

# NDEX

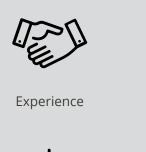
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## **CBB DECANTER**

#### "OUR EXPERIENCE, SHARED WITH YOU!

Particularly careful to the marketplace demands, to the environmental problems and above all to the necessities of its clients, our Company offers highly qualified professionalism and assistance. Moreover, it is able to offer a fast and efficient service complying with the increasingly tightened sector rules. The Company is composed of persons who have gained fundamental experience in the field of two and three phase separation.







Customized software



Innovative machines



Dedicated hardware



Partners all over the world



Timely and targeted assistance







## **Cbb Decanter and its history**

2007 Design and implementation of the first DPC (Decanter Process Controller)

2007 First electric-hydraulic hybrid decanter with significant energy recovery

2012 Decanter up to 160 m³ / h effective capacity

2018 Implementation of polymer stations without injection pump

## DECANTER CENTRIFUGE

Centrifuges produced by us are horizontal separators for separation of two or three phases contained in a product of wastewater treatment and/or industrial and/or food product origins. These machines can be seen a settling tank or clarifier, with the only difference being the presence of centrifugal force that improves time and efficacy of separation. The whole working cycle of the centrifuge is managed and controlled through a DPC (Decanter Process Controller) electronic card. This is a dedicated electronic Card that manages and optimizes the separation process to achieve the best performance. With our system, the entire process is automatized and adapted to the specific necessities of the client and it fully satisfies them.



#### **OUR DECANTER WILL HELP YOU IN THESE SECTORS:**



WASTE WATER



RECYCLING



HFA\/Y SLUDGE



PLASTIC MATERIAL



OIL REFINERY



PHARMACEUTICAL FIFI D



OLIVE OIL



CHEMICAL FIELD



VEGETABLE OIL AND FATS EXTRACTION



**BIOGAS ETHANOL** AND BIOETHANOL





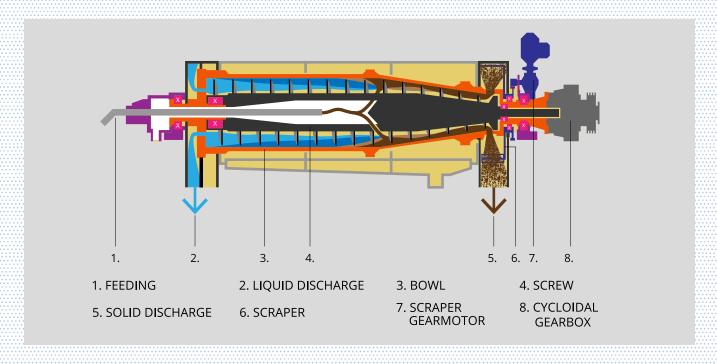


FOOD

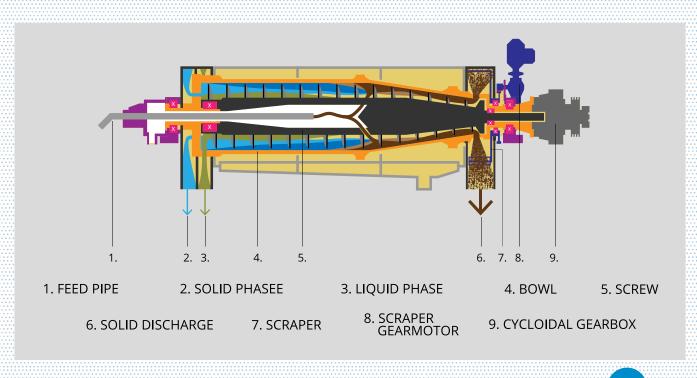
FIELD



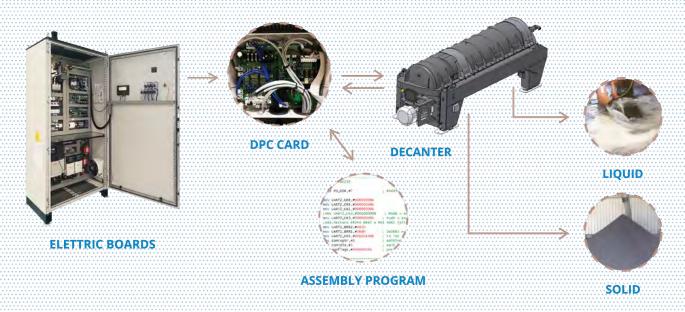
TWO PHASE DECANTER allows the separation between liquid and solid parts, contained in a sludge of wastewater and/or industrial and/or food origin.



THREE PHASE DECANTER allows the separation between two liquid phases with different specific weight from the solid one, contained in a sludge of wastewater and/or industrial and/or food origin.



## **DECANTER PROCESS CONTROLLER**



DPC, acronym for Decanter Process Controller, is the electronic card designed, built and programmed by CBB Decanter for the management and control of separation process of 2 or 3 phases contained in a product of wastewater and/or industrial and/or food origin through the decanter. Entirely programmed in Assembly language, it optimizes at the best the process of separation checking and managing all the variables that affected the process and possible alarms. The dewatering plant works automatically and safely with it taking advantage of all the Decanter resources fully. Through Modbus TCP/IP protocol, it is possible to converse with whichever SCADA system.

#### DPC - MANAGEMENT AND CONTROL

- Bowl speed
- Automatic regulation of differential speed screw/bowl
- Automatic lubrication of bearings
- Alarms
- Start-up phase
- Working phase
- Remote assistance

- Bearing temperature
- Vibrations level
- Work mode
- Absorptions of electric motors
- Automatic regulation of pumps capacity
- Polymer stations
- Stop phase

- Modbus TCP/IP protocol
- Decanter status
- Hydraulic pressure
- Hydraulic pump management
- Tank for sludge preparation
- Automatic regulation of polymer dosing
- Oil levels and temperatures

#### AVAILABLE TRANSMISSION TYPES:

- Variable speed transmission with electric motor and closed-loop system hydraulic pump/motor;
- Variable speed transmission with double electric motor;
- Variable speed transmission with double hydraulic motor;
- Fixed speed transmission;

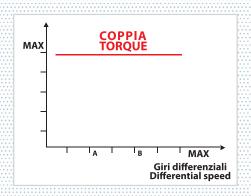




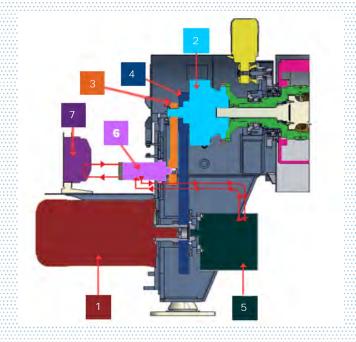
# TRANSMISSION TYPE

### **HYDRAULIC TRANSMISSION**

Transmission of bowl and screw rotation occurs through belt transmission and it is induced from an electric and a hydraulic motor, controlled through a closed-loop system by a hydraulic pump; with this system, the decanter works with variable speed and automatically the differential rpm between screw and bowl change with the variation of the hydraulic motor rpm.



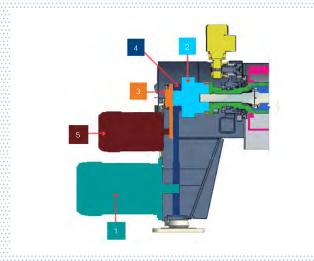




- 1. Main Motor
- 2. Gearbox
- 3. Screw Belt
- 4. Bowl Belt

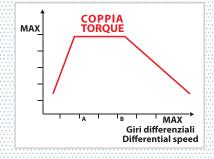
- 5. Hydraulic Pomp
- 6. Hydraulic Motor
- 7. Heat Exchanger

### TWO ELECTRIC MOTORS TRANSMISSION



- 1. Main Motor
- 2. Gearbox
- 3. Screw Belt
- 4. Bowl Belt
- 5. Screw Motor

Transmission of bowl and screw rotation occurs through belt transmission and it is induced by a double electric motor; in this case, the machine works at variable speed and automatically the differential rpm between screw and bowl change with the variation of the electric motor rpm.



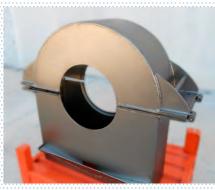


## **CONSTRUCTION FEATURES**





LIQUID DISCHARGE



**SOLID DISCHARGE** 



**SCRAPER** 



SCREW



BUSHING

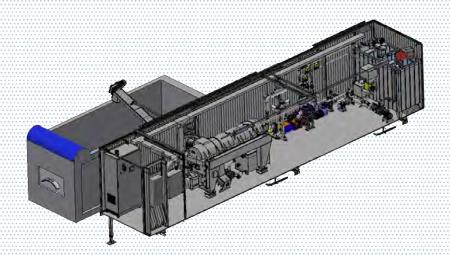


**BOWL** 



## **MOBILE PLANTS**





Mobile plants are mobile stations of dewatering that can be transported where there is necessity of sludge separation. Inside, they have all the necessary equipment for the separation. They are designed for the necessities of mobility and flexibility of clients.

## **4 REASONS TO CHOOSE CBB MOBILE PLANTS:**

#### 1. WORK MANAGED AUTOMATICALLY

Work cycle managed automatically by dedicated electronic system taking advantage.

#### 2. EASE OF TRANSPORT

Ease of transport secured by the external structure suitable for the placement on traditional means of transport;

#### 3. DEMOLITION OF PRODUCTION COSTS

Demolition of production costs for the dewatering of the sludge thanks to the processes optimization and the working cycle completely in automatic;

#### 4. REMOTE ASSISTANCE

Possibility to take advantage of the remote assistance through the internet, reducing waiting times for the resolution of possible issues;



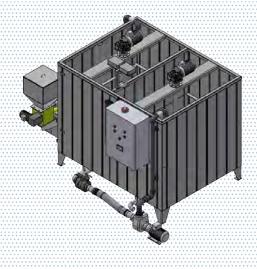
## **ACCESSORIES - POLYMER STATIONS**



"POLYMER STATIONS WITH DIRECT INJECTION REDUCE WORK TIME AND INCREASE THE PERFORMANCES"

Capacities from 300 to 15000 l/h

DIRECT POLYMER STATIONS are conceived for the direct preparation of the polymer in solution. The solution is a mixture of a right percentage of liquid polymer with water, completely automatic without pumps and tank, using only the pressure of hydro-circuit for the preparation and injection of the product.



LIQUID+POWDER STATION
Capacities from 1000 to 15000 I/h



LIQUID STATION
Capacities from 1000 to 15000 I/h

Beyond direct polymer station, we manufacture other two types of polymer stations: automatic polymer stations for powder and liquid polymer with tank and automatic polymer station for liquid polymer with tank.



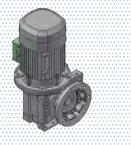
## **ACCESSORIES - EVACUATION SCREWS**





"SLUDGE EVACUATION SCREWS FIXED AND SWINGING SCREWS"

The evacuation screws are conceived for the transport of dewatering sludges. They are used on plants of the above-mentioned sludges matched to the decanter. Their function is to carry the solid phase on decanter outlet, to the collection point. According to the specific discharge necessities of the client, the screw can be fixed or with swinging system.



HIGH PERFORMANCES WORM GEARBOXES

**BEARINGS AND SEALS** 



## **ASSISTANCE**

The Assistance service is organized in order to guarantee to all our clients a high standard of support and assistance during the post-sales phase. To take the highest advantage of this service, it is possible to agree upon a contract dedicated to the assistance.



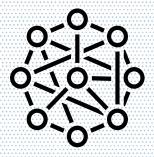
# TELEPHONE AND REMOTE ASSISTANCE THROUGHT THE INTERNET

1st level, contact by telephone assistance and possible remote connection.



# ASSISTANCE WITHIN 24 HOURS IN ITALY AND WITHIN 48 HOURS IN THE WORLD

2nd level, if it is necessary a timely service with specialized technicians.



#### SPARE PARTS ALWAYS AVAILABLE

3rd level, a warehouse always provided with original and guaranteed spare parts, for all machines.

This process guarantees faster response time and a remarkable time saving and costs for the client. A logistics department able to supply upon request a wide and advanced reporting on the status of the machines, from the simple maintenance form of the machine, fulfilled with all maintenances and replaced spare parts and a more sophisticated analysis in case of a greater number of machines.



## CERTIFICATIONS



The Company is certified by ISO 9001 quality system, giving consultation to designers or to plant company in full respect of the constructive rules and of the national and international production standard. The conformity with regulations ISO 9001:2015 provides for the respect of a management system of the quality during the company processes that take to the realization of the products. All this starting from the phase of quotation, the achievement of the order confirmation, to put in writing of the purchase orders, up to the production and internal start-up of the products.



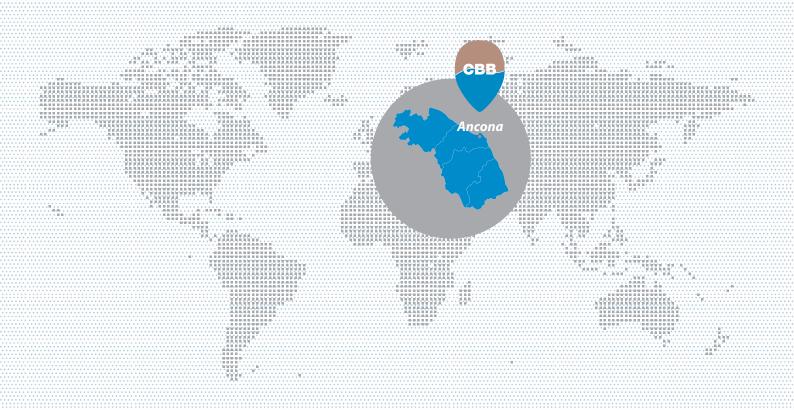
This ensures the achievement of a product with high quality features and above all corresponding to the initial requests. Our system for the quality management is continously evolving in order to further raise our qualitative standards, opening even more to the market where the quality and the correspondence to the requests make the difference.



DIGITAL DEPLIANT











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