



BBVgroup

# the INDUSTRIAL PROCESS SPECIALIST

MILAN - ITALY



**The BBV Group, strong also of solid international partnerships, places itself on the global markets as specialist:**

1. of industrial piping, able to intervene in the mechanical verifications of the piping or of big ducts in various load conditions (stress analysis calculation according to regulations EN-13480, ASME B31.1, ASME B31.3), in the design (with numerical calculus and FEM verification, Finite Element Method) and production of metallic expansion joints (from ND 10 up to 7000 mm), textile (without limit of dimension) and rubber ones (ND up to 3800 mm), for temperatures from -200°C up to more than 1.200°C, pipe clamp, variable and constant spring hangers and other accessories, rigid struts, hydraulic shock absorbers;
2. in presence of seismic events (according to the national regulations NTC2018 or equivalent international ones ASCE) in the study of dynamic components constraint designed to contain occasional loads, vibrations or to facilitate the movements on horizontal surfaces of support bases for appliances, civil, commercial and industrial (plant building) structures.

The history of the BBV Group takes its origin in the engineering and manufacturing experience of Inoflex, BBV Tech (Alflex) and Steelflex.

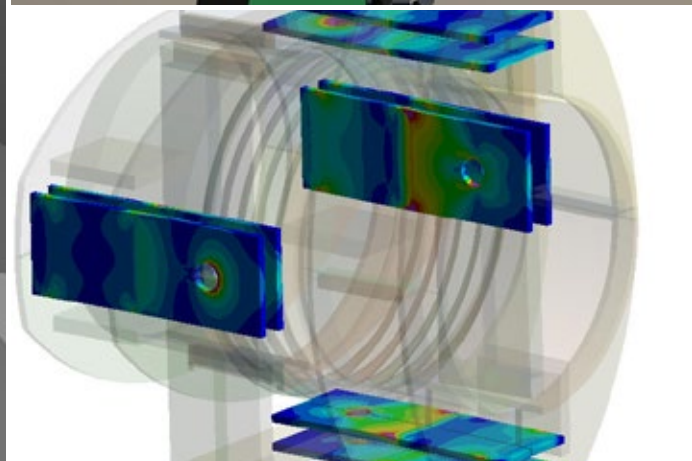
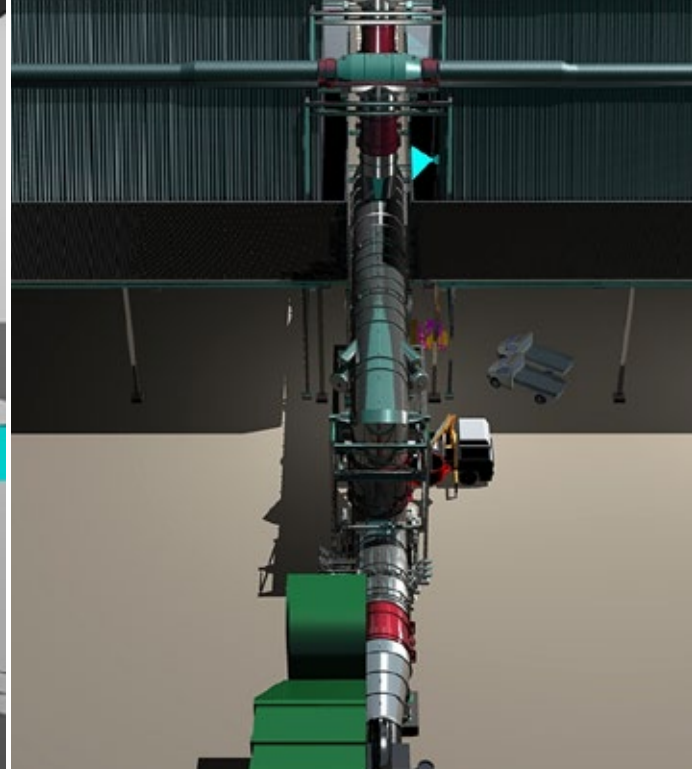
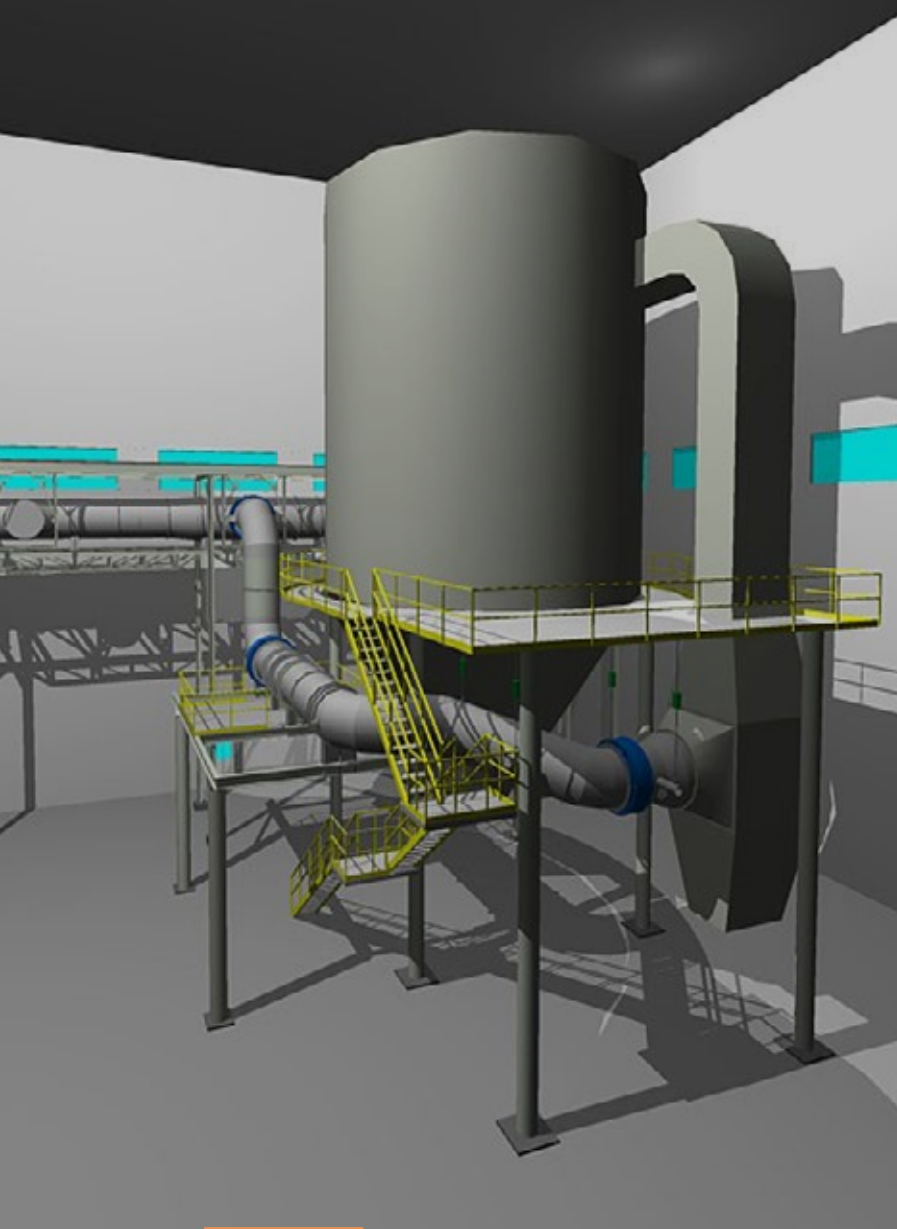
**In 2015, BBV Tech acquired Alflex** business branch from Compensatori di Dilatazione; a business story born in 1978.

**In 2016, BBV Holding was established and it acquired Steelflex's** entire registered capital, company founded in 1978.

**In 2017, the Industrial Group BBV was established.** BBV Holding exercises the functions of coordination and control over BBV Tech and Steelflex.

**In 2020, BBV Group open the Dubai office** and hired full time employees





## ENGINEERING R&D

Our engineering team models and analyses our customers' production lines and creates a full set of design suggestions.

### Department of Engineering

has the skills to carry out process studies of production lines.

### Activities & Production

FEM Finite Element Method, Fluid dynamic and Stress analysis, 3D modeling, Piping design and drawing and more.

### Piping Engineering Division

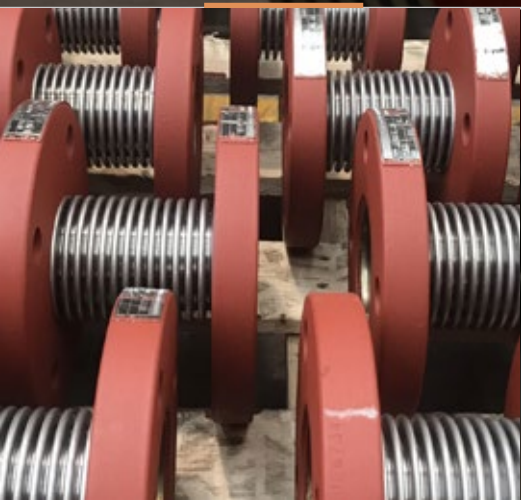
which is a specialized department that, for nearly two decades, takes care of plant projects.

Considerate the importance of the directives, our technicians are involved in the European working group for CEN standardization.



# METALLIC

## EXPANSION JOINTS







# High customization



**High Pressure  
and Temperature**

**Liquid and  
Gaseous state**

**All shapes and  
lengths**

Suitable for medium gaseous and liquid state. High pressure and temperature. All shapes and lengths available on design.

## **Metallic Expansion Joints**

The Group has two production sites for metal expansion joints equipped with modern production lines capable of making expansion joints in various materials with sizes from DN15 to DN7000: AISI304, AISI321; AISI316Ti; AISI310S etc. and / or with special alloys: MONEL, Hastelloy, Inconel, Duplex and other.

Expansion Joints and Supports are certainly the best solution to absorb and control all the thermal expansions of a plant, to minimize working costs, the thermal dispersion and the load losses.



## SEISMIC RESTRAINT DESIGN AND ENGINEERING

Seismic restraint design of vibration isolated equipment, independently tested and certified by UL, FM, Smith Emery and OSHPD.

Seismic restraint of piping systems to mitigate stress and guarantee survivability.

Control differential seismic movement in buildings and industrial facilities preventing system failures.

Seismically rated spring isolators, seismically restrained acoustical floating floors, walls and ceilings.

### Engineering, research and development

Mitigating the destructive forces of earthquakes takes understanding and engineering. BBV Group can offer the technical solutions required to guarantee survivability of mechanical systems.



# RUBBER EXPANSION JOINTS



**Medium  
Flexibility**



**Medium  
Spring Rate**



**Medium/High  
Pressure**

**Liquid and  
Gaseous state**

Rubber expansion joint is a flexible connector fabricated of natural or synthetic elastomers and fabrics and, if necessary, metallic reinforcements to provide stress relief in piping systems due to thermal and mechanical vibration and/or movements.

Noteworthy performance features include flexibility and concurrent movements in either single or multiple arch type construction, isolation of vibration and noise resistance to abrasion and chemical erosion.

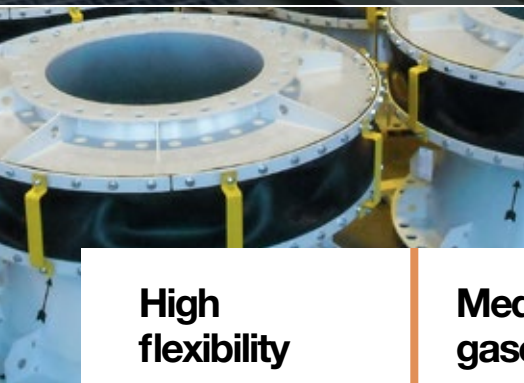
We can manufacturer rubber expansion joints with size from Ø1" to Ø144", all legth and shape.

## Engineering & Design

Engineering can solve anticipated problems of vibration, noise, shock, corrosion, abrasion, stresses and space by incorporating rubber expansion joints into designed piping systems.

# FABRIC

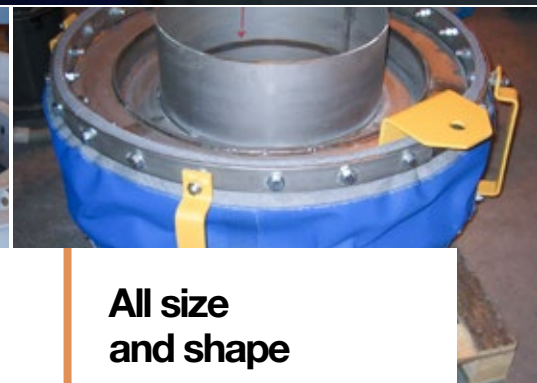
## EXPANSION JOINTS



**High  
flexibility**



**Medium  
gaseous state**



**Low  
pressure**

**All size  
and shape**

An expansion joint made from textile fibres is a flexible element. It belongs to the category of the non-metallic expansion joints.

**They can withstand extremely high temperatures, up to 1100°C.**

A fabric expansion joint is made of one or more layers of different nature, each of which performs a specific task.

Some materials are designed to withstand temperature, others are designed to resist corrosion caused by the process fluid, and others retain pressure.

Overlaying and combining of different layers obtains a stratification that has properties suitable for specific project conditions.

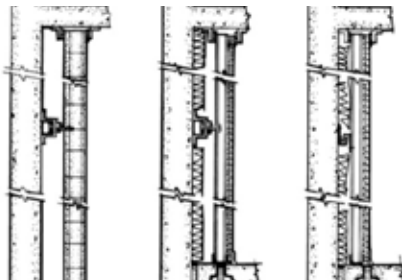
It is therefore an extremely versatile component.

### Customized Manufacturing

They are suitable for low pressure medium gaseous state and range temperature -47°C up to +1100°C. special design and customized shape.



# Other Items



## We produce also other items:

- Pipe rolls
- PTFE slide bearings
- Variable and constant spring hangers
- Spring and rubber vibration mounts
- Quick/valved couplings
- PTFE and rubber flexible hoses
- Swing joints
- Special rubbers joint for marine field
- Special metal flexible hoses
- Soundproofing system







## ON SITE SERVICE AND MAINTENANCE

Our technicians can help install expansion joints and pipeline accessories, analyze the actual state of process lines, and create maintenance/replacement plans.

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**Post-installation audits and periodic audits.**

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**Full supervision on plant in order to avoid unexpected shutdown.**

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**We share our long experience with our customers to ensure the best performance of our expansion joints.**



# certifications



ISO 3834-2  
TYPE APPROVAL



ISO 9001:2015



TYPE APPROVAL



ISO 9001  
PED 2014/68/UE Mod. H  
TYPE APPROVAL



MILAN - ITALY



# passion for EXCELLENCE



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