

Product Brochure

METAL EXPANSION JOINTS



PENTAMET

**YOUR ONE STOP EXPANSION
JOINTS SOLUTIONS PROVIDER**





INTRODUCTION:

PENTAMET is a family owned company, established already in 1989. We are dedicated to 4 core values: quality, commitment, responsibility and fairness.

PENTAMET's first expansion joints were manufactured in 1995. Since then, we have had the honor of working with some of the worlds most experienced and innovative expansion joints customers.

PENTAMET designs and manufactures expansion joints to the whole energy sector where there is a high demand for excellent design and manufacturing. We offer a complete range of metal expansion joints, from round to rectangular.



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MAIN PRODUCTS:

Metal expansion joints (also called compensators) are flexible elements in piping and ducting systems. Their main purpose is to accommodate expansion and vibration caused by temperature, media and/or pressure.

PENTAMET's expansion joints are designed, manufactured and tested according to E.J.M.A (Expansion Joints Manufacturers Association, Inc.) standards. Other design codes available by request.

PENTAMET product range:

CIRCULAR EXPANSION JOINTS

Axial, Hinged, Gimbal, Lateral, Pressure balanced, Lens, Thickwalled, Penetration seals

RECTANGULAR EXPANSION JOINTS

Rounded corner, Double miter corner, Single miter corner

Circular expansion joints are manufactured with single and multiple layers with a diameter ranging from 150 to 5000 mm. Rectangular expansion joints are available in unlimited dimensions.

We are specialized in using the following materials:

Carbon steel:

S235, S355, P235GH, P265GH, P355GH, 16Mo3, 13CrMo4-5, 10CrMo9-10, Corten, Hardox, etc

Austenitic steels:

AISI 304, 316, 316L, 316Ti, 321, 309, 310, 253 MA, etc

Nickel alloys:

Inconel 600, Inconel 625, etc

COMPLEMENTARY PRODUCTS & SERVICES:

PENTAMET has vast experience in manufacturing various steel constructions, to support our customers in various projects.

Complementary products:

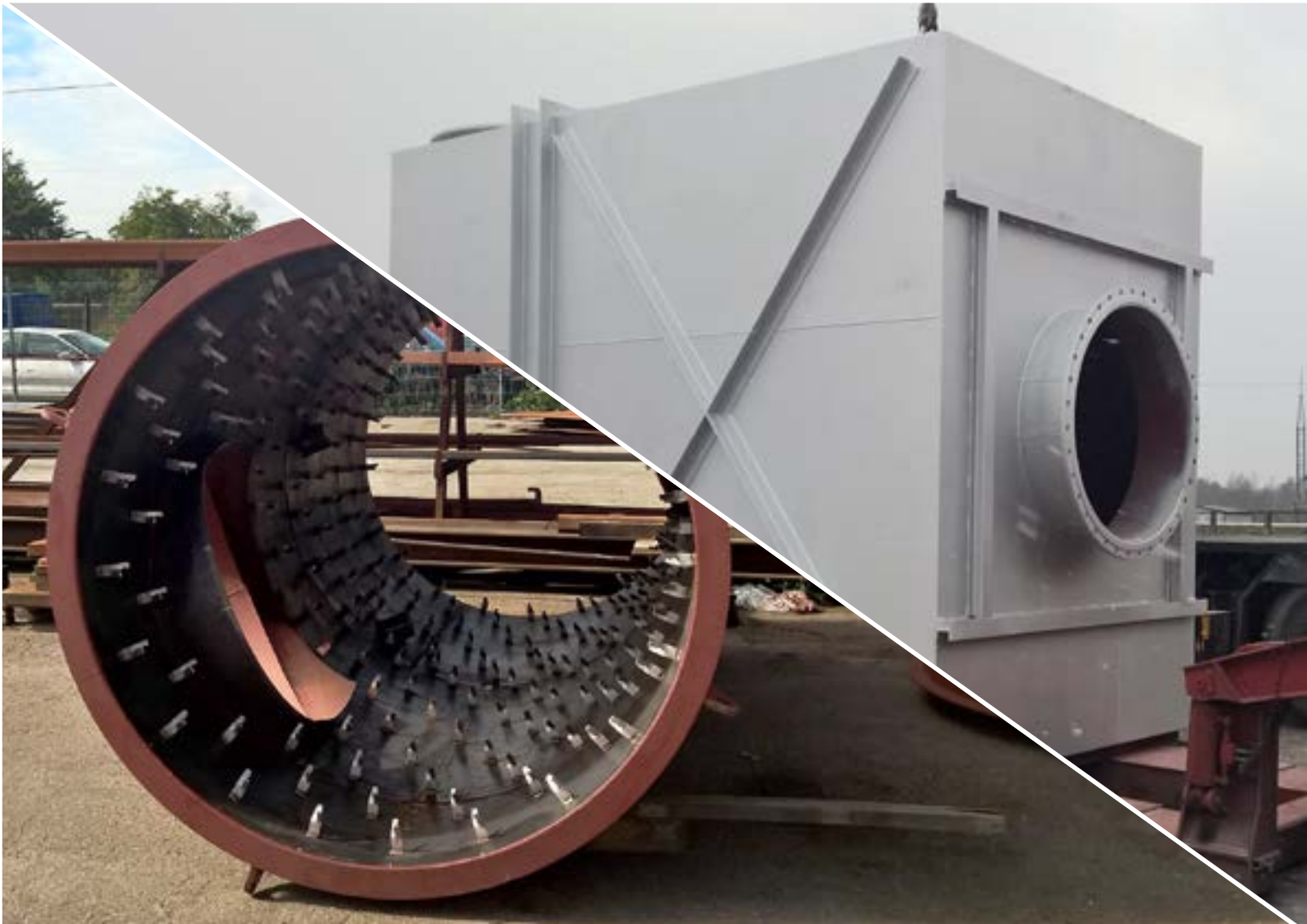
- Fabric expansion joints
- Hoppers, Ash Chutes
- Air- and Flue gas ducts
- Economizer casings
- Aerofoils, Venturies
- Vessels
- Supporting steels

Services:

- Erection works
- Insulation works
- Supervising works
- 3D modelling
- Draft drawings
- Workshop drawings
- Finite Element Analysys (FEA)
- Packing
- Delivery

Machinery & Equipment

- CNC controlled Press Brake Finn-Power E-Brake II E150-3100
- CNC plasma & oxygen cutter Sato Satronic E3500 (200 A)
- CNC 4 roll plate bending machine MG 2020C, max. T=20mm
- Bellows forming machines
- TIG welding equipment
- MIG/MAG welding equipment
- Guillotine shears, max. T=10mm
- Band saw
- Turntables: 1.5T, 3.5T
- Profile bending bench
- Drilling machines
- Press bench
- Punching machine
- Milling machine
- Lathes
- Point welding machines
- Cranes: 6.5 T



QUALITY:

Each expansion joint is inspected thoroughly, during the fabrications process and prior to shipping. We work closely with third party inspection companies, like TÜV, Inspecta and Bureau Veritas, whose inspection report will complement our internal reports in every project.

ISO 9001

**BUREAU VERITAS
Certification**



PENTAMET is certified according to:

- ISO 9001
- EN ISO 3834-2
- EN 1090-2 EXC 3
- Other certificates are available upon request

- Magnetic Particle Examination
- Ultrasonic Examination
- Chemical and Mech. Analysis
- Spring Rate Test

Available Destructive test (DT):

- Cycle Life Test

Available Non-destructive tests (NDT):

- Liquid Penetrant Examination
- Radiography

