

# BIOPRESS DBP 205 Screw Extruder



**Doppstadt**

WE CARE

# BIOPRESS DBP 205



Mobile Screw Extruder BIOPRESS DBP 205

## FLEXIBLE APPLICATION

### THE IDEAL SCREW EXTRUDER FOR ORGANIC WASTES

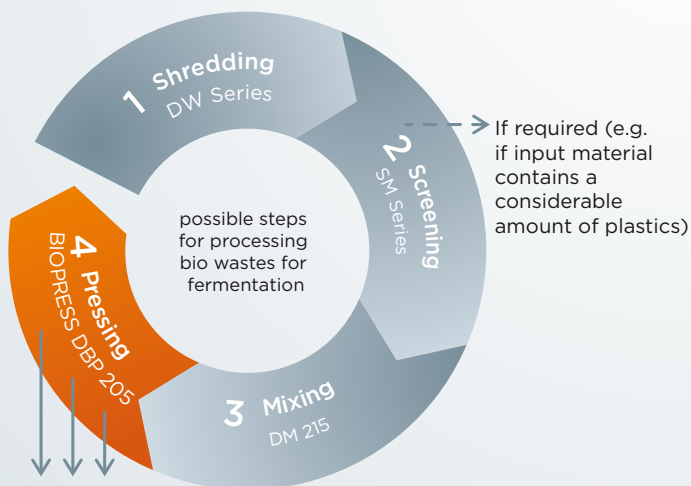
The BIOPRESS DBP 205 screw extruder separates the liquid and the solid fractions of bio-degradable wastes. The screw is driven by a hydromotor with planetary gear. The rotating cone presses the material with a pre-set pressure through the screening baskets, which are available with different mesh sizes.

The liquid fractions can be used for biogas produc-

tion and the solid fractions for thermal utilization or for composting. A 500 mm (1' 8") screw diameter and 17 - 26 rpm (adjustable) ensure a high throughput. Input materials, e.g. mixed biowaste can be pressed through the screening baskets with different mesh sizes and are then discharged.

Applications: food and supermarket wastes, biomass, rejects from the paper industry ...

### COMPOSTING AND PROCESSING OF REFUSED DERIVED FUEL AND FERMENTATION



Final Product 1 (solid fraction): thermal utilization, composting  
 Final Product 2 (fluid fraction): biogas

## MAIN ADVANTAGES

- maximum throughput and optimal dehydration of the materials to be pressed thanks to variable mesh sizes of the screening tunnel
- easy to change screening baskets with different perforations to meet various demands
- easy to change wear elements on the extruder
- constant discharge of solid fraction thanks to peripheral pressing gap
- hydraulically adjustable cone with pressure-dependent control
- high wear resistance
- up to 70% dehydration for organic wastes
- driven by low-maintenance hydro-motor
- load-sensing speed control for hydraulic drive (optimal torque)

Organic wastes containing liquids

Solid fraction - e.g. for thermal utilization

Liquid fraction for fermentation





### MIXING HOPPER

In the mixing hopper the material to be pressed is homogenized by two worm shafts running in the opposite direction.

### SCREEN BASKET

The screen basket is available in different perforations. This guarantees optimal dehydration of various materials at maximum throughput.

### PRESSING CONE / HYDRO MOTOR

The screw is driven by a hydromotor with planetary gear. Load-sensing speed control for hydraulic drive (optimal torque).



### REAR CONVEYOR

The material is discharged by the foldable rear conveyor.



### MATERIAL TRANSFER

Transfer from the mixing hopper to the pressing screw.

### OUTLET for liquid phase

### PRESSING SCREW

Running on anti-friction bearings the screw spiral presses the materials constantly through the screening mesh. This guarantees an optimal dehydration of the materials to be pressed.

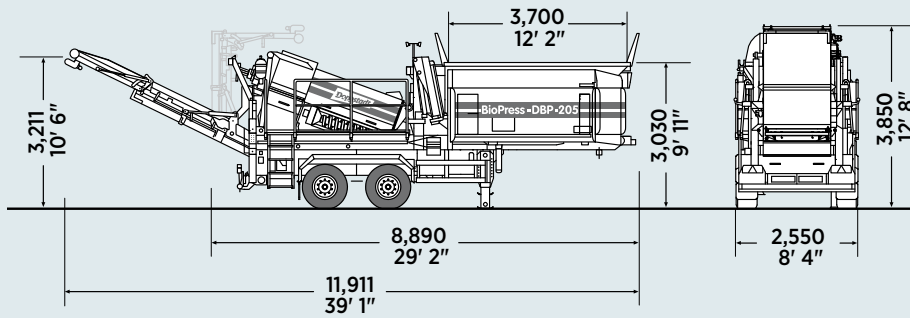
### MATERIAL DISCHARGE

Discharge of the solid matters at the hydraulically controlled pressing cone. Low rate of failures than to the circumferential opening.



# TECHNICAL DATA BIOPRESS DBP 205

## BIOPRESS DBP 205



Transport dimensions L/W/H: 8,890 / 2,550 / 3,850 mm (29' 2" / 8' 4" / 12' 8")

Modell	BIOPRESS DBP 205
Permissible weight	24,000 kg (52,911 lb)
Chassis	2-axle semitrailer chassis for 80 km/h (50 mph)
Motor type	Mercedes-Benz OM904 LA
Power	90 kW (122 hp) an 1,600 rpm
Exhaust level	EUROMOT III A
Fuel tank	300 l (79 gal)
Measurements L/W/H	10,750 / 2,550 / 4,000 mm (39' 4" / 8' 4" / 13' 1")
<b>Screw Extruder</b>	
Motor type	hydromotor with planetary gear
Screw	mixing screw with replaceable wear segments
Screw diameter	500 mm (1' 8")
Press cone	hydraulically adjustable gap, pressure-dependent control
Screen basket	10 mm round holes
Measurements L/W/H	4,470 / 1,400 / 1,520 mm (14' 8" / 4' 7" / 5')
Rear conveyor L/W	4,200 / 1,200 mm (13' 9" / 3' 11")
Mixing hopper, Volume	5 m <sup>3</sup> (176.6 ft <sup>3</sup> )
Mixing shafts	2 pcs., diameter: 480 mm (1' 7") for mixing and conveying

As of June 2012 - subject to technical alterations. The specifications are approximate. Illustrations and descriptions may include options that are not part of the standard equipment.

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