressive environment

Temperature up to **1300°C**

## MAIN APPLICATIONS

Incenerator furnaces

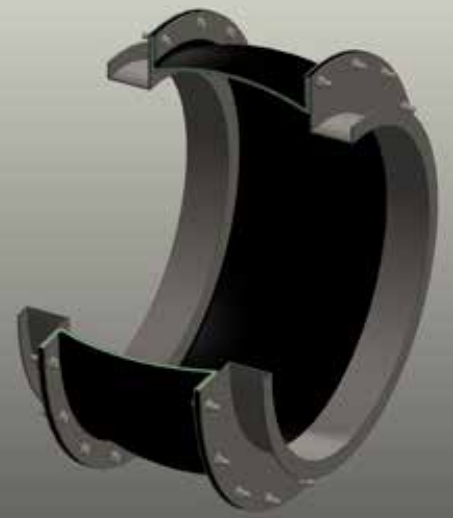
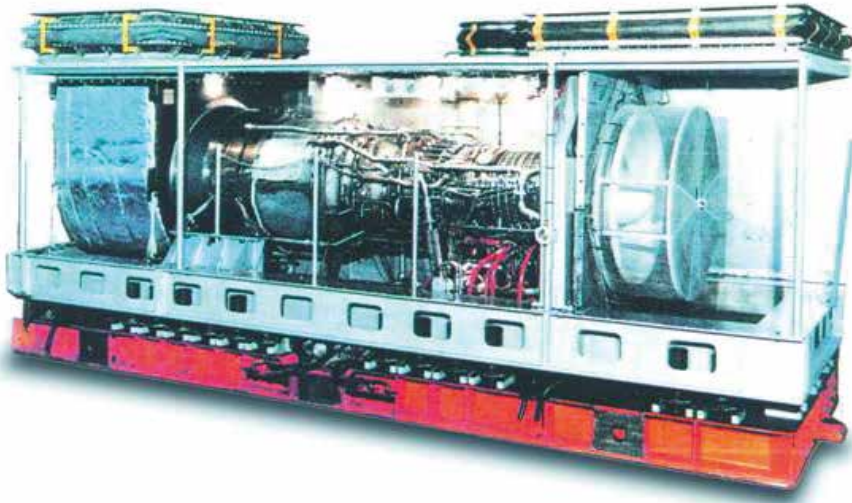
Catalytic Cracking  
post combustors



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

# NAVIFLEX

Maximum performances in marine applications



## ADVANTAGES

Maximum noise reduction

Maximum pressure tightness

Temperature up to 650°C

## MAIN APPLICATIONS

Marine engines



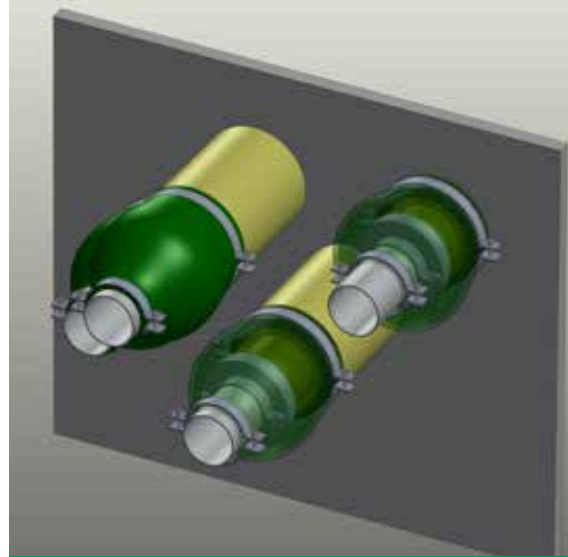
# EXPANSION JOINTS ISMES CERTIFIED



CONTINUOUS OPERATING TEMPERATURE (°C)	MAX. TEMPERATURE FOR SHORT TIME (°C)	PRESSURE LIMIT (mm/H <sub>2</sub> O)	FLUID	VIBRATION RESISTANCE	SOUNDPROOFING FUNCTION
550	650	2000	AIR / FUMES	YES	YES

# PIPERFLEX

Maximum compensation at high temperatures



## ADVANTAGES

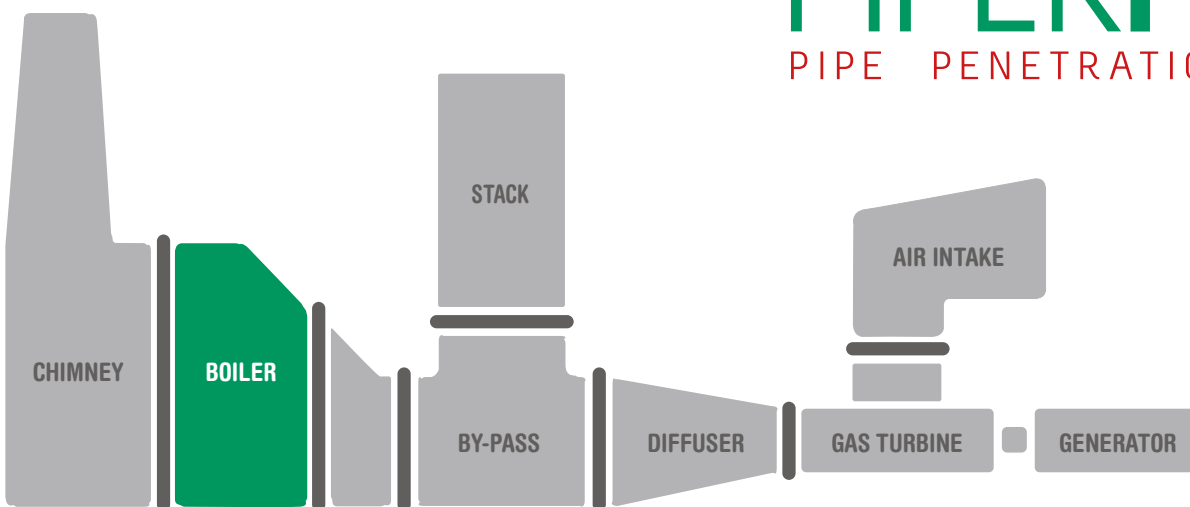
**Opportunity** to compensate high movements

**Maximum heat reduction**

Temperature up to **850°C**

## MAIN APPLICATIONS

Recovery boilers



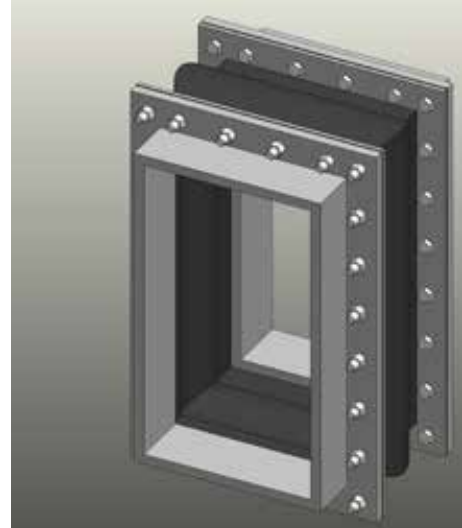
**PIPERFLEX**<sup>®</sup>  
PIPE PENETRATION JOINTS

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

# RUBBER EXPANSION JOINTS

# ACUFLEX

Maximum noise reduction



## ADVANTAGES

Optimum noise reduction

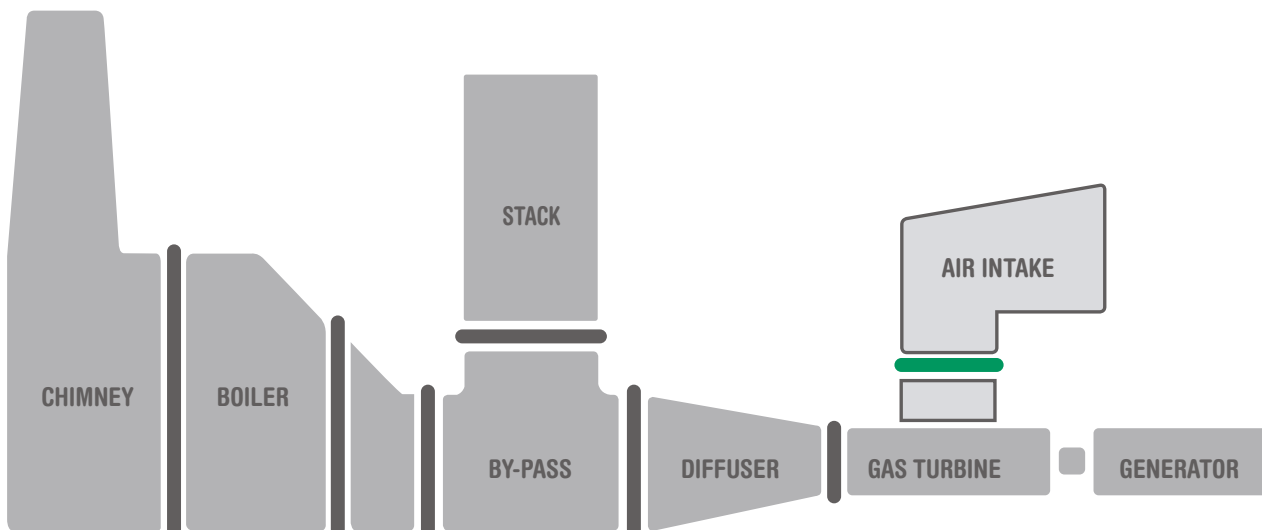
Maximum resistance to high pressure

Temperature up to 250°C

## MAIN APPLICATIONS

Air intake

Upstream and downstream of the fans



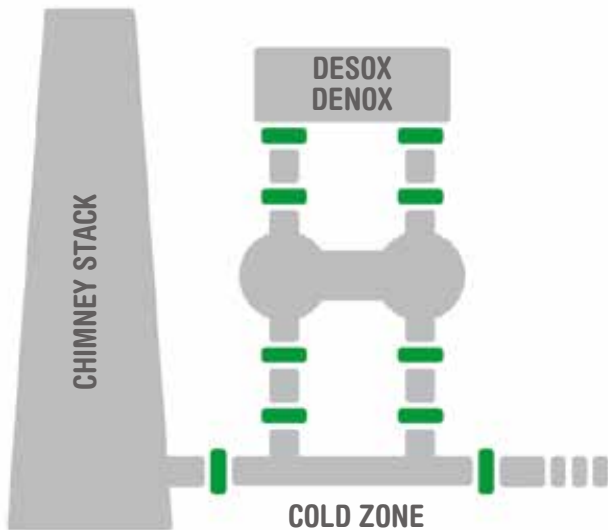
CONTINUOUS OPERATING TEMPERATURE (°C)	MAX. TEMPERATURE FOR SHORT TIME (°C)	PRESSURE LIMIT (mm/H <sub>2</sub> O)	FLUID	VIBRATION RESISTANCE	SOUNDPROOFING FUNCTION
120	250	5000	AIR	YES	YES

# ACUFLEX

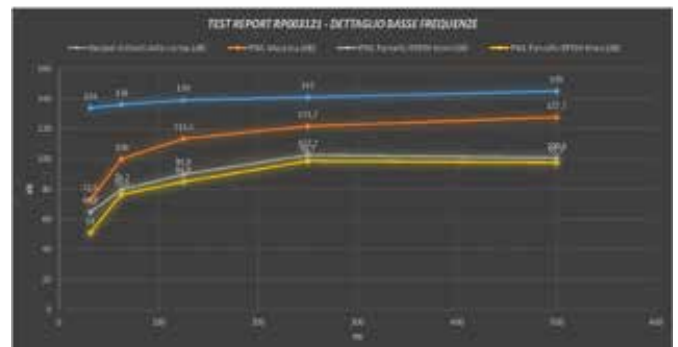
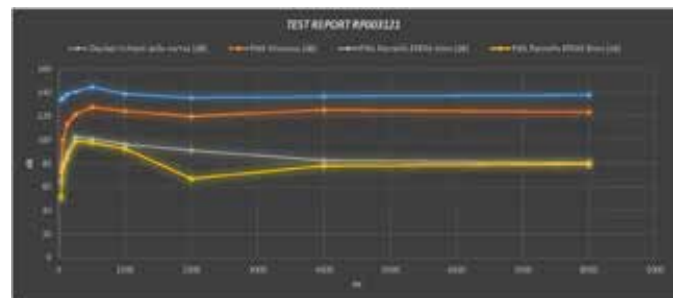


## MATERIALS:

- 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.

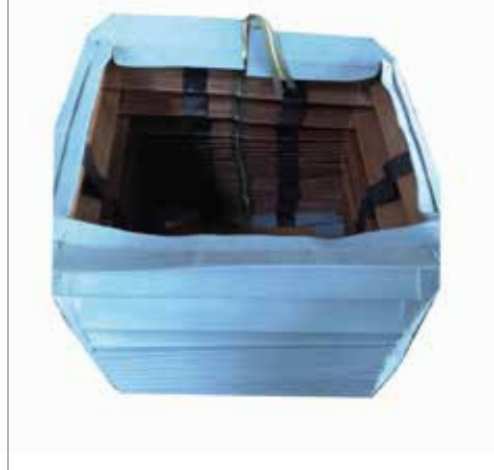


# BELLOWS

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.





# 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.



EFFICIENCY BOX



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

## OUR PROPOSAL

**Supervision**

**Monitoring** assistance

**Repair** service

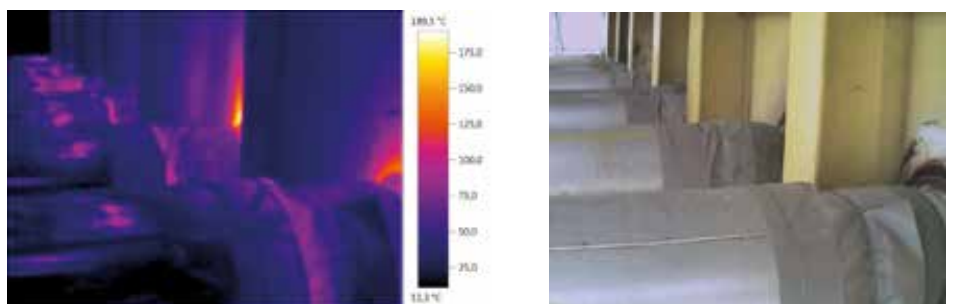
**Maintenance** service

**Thermograpghy** service

**Engineering**



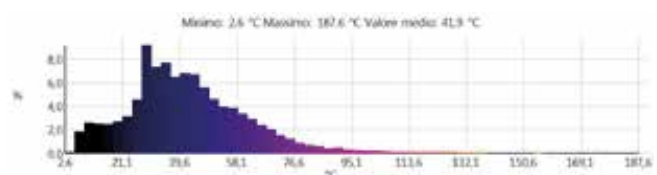
## TERMOGRAPHIC ANALYSIS ON PIPERFLEX JOINTS



Parametri dell'immagine:

Grado di emissione: 0,94  
Temp. riflessa [°C]: 100,0

Istogramma:



# REFERENCE LIST

Some of our customers...

- 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
- GE Oil&Gas - 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



# NEW **COMPONIT**

textile solutions for heat treatment

## EXPANSION JOINS

### 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

## CERTIFICATIONS AND PARTNERS

**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
- ISO9712:2012  
Themographic Analysis



### New Composit Srl

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