

FOR A GREEN WORLD

# SEPARATOR S 655 / S 855



### **SEPARATOR S 655 / S 855**

#### Economical use of existing resources with up-to-date technologies.

#### SEPARATOR S 855



#### Customary slurry treatment - a problem

Farms with high animal concentrations are faced with great problems due to the big amounts of slurry. This applies particularly to farms with a high stock per unit of area. Existing legal requirements aggravate the situation.

For this reason, slurry must be treated adequately. Customary slurry treatment systems are time-consuming and labor-intensive and require enormous investments, too.

## The BAUER SEPARATOR converts slurry into a valuable fertilizer

Fully-automatic separation – that means splitting up slurry into a liquid and a solid fraction – offers great advantages.

The thin slurry remaining can be distributed any time without any sophisticated homogenizing techniques.

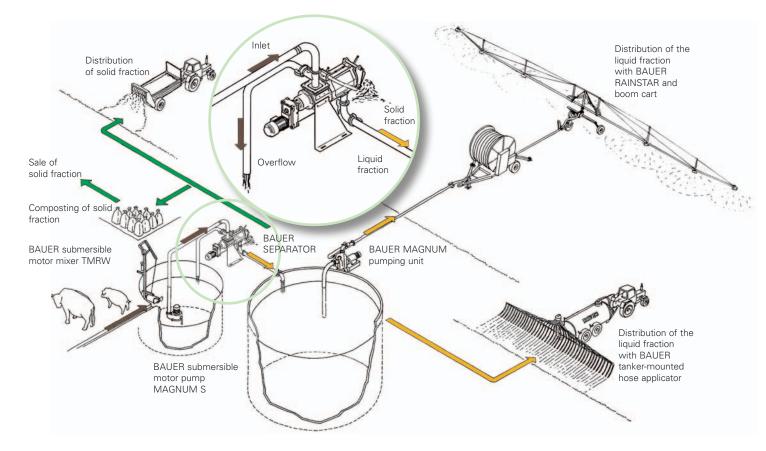
The odorless solid fraction is easy to store without any problems.



Solids re-used for bedding



Liquid fraction re-used for flushing



#### **Liquid fraction**

- Slurry volume reduced by 15 up to 30%.
- This means less storage space and fewer transports.
- Separated slurry no longer forms sediments and floating crusts – no mixing required before distribution.
- Lower nitrogen loss (NH<sub>3</sub>, CH<sub>4</sub>, N<sub>2</sub>O) during storage and distribution due to extraction of solids and carbon.
- Distinctly reduced smell.
- More accurate nutrient analysis makes it possible to determine the ideal time of distribution.
- Lower nutrient concentration allows a higher application per hectare compared with raw slurry.
- Much better infiltration to the soil and less adhesion to the plants ensure that nutrients are more quickly absorbed and and crop damage by burning is minimized.
- Longer distribution period, because overhead application is possible.
- Simple, cost-effective distributing systems.
- Lower energy requirement for pumping and delivery.
- Distinctly reduced weed seed content (especially dock) in the liquid fraction.

#### **Solid fraction**

- Self-composting, odor-less and stackable.
- High solids contents allows storage without any special provisions.
- Improves the soil structure and increases the humus content.
- 30% or higher dry matter content allows composting in the open.
- Apart from agricultural areas, suitable also for other applications, where nutrients are required.
- Easy to transport and sell.
- Re-use for bedding.



#### Dry matter setting

With the setting of the weights you can determine the desired dry matter content (up to 35%) of the solid fraction, if the slurry consistency varies.



#### Strong output

#### Throughput capacity of raw slurry

SEPARATOR	S 655	S 855		
cattle slurry up to m³/h	20	30		
pig slurry up to m³/h	25	35		
poultry slurry up to m³/h	10	15		

Throughput depends on age, dry matter content, and viscosity of the raw slurry.

#### High economic efficiency

Slurry separation is the ideal solution for farms with a large animal population and small distribution areas. It reduces the storage capacity requirement up to 30%.

Through specific use of nutrients of the liquid and solid fractions, mineral fertilizers can be saved. Extra profits are possible by selling the solids for instance to small gardeners or as a basis of compost for horticultural farms.

#### Separation of raw slurry (= 100%)



Liquid fraction 70 – 85% Thin, ideal for delivery through pipe and hose systems

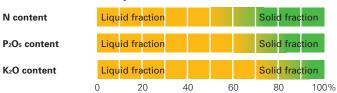
Solid fraction 15 – 30% odorless, easy to store, can be sold as fertilizer or compost

#### Nutrient distribution by separation

#### Total raw pig slurry (= 100%)

N content	Liqu	id fra	ection					Solid	d frac	tion	
P <sub>2</sub> O <sub>5</sub> content	Liqu	id fra	ection					Solid	d frac	tion	
K₂O content	Liqu	id fra	ction					Solid	frac	tion	
	0	2	20	4	10	6	0	8	0	100	)%

#### Total raw cattle slurry (= 100%)



The nutrient-separating capacity varies according to the dry matter content of the raw slurry and the dry matter content of the solid fraction.

# Liquid fraction Solid fraction Screen sizes

0.75

1.0

0.25

#### Screen sizes

Four different screen sizes are available for the SEPARATOR. The separation degree also depends on the screen size.



**Large lateral openings** for checking and cleaning of screen.



#### The BAUER SEPARATOR sets new standards also for industrial applications.

Due to its high quality material, top workmanship, and enormous performance capacity, the BAUER SEPARATOR finds nearly unlimited possibilities of application also in the industrial field.

#### For example:

- Food industry
  Separation of vegetable waste
- Slaughter houses
  Separation of paunch content
- Pharmaceutical industry
  Separation of poppy seed mush
- Biogas plants

  Before and after fermentation
- Destilleries

#### The advantages

- Waste volume reduced considerably
- Liquid fraction suitable for sewer
- Minimum odor
- Re-use of solid fraction as animal feed or fertilizer





Separation of paunch content



Separation of potato waste







FOR A GREEN WORLD



**BAUER SEPARATOR S 655** 

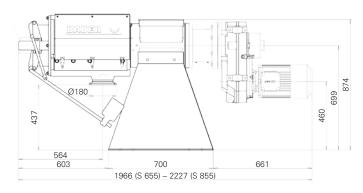
#### **Extent of supply**

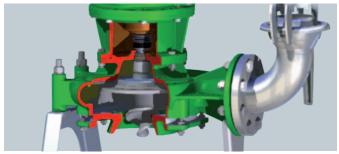
- Coated stainless steel press screw
- Stainless steel slotted screen cylinder (S 855: 2 screens in line)
- Slot size optional 0.25, 0.5, 0.75 or 1.0 mm
- Housing ingrey cast iron with lateral openings for easy cleaning
- Weight-loaded discharge flaps, stainless steel
- Mounting frame for installation on the ground or on mobile trolley, stainless steel
- Inlet Tee
- Outlet with square flange
- Geared motor 5.5 / 7.5 kW 220 / 400 / 690 V 50 / 60 Hz



**BAUER SEPARATOR S 855** 

#### **Dimensions**





BAUER Submersible Motor Pumps MAGNUM CSP



BAUER Submersible Motor Mixer

Your dealer:

Röhren- und Pumpenwerk BAUER Ges.m.b.H. 8570 Voitsberg, Austria

Tel. +43 3142 200-0 Fax +43 3142 200-320 / -340 sales@bauer-at.com

