



# FLENCO

 Metanoimpianti

Your partner in **Oil & Gas**  
and **Power Generation**

Since 1988

A COMPANY OF



# The Group

300+

Flenco  
Employees  
Worldwide



77M+ €

Flenco  
Turnover



40.000+

Square  
meters  
Flenco Sites



1000+

Group  
Employees  
Worldwide

270M+ €

Group  
Turnover

250.000+

Square meters  
Group Sites



# More than 6100 systems, **experience** and **quality since 1988**

Flenco Fluid System is a privately owned **Italian Company** which supplies a wide range of products & services to the **Energy, Oil & Gas, Power Generation** and **Petrochemical** markets worldwide.

The core business is represented by the **Engineering, Procurement, Production and Testing of Auxiliary Systems** and Packages for compressors, gas and steam turbines, pumps, generators and by the **Gas Process Skids**.



# Our skills

Flenco's Industrial and Process Engineers are expert in several international standards and are involved in proprietary codes, specifications for major clients in the Oil & Gas and Power Generation business.

The Engineering team counts on 60+ professionals, specialized in industrial and process engineering.

They are spread among the center of excellence in Avigliana, headquarters and historical site of the company, the local offices of Calenzano and Rome, and the branch office of Milan where is located Metanoimpianti, recently acquired for strengthening the presence of Flenco towards EPCs and End Users thanks to over 40 years of experience in the Gas Process Skids.

## Flenco Process Engineering

- PFD – Process Flow Diagrams
- P&ID – Piping and Instrumentation Diagrams
- Heat & Material Balance
- Process Equipment Design
- Field instrumentation and Control Room design
- Datasheets

## Flenco Industrial Engineering

- Basic Engineering
- Mechanical Engineering
- Structural Analysis
- Mechanical Calculation
- Piping Stress Analysis
- 3D Modeling and Production Engineering
- Electrical, Instrumentation and Controls Engineering

# Where we are



-  **Headquarters**
-  **Local offices**
-  **Branch office**
-  **Workshop**

# Where we are



## Avigliana Italy

### Headquarters

- Business & administrative head offices
- Marketing & Process Skids department
- Sales & aftersales department
- Engineering department
- Purchasing, expediting and logistics department



# Where we are



Milan  
Calenzano  
Rome  
Italy



## *Branch office and local offices*

Milan (Metanoimpianti) branch office and Rome local office are focused on Gas Process Skid business line, providing technical and commercial support to EPCs and End Users starting from the FEED phases to the project development, till the handover to customer.

Calenzano local office provides technical and commercial support to OEM customers.

# Where we are



## Trino Vercellese Italy

### Workshop

### Total area: 21.800 sqm

- Total covered area: 8.500 sqm
- Assembly / test area: 2.800 sqm
- Pre-assembly area: 1.100 sqm
- Production / welding area: 2600 sqm
- Painting / sandblasting area: 400 sqm
- Warehouse: 1.200 sqm
- Offices: 400 sqm
- NDT area

- Cranes:
  - Assembly: 2x10 tons
  - Heavy steel fabrication: 2x10 tons
  - Steel fabrication: 2x5 tons
  - Painting: 2x10 tons
  - Pipe welding: 6x1,5 tons



# Where we are



## Ptuj Slovenia

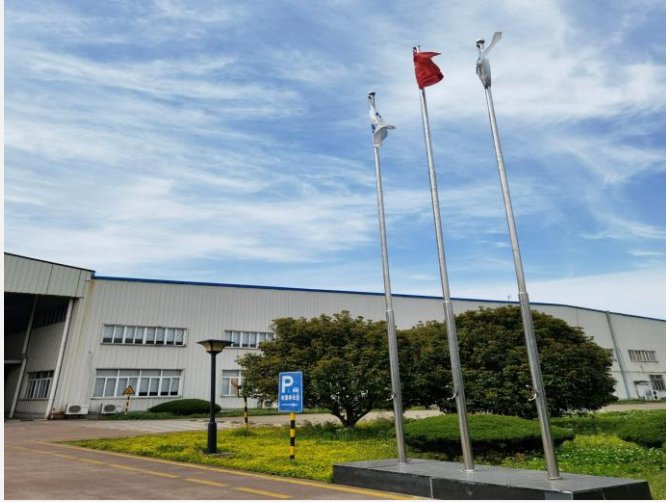
### Workshop

### Total area: 22.000 sqm

- Total covered area: 8.800 sqm
- Offices (two floors): 2.300 sqm
- Loading / unloading area: 200 sqm
- Assembly / test area: 700 sqm
- Pre-assembly area: 1.000 sqm
- Production / welding area: 2.000 sqm
- Painting / sandblasting area: 270 sqm
- Warehouse: 850 sqm
- Machining area: 400 sqm
- NDT area
- Cranes:
  - Assembly: 2x25 tons + 1x15 tons
  - Steel fabrication: 2x10 tons
  - Light steel fabrication: 2x5 tons
  - Stainless steel fabrication: 1x10 tons
  - Pre-assembly: 2x20 tons
  - Storehouse: 2x5 tons



# Where we are



## Ningbo China

### Workshop

Flenco China supports the Asian Pacific regions for procurement, project management, production and testing of systems.

### Total area: 3.120 sqm

- Production / welding area: 2300 sqm (18 m width, 10 m high)
- Warehouse: 400 sqm
- Production offices: 300 sqm
- Offices: 120 sqm



# Auxiliary systems and packages



## LUBE OIL SYSTEMS

Lube oil, seal oil, hydraulic oil, control oil systems for turbines, compressors, pumps, gears, generators designed according to API 614/ISO10438 or any other standard. They may include overhead tanks.



## GAS SEAL PANELS

Gas seal panels, according to ISO 10438:2008 Part 4 and API 614 Fifth Edition Chapter 4, are designed to supply seal and buffer gas to the shaft seals. They include filters, controls, piping or tubing and the related instruments and cover a wide array of flows, pressures and material grades.



## COOLING WATER SYSTEMS

Cooling water systems or coolant skids, pump cooling water to the compressor cylinders, as the power input to the compressor is converted to heat in the compression process. Heat is removed by our cooling systems to prevent the gas and compressor parts from reaching excessively high temperatures.



## FULL PACKAGING

Assembly of the complete compressor train on the base frames, including mechanical (piping around & structures), electrical, instrumental and controls. Flenco offers a complete testing capability, while the modular design reduces field installation and transportation costs.



## INTEGRATED SYSTEMS

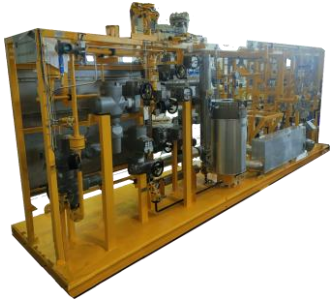
Integrated systems for lubrication, start up, gas and fuel treatment, including filtration, pumping, injection and controls.



## STATOR WINDING COOLING SYSTEMS

Cooling system is designed to provide water free from oxygen to avoid corrosion in the system. The circuit is sealed from the atmosphere and under constant hydrogen overpressure. Water is circulated in a closed-circuit system through hollow conductors in the stator winding bars.

# Auxiliary systems and packages



## HYDROGEN COOLING SYSTEMS

Gas cooling systems cool by filling the generator with hydrogen, maintain under pressure, check the gas purity and evacuate it. To prevent the formation of explosive gas mixtures, the air in the generator is expelled with CO2 prior to being filled with hydrogen.



## GAS DRYERS

A hydrogen gas dryer is a system to dry and/or remove water from hydrogen gas for use in hydrogen-cooled generators, preventing deterioration of the hydrogen's cooling properties. Depending on customers' needs, we are able to provide both desiccant dryers and refrigerated dryers.



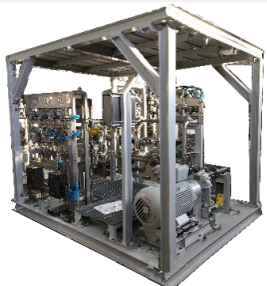
## ACCUMULATOR SKIDS

Accumulator skids are designed to prevent low system pressure trips during transient events and to provide additional temporary flow when required.



## AIR SYSTEMS

Flenco provides a wide range of air systems to produce and distribute compressed air to different utilities, control air for instrument and valves all-over the plant.



## WATER INJECTION SYSTEMS

For non-Dry Low Emissions (DLE) turbines without a NOx abatement system, a water injection system can be added to lower NOx emissions. This system injects demineralized water into the combustor through the fuel nozzles to regulate the combustor flame temperature and lower NOx emissions.



## WATER WASHING SYSTEMS

Turbine water wash systems can operate in both online (during turbine run) and offline (during turbine stop) mode. They deliver specified water and detergent flow to the nozzles, thus maintaining efficiency. They can be used onshore and offshore. Our standard systems are designed to be compact and mobile.

# Process packages



## FUEL GAS & GAS CONDITIONING SKIDS

Fuel gas & gas conditioning skids treat natural gas and other combustible gases before injection into a critical process. It performs two functions: removing both moisture and any solid contaminants from the gas and regulating the gas temperature to the injection requirements.



## GAS SEPARATION PACKAGES

Gas separation package, with its vane pack or cyclone separators at high efficiency, making them suitable for installation upstream of the gas turbine or turbo-compressor.



## WBH & PERFORMANCE HEATER SKIDS

Heating skids are designed to heat oil, fuels or gases. The heating process is performed by steam, hot water or electricity.



## GAS METERING & PRESSURE REGULATING SKIDS

Gas metering and pressure regulating skids are designed to measure gas or liquid flowrate. The metering skids can be used to provide additional treatments including pressure-reduction and flow control.



## FILTERING SKIDS

The skids treat natural gas and other combustible fluids before injection into a critical process, by removing any solid contaminants from the fluid.



## PIG LAUNCHERS AND RECEIVERS

Pig launchers and receivers perform maintenance operations (mainly cleaning and inspection) of the pipeline without stopping the flow of the product inside. Pigs or scrapers are pushed from the pig launcher along the pipe until it reaches the receiving trap. During this process, they remove deposits or separate fluids.

# Aftersales & Services



## SPARE PARTS

Flenco provides technical definition and sourcing of: capital parts, commissioning spare parts (supplied with main system), repairable and consumable parts.



## REVAMPING AND RETROFIT

Upgrading of existing systems to improve performance, to save maintenance costs, to comply with new regulations and to keep the environmental impacts as low as possible.



## SERVICES

Flenco provides field installation assistance, commissioning, testing, calibration, training, technical advisory, troubleshooting and repair services. Our engineers team is on call 24/7.

# Main customers



# Contacts

## FLENCO FLUID SYSTEM S.R.L.



### Avigliana headquarter

Corso Torino, 4M – 10051 Avigliana (TO) – Italy  
Tel. : +39 011 9330 611  
[info@flenco.com](mailto:info@flenco.com)

### Trino workshop

S.S. 31 Bis Km 31 – 13039 Trino (VC) – Italy  
Tel.: +39 0119330 611  
Tel.: +39 0161 804212

### Calenzano local office

Via Vittorio Emanuele, 19 – 50041 Calenzano (FI) – Italy  
Tel. +39 011 9330 611  
Tel. +39 055 3195 26

### Rome local office

Via Eschilo, 186 – 00125 Roma – Italy  
Tel. +39 011 93 39 611

### Milan branch office (Metanoimpianti)

Via Gallarate, 58 – 20151 Milano - Italy  
Tel. +39 011 9330741

## FLENCO D.O.O.



### Ptuj workshop

Rogozniska, 14 – 2250 Ptuj – Slovenija  
tel.: +386 2 749 27 30  
[slovenia@flenco.com](mailto:slovenia@flenco.com)

## FLENCO NINGBO POWER AUXILIARY EQUIPMENT & SYSTEMS CO.,LTD



### Ningbo workshop

Hengshan west road, No.665 – Beilun District,  
315800 Ningbo – Zhejiang province – China  
tel.: +86.13958397860  
[china@flenco.com](mailto:china@flenco.com)

