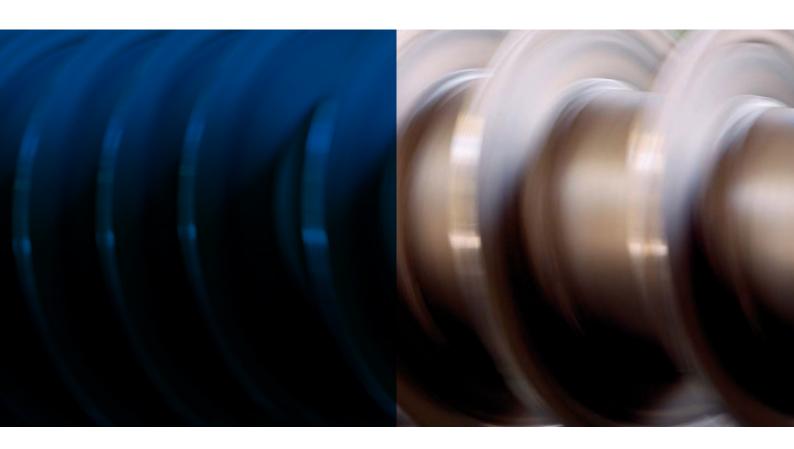
# **DECANTER CENTRIFUGES**FOR INDUSTRIAL APPLICATIONS

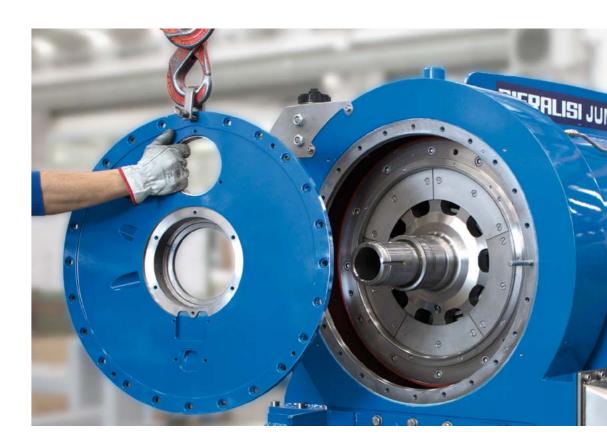




# The centrifugal force effective, reliable and innovative

Over the years Pieralisi has developed a great experience and a strong know-how in the most important centrifuge markets. Therefore we developed a broad selection for our customers, granting them the most advanced technologies with the highest quality level.

We provide solutions to any technological solid-liquid and solid-liquid-liquid separation problem, through decanters which are placed on a large variety of application fields with a wide range of flow rates.



## Global presence

Pieralisi is strategically located in Italy and worldwide, together with an extensive network of agents, technical service centres and spare parts warehouses. We support our customers with specific competences for each market, country and application.



## **Application fields**



## **Environmental**

We design and develop solutions for thickening and dewatering of sludge generated by municipal or industrial wastewater, biomasses and manures treatment plants. A large range of decanters is continuously innovated, basing on a number of installations and many years of experience in this field.



## Food and Beverage

We provide separation solutions for any type of food or beverage. Pieralisi decanter centrifuges are used for fruit or vegetable juice purification, wine processing, food treatment, edible additives extraction with the highest safety and hygiene standards compliant with the strictest regulations.



## Mineral Fuels and Lubricants

We offer technological solutions for fuels cleaning and treatment, for lube oils purification, for the conditioning and recovery of mineral oils, industrial or environmental slop oils, bottom tank residues and bilge water.



## Recycling

We take part in the recovery of process water and industrial fluids, in polymer recycling and in drilling mud conditioning.



## **Vegetable Oils**

We are present in the production plants of vegetable oils and their derivates, including the recovery processes for any type of exhaust and waste vegetable oil.



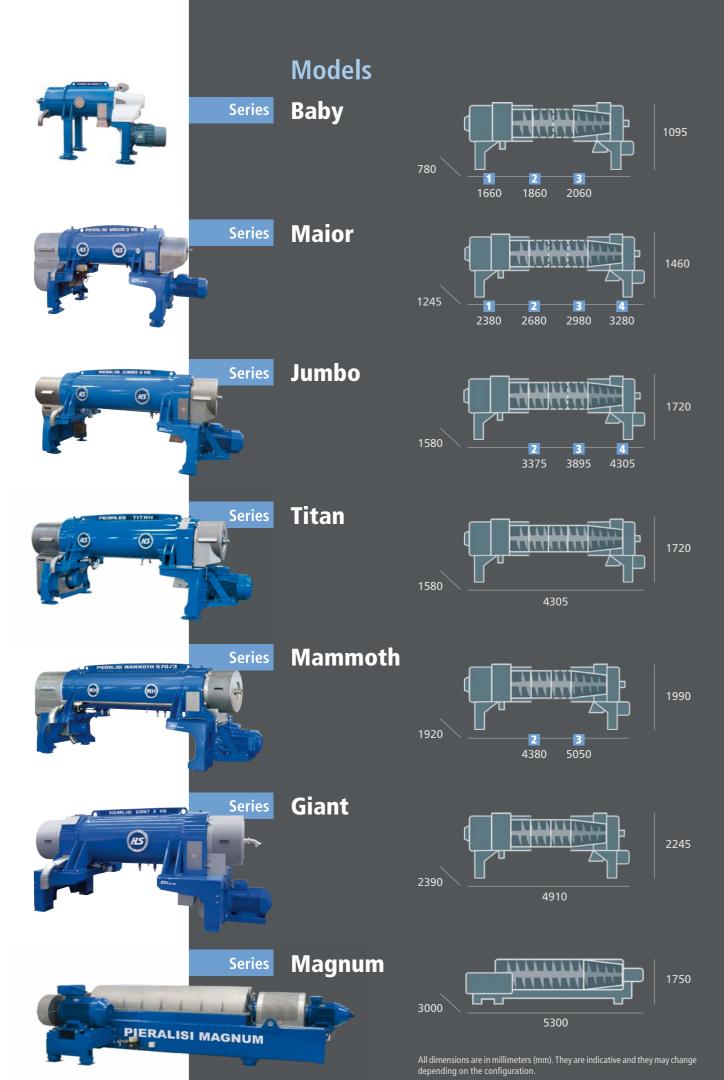
## Chemical and Pharmaceutical

We provide solutions for several chemical industries in the purification of intermediate or final products and even in the recovery of waste products. Our decanter centrifuges are largely installed in pharmaceutical and bio-technologies industry, in production processes of minerals, metals and non-conventional fuels (e.g. biodiesel, ethanol).



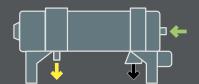
## Animal by-products

In fish or meat processing industries and rendering plants, we supply decanter centrifuges able to obtain a high quality product by removing water, contaminants and solid impurities.



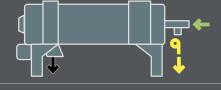
## **Features**

## Inlet and solid-liquids discharge



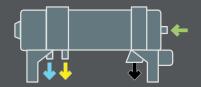
## **TWO PHASES**

- Inlet product
- Solid phase free exit
- Liquid phase free exit



## **TWO PHASES**

- Inlet product
- Solid phase free exit
- Liquid phase under pressure



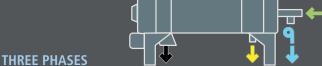
#### **THREE PHASES**

- Inlet product

- Solid phase free exit
  Light liquid phase free exit
  Heavy liquid phase free exit



Interchangeable liquid discharge outlets and levels



- Inlet product

- Solid phase free exit
  Light liquid phase free exit
  Heavy liquid phase ♂ under pressure



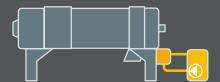
Liquid discharge level adjustable during operation

## **Drives**

**Bowl** Main motor Electric



Hydraulic



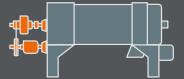
#### Scroll

Differential speed adjustment

Fixed differential speed



Variable differential speed with automatic control (electric motor)



Variable differential speed with automatic control (hydraulic motor)



Variable differential speed with automatic control and mechanical energy recover **®**Rotovariator



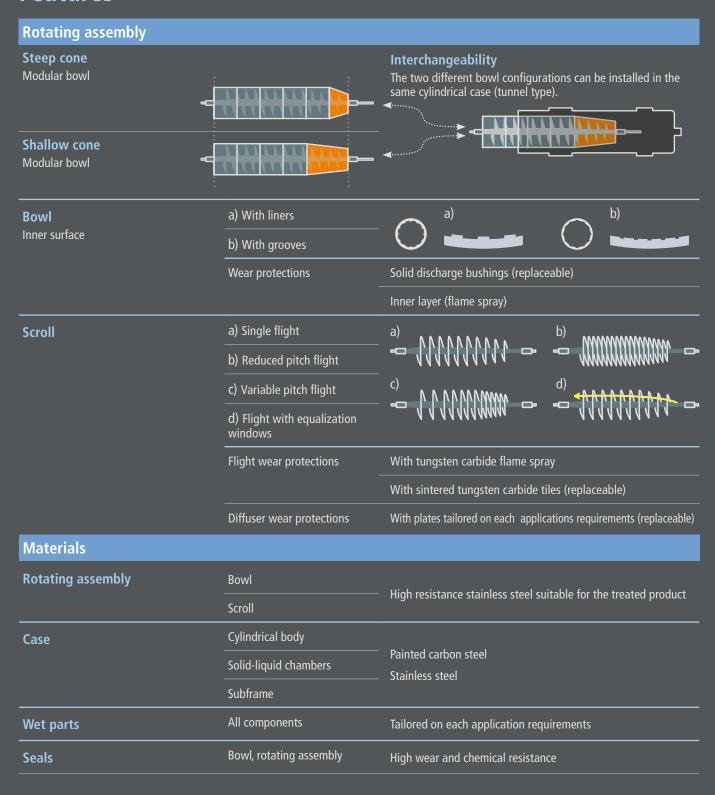
## Lubrication

Type

Oil bath

Automatic greasing

## **Features**



# **Solutions**

Configurations	
Installation areas	Safe
	Hazardous: ATEX Zone 1 / ATEX Zone 2
Lay-out	Turn-key system supplied on skid or container
	Stand alone decanter with vibration absorbers and anchor device

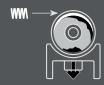
## **Options**

## **Kits and Systems**



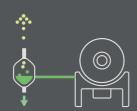
#### Counter pressure valve

Controls the pressure of the liquid phase outlet and the separation interphase.



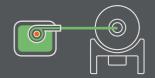
## Solids scraper device

Facilitates the detachment of the solid from the discharge chamber wall.



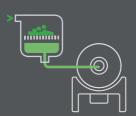
## Cyclone kit

Allows the removal of gas or vapour from the liquid outlets.



#### Feeding pump

Ensures constant and automatically adjustable flow to the decanter inlet.



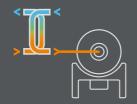
#### Filtering unit

Ensures the large solids removal from inlet product, protecting downstream pieces of equipment.



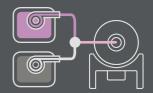
## Flow rate measuring kit

Measures and continuously monitors the inlet product and additive flows.



## **Heating system**

Regulates the temperature of inlet product.



#### Additive unit

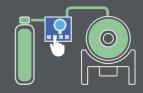
Allows the preparation and dosing of the additive necessary for the process.





# Electric and control panel

Permits the monitoring and the regulation of power, process parameters and safety devices.



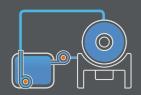
## **Inertization system**

Protects the decanter through an inert gas barrier, avoiding potential explosive mixtures inside (ATEX).



#### Gate valve kit

Allows to isolate the decanter solid discharge from the conveying system.



#### **CIP** washing system

Preparation for the washing and automatic cleaning of the separation unit.



#### Solid conveying system

Manages the solid transportation from the decanter discharge to the storage area.



## Homogenizing system

Homogenizes the temperature and the solid particles content of the inlet product.



Via Don Battistoni, 1 - 60035 Jesi (AN) Italy Phone +39 0731.2311- Fax +39 0731.231239 www.pieralisi.com - info@pieralisi.com