



# BARIGELLI DECANTER

Plant and Equipment for the Dewatering of Sludge  
from Wastewater and Industrial Process  
Centrifugal Extractor  
**BDF 400L - BDF 400LH**

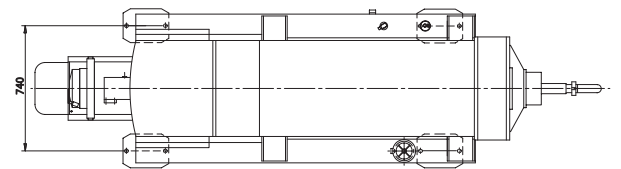
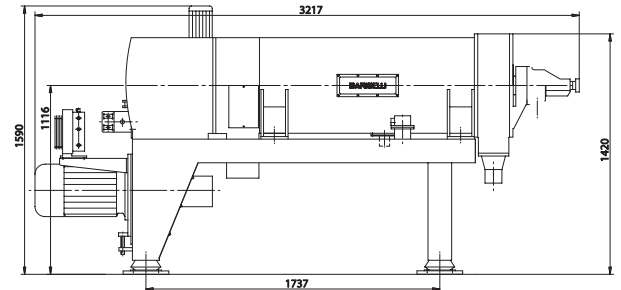


## FIELDS OF USE

- ◆ Ecology / Depuration
- ◆ Industrial
- ◆ Chemical / Petrochemical
- ◆ Food Industry
- ◆ Zoo-technical

## APPLICATIONS

- ◆ Dewatering of sludge
- ◆ Used and Refinery Oil Recovery and Extraction
- ◆ Liquid Treatments
- ◆ Sludge Treatment from Food Industries Process



## Technical Specification Standard and Optional

Hydraulic flow-rate (water without solid content) Hydraulic Version H	25,0 [m <sup>3</sup> /h] 30,0 [m <sup>3</sup> /h]
Internal diameter of the bowl	390 [mm]
Total length of the bowl	1.500 [mm]
Slenderness ratio	3,85
Internal capacity	115,0 [l]
Max speed of the bowl	4.000 [rpm]
Max centrifugal acceleration	34.200 [m/s <sup>2</sup> ]
Differential speed of the screw (standard version) Hydraulic Version H	1-59 [rpm] 0,1-59 [rpm]
Main Motor Power Hydraulic Version H	15 [kW] 18,5 [kW]
Main motor starting	inverter
Power of the solids scraper motor	0,37 [kW]

## Size and Mass Dimensions

Length max	3.300 [mm]
Width max	950 [mm]
Height max	1.500 [mm]
Static Mass	1.900 [kg]
Dynamic Mass	4.800 [kg]
Mean Noise Pressure Level (empty - free space)	82 [dB(A)]

## Mean Materials Utilized

Bowl	DUPLEX
Screw	AISI 304 / 316L* / DUPLEX*
Ring adjustment of the liquid level inside the bowl	AISI 304 / 316L* / DUPLEX*
Interchangeable discharge bushes of the dehydrated solid	Ceramic material
Screw anti-wear protection	Spiral (continuous coating) Tungsten carbide
Feeding Pipe	AISI 304 / 316L* / DUPLEX*
Solid and Liquid chamber discharge	AISI 304 / 316L* / DUPLEX*
External case	Carb. steel / AISI 304* / 316L* / DUPLEX*
Support structure	Carbon Steel

\* upon request

## HIGH QUALITY MATERIALS

All parts of the machine in contact with the product, are made of stainless steel AISI 304 or 316L, with the exception of the drum which is instead made of duplex stainless steel, with very high characteristics of mechanical resistance to abrasion and chemical corrosion resistance. All the components of the centrifugal most exposed to the erosive action of the normal biological sludge, are protected with a continuous coating of high tungsten carbide thickness, while the outlet holes of the dehydrated sludge are protected with ceramic material with very high surface hardness, which ensures a lot longer life than normal stainless steels.

## HYDRAULIC SISTEM H

The centrifuge can be equipped with the automatic and continuous adjustment device of the differential speed of the internal screw which adapts the operation of the centrifuge to the actual immediate feeding conditions, in order to obtain maximum yields of gear and the minimum consumption of polyelectrolyte and energy, compatible with the instant load input; the hydraulic system provides high drive torques irrespective of the speed of rotation required and this leads our System to be one of the most "performance" today available on the market, for the obtaining of high concentrations of SS on dehydrated.



ALCI Group  
Via dei Mutilati del Lavoro, 105 - 63100 ASCOLI PICENO  
T. (+39) 0736 814600 - F. (+39) 0736 811480  
[www.barigellidecanter.com](http://www.barigellidecanter.com)

