



# MARINE & INDUSTRIAL SPARE PARTS MANUFACTURER

Expansion Joints • Impellers • Blowers • Fans • Flexible Metal Hoses Exhaust Gas Manifolds • Sea Chests • Filter Elements Flanges • Gaskets • Thermal Insulating Jackets



# Company Profile

BELLOWS HELLAS O.E. primarily specialises in a wide range of Expansion Joints and Fan Impellers with an accumulated experience of 20 years.

We are able to offer custom solutions for the whole range of our products while maintaining top quality and short delivery times.

All products are manufactured in our premises by specialised and experienced personnel based on detailed engineering drawings created by our design engineers to ensure optimum results.







# BELLOWS Axial Expansion Joints



### **Steam Expansion Joints** (c)

Expansion Joints for high working pressures which consist of 4 to 6 metal sheets with thickness of 0.4mm or 0.6mm depending on the size of the Joint and the required working pressure.

### **Working Pressure:**

Up to 20 BAR

#### Material:

SUS-316L

# **Available Size Range:**

DN65A - DN400A.

### Flange Type:

Standard or Custom Made – Fixed or Rotating.



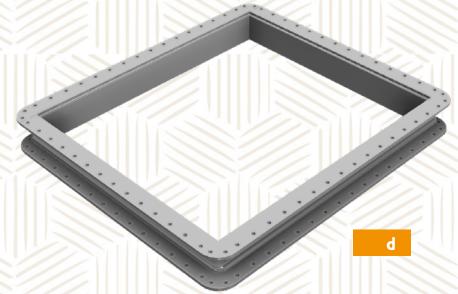


# Rectangular Expansion joints (d)

Rectangular Expansion Joints consist of 1 sheet of metal with thickness from 1.5mm to 2mm with various material choices available depending on the application of the joint.

# Flange Type:

Custom Made – Fixed.





# BELLOWS Axial Expansion Joints



### Sleeve Type Expansion Joints (e)

Expansion Joints for steam lines which are primarily used in deck lines.

# **Body & Gland Material:**

Galvanised or Epoxy Painted ST-37.2.

#### Sleeve Material:

Stainless Steel.

### Available Size Range:

DN65A - DN300A.

# Flange Type:

Standard or Custom Made – Fixed.

# **Dresser Type Expansion Joints** (f)

An Expansion Joint type primarily used in cargo deck lines.

### Material:

Galvanised or Epoxy Painted Steel.

## Available Size Range:

DN65A-DN750A

# **Dresser Rubber Packing** (g)

The rubber O rings which are responsible for accommodating the axial displacement in Dresser Type Expansion Joints are available individually from DN65A-DN750A.







# ELLAS Axial Expansion Joints



### Rubber Expansion Joints (h)

Rubber Expansion Joints can accommodate movements in all 3 directions as well as torsional movement. They have large movement capacity, a compact design and no gaskets are required for their installation. They can be used for a wide range of applications since they are corrosion and erosion resistant.



### Siliconized Expansion Joints (i)

Thermo-E-glass Fabric with red silicone coating and Kevlar threads capable of withstanding temperatures up to 550°C mainly used in the ship air ducts. They can be manufactured at any size requested by the customer.





# BELLOWS Impellers - Blowers - Fans



### I.G.S. Fan Impellers (a)

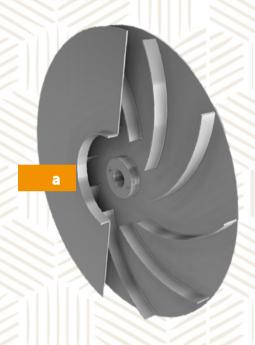
We specialiase in the manufacturing of various Impeller types in various dimensions and metal thicknesses.

### **Direction of Rotation:**

Clockwise or Anticlockwise.

#### Material:

Stainless Steel



# Centrifugal Blowers (b)

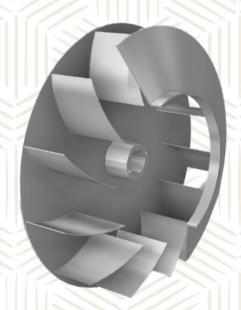
The blower is one of the most widely used fans across a number of industrial fields and can be manufactured at any size requested by the customer.

### Material:

Steel, Stainless Steel and Aluminium









### Sirocco Type Blowers (c)

A special type of Centrifugal Blower with forward curved and narrow blades primarily used for air-conditioning applications.

### Inlet:

Single or Double.

**Direction of Rotation:** 

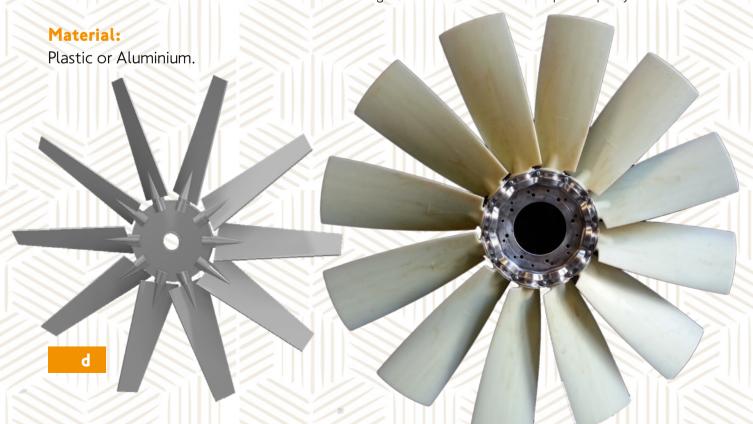
Clockwise or Anticlockwise.





### **Ventilation Axial Fans (d)**

Axial Fans are used primarily for moving air through a piping system and can be manufactured at various sizes depending on the needs of the customer. The number of blades and their angle is calculated based on the required capacity of the fan.



# BELLOWS Bunker Sampler Flanges



### **Drip Type Bunker Sampler Flanges**

Drip Type Bunker Sampler Flanges are one of the most common and economic methods of obtaining samples. Our bunker samplers are type approved by Bureau Veritas, they are manufactured under strict ISO 9001 quality assurance standards and are also compliant with IMO MARPOL 73/78 Annex VI. They are easy to install as there is no need for external equipment and are available in two designs.

Full Face Type Design





TYPE APPROVAL CERTIFICATE

This certificate is issued to BELLOWS HELLAS O.E.

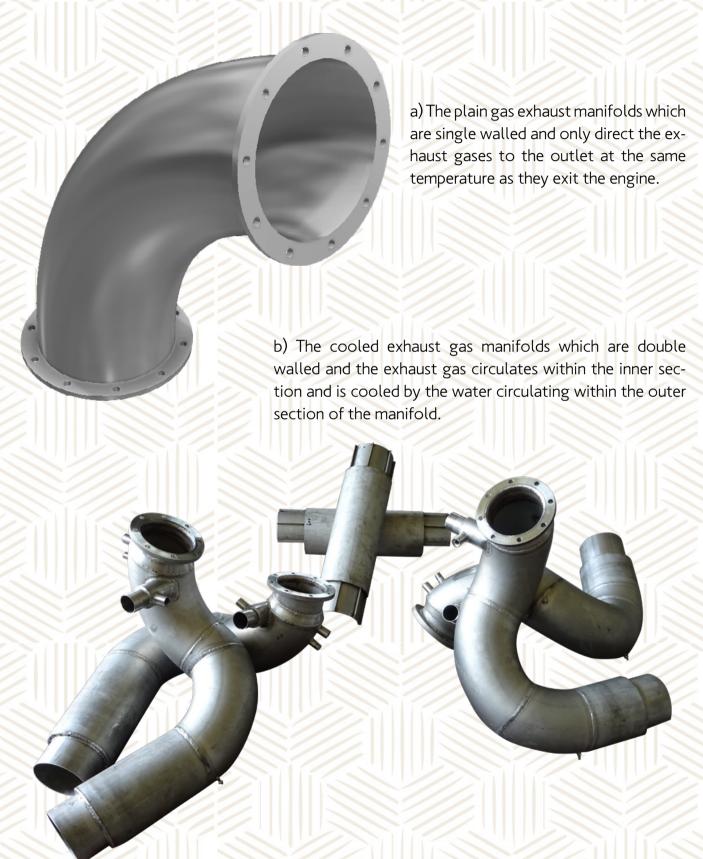
SAMPLING DEVICES



Ring Type Design



Stainless Steel Units which collect the engine exhaust gas. They can be made in various sizes and shapes. They are divided into two categories:





### Flexible Metal Hoses

Corrugated flexible stainless steel metal pipe reinforced with braided stainless steel on the outside. They can be used in extreme conditions as they are corrosion resistant while maintaining their pressure tightness.

### Material:

SUS-316L or SUS-321

# **Available Size Range:**

DN15A - DN150A.

### Flange Type:

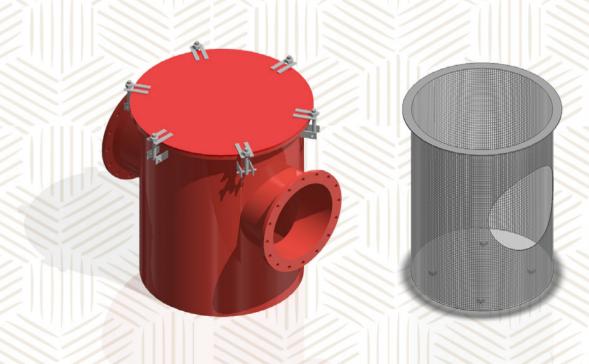
Standard or Custom Made Fixed or Rotating.





#### Sea Chests - Filter Elements

Sea Chests are physical barriers used to withhold impurities found in the sea water being pumped for the cooling of the ship engines. Filter Elements act as casing for the sea chests and they have an inlet and outlet which can either be linear or at an angle. They can be manufactured at any shape and size requested by the customer.

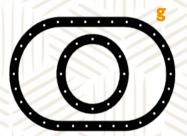


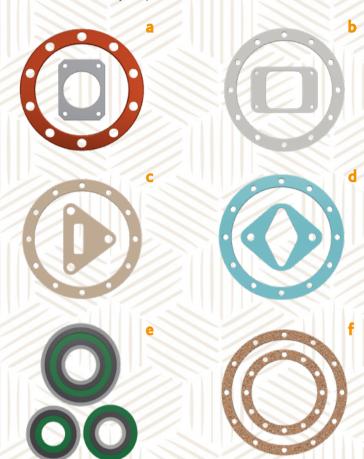


# Gaskets

They are one of the simplest sealing components and they can also fill any irregularities on the two mating surfaces. We provide a number of different Gasket types which can be manufactured at any shape and size to meet the needs of the customer.

- Metal Plastic Gaskets
- b. Mild Steel Gaskets
- c. Vegetable Oil Gaskets
- Non Asbestos Gaskets
- e. Spiral Wound Gaskets
- Rubber Cork Gaskets
- Rubber Manholes





# Thermal Insulating Jackets

Used for insulating the piping and the Expansion Joints in the ship's engine room. They are separated into three layers with the inner being plain fiberglass, the intermediate layer ceramic wool and the outer one fiberglass coated with silicone or aluminium.





# BELLOWS HELLAS O.E.

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