

Plant and equipment for the dewatering of sludge from wastewater and industrial process centrifugal extractor.

BDF 650 - BDF 650H



FIELDS OF USE

- Ecology / Depuration
- Industrial
- Chemical / Petrolchemical
- Food Industry
- Zoo-technical

APPLICATIONS

- Dewatering of sludge
- Used and reney 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	80,0 90,0	[m3/h] [m3/h]
Internal diameter of the bowl	650	[mm]
Total lenght of the bowl	1.920	[mm]
Slenderness ratio	2,95	
Internal capacity	440,0	[l]
Max speed of the bowl	2.250	[rpm]
Max centrifugal acceleration	17.500	[m/s ²]
Differential speed of the screw (standard version) Hydraulic Version H	1-59 0,1-59	[rpm] [rpm]
Main motor power Hydraulic Version H	65 75	[kW] [kW]
Main motor starting	inverter	
Power of the solids scraper motor	0.37	[kW]

* available with dual motor drive

Size and Mass Dimensions

Lenght max	5.350	[mm]
Width max	1.500	[mm]
Height max	1.900	[mm]
Static Mass	6.100	[kg]
Dynamic Mass	15.300	[kg]
Mean noise pressure level (empty - free space)	84	[dB(A)]

Main Materials Used

Bowl	DUPLEX
Screw	AISI 304 / 316L* / DUPLEX*
Ring adjustment of the liquid level inside the bowl	AISI 304 / 316L* / DUPLEX*
Dehydrated solid discharge bushing	Ceramic material
Screw 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 centrifuge in contact with the product are made of Stainless Steel AISI 304 or 316L, except for the drum which is made of Duplex Stainless Steel to ensure mechanical resistance to abrasion and a strong chemical corrosion resistance.

The components of the centrifuge most exposed to the erosive action of the normal biological sludge are protected with a thick coating made of high Tungsten Carbide. The exit holes of the dehydrated sludge are protected with ceramic material which has a very high surface hardness to provide a much higher durability of the centrifuge.

Hydraulic System 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 efficiency and the minimum consumption of polyelectrolyte and energy, compatible with the instantaneous load input.

The hydraulic system delivers high torque regardless of the required speed of rotation and brings our system to be one of the most performing today available on the market in obtaining high concentrations of SS on the dehydrated.

