

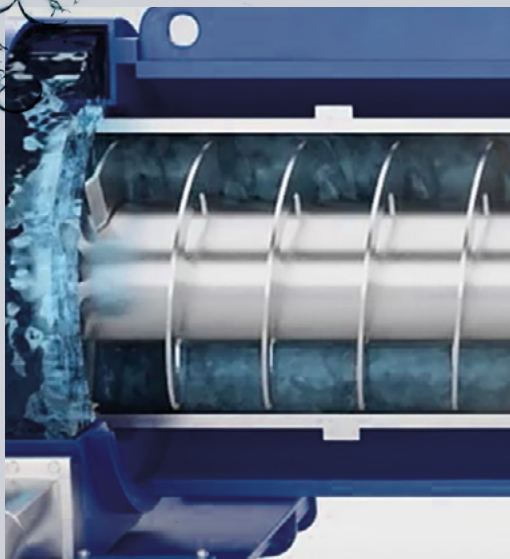
DECANTER CENTRIFUGES



THE CENTRIFUGAL FORCE EFFECTIVE, RELIABLE AND INNOVATIVE

Over the years Pionalisi 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 decaners which are placed on a large variety of application fields with a wide range of flow rates.



GLOBAL PRESENCE

Pionalisi 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



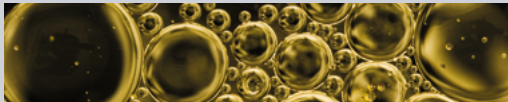
We design and develop solutions for thickening and dewatering of sludge generated by municipal or industrial wastewater, biomasses and manures treatment plants. A large range of decaners is continuously innovated, basing on a number of installations and many years of experience in this field.

FOOD & 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 OILS



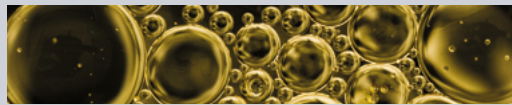
We offer technological solutions for fuels cleaning and treatment, for lube oils purification, for the conditioning and recovery of mineral oils, industrial or environmental slop oils, bottom tank residues and bilge water.

RECYCLING



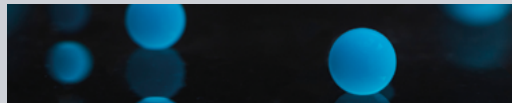
We take part in the recovery of process water and industrial fluids, in polymer recycling and in drilling mud conditioning.

VEGETABLE OILS



We are present in the production plants of vegetable oils and their derivatives, 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 product and even in the recovery of waste products. Our decanter centrifuges are largely installed in pharmaceutical and biotechnologies industry, in production processes of minerals, metals and non-conventional fuels (e.g. biodiesel, ethanol).

FAT & OILS



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.

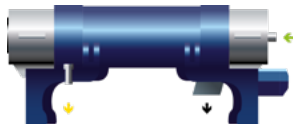
MODELS

		LENGTH*			
Dimensions [LxWxH mm]					
					
		1	2	3	4
BABY		L - 1660 W - 780 H - 1095	L - 1860 W - 780 H - 1095	L - 2060 W - 780 H - 1095	—
MAIOR		L - 2380 W - 1245 H - 1460	L - 2680 W - 1245 H - 1460	L - 2980 W - 1245 H - 1460	L - 3280 W - 1245 H - 1460
JUMBO		—	L - 3375 W - 1580 H - 3680	L - 3895 W - 1580 H - 5300	L - 4305 W - 1580 H - 5300
UNIQUE BODY LENGTH					
TITAN		L 4305 x W 1580 x H 1720			
MAMMOTH		L 5050 x W 1920 x H 1990			
COLOSSUM		L 5265 x W 1500 x H 1290			
GIANT		L 4910 x W 2390 x H 2245			

* Available lengths based on model.

FEATURES

INLET AND SOLID-LIQUIDS DISCHARGE



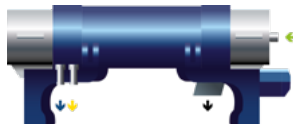
Two Phases

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



Two Phases with continuous regulation

- 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



Three Phases with continuous regulation

- Inlet product
- Solid phase — free exit
- Light liquid phase — free exit
- Heavy liquid phase — under pressure

Interchangeable liquid discharge outlets and levels

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

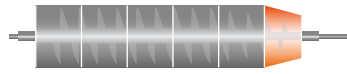
Automatic greasing

FEATURES

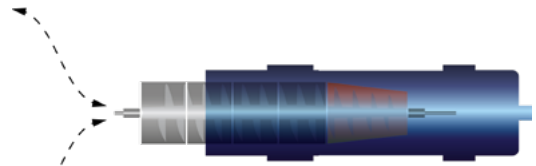
ROTATING ASSEMBLY

STEEP CONE

MODULAR BOWL

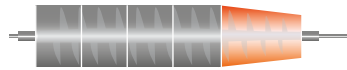


INTERCHANGEABILITY



SHALLOW CONE

MODULAR BOWL

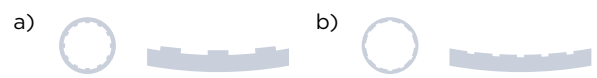


The two different bowl configurations can be installed in the same cylindrical case (tunnel type).

BOWL

INNER SURFACE

- a) With liners
- b) With grooves



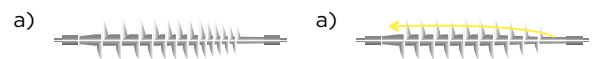
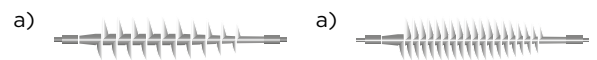
Wear protections

Solid discharge bushings (replaceable)

Inner layer (flame spray)

SCROLL

- a) Single flight
- b) Reduced pitch flight
- c) Variable pitch flight
- d) Flight with equalization windows



Flight wear protections

With tungsten carbide flame spray

With sintered tungsten carbide tiles (replaceable)

Diffuser wear protections

With plates tailored on each applications requirements (replaceable)

MATERIALS

ROTATING ASSEMBLY

Bowl
Scroll

High resistance stainless steel suitable for the treated product

CASE

Cylindrical body
Solid-liquid chambers
Subframe

Painted carbon steel
Stainless steel

WET PARTS

All components

Tailored on each application requirements

SEALS

Bowl, rotating assembly

High wear and chemical resistance

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

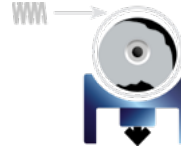
OPTIONS

KITS AND SYSTEMS



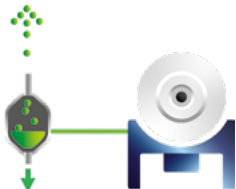
COUNTER PRESSURE VALVE

Controls the pressure of the liquid phase outlet and the separationinter phase.



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.



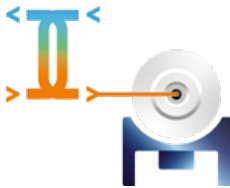
FILTERING UNIT

Ensures the large solids removal from inlet product, protecting down stream 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).



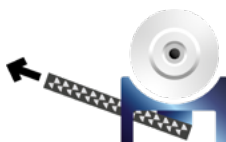
GATE VALVE KIT

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.



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