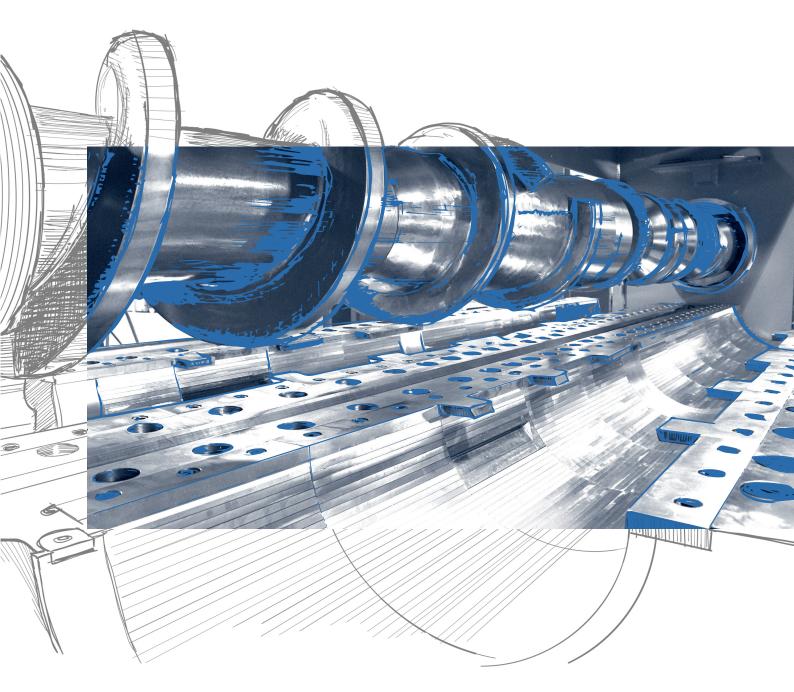
# Rendering & Biomass Technology





### Environmental sustainability by recovering high-quality animal protein and fats

HF Press+LipidTech provides proven technology for processing biomass material. Reliability and efficiency are the core features of our products. As an experienced partner, HF P+LT offers all essential components from single spare parts to machines:

**Screw Presses** 

Meat Pulp Collecting Vessels

mmm

**Disc Dryer** 

Sterilizer

**Spare Parts** 

## Screw Presses SP 160-280R

Screw presses are used for mechanical extraction of fats from dried semi-finished products. The self-centering, free-floating shaft of the presses assure secure operation, and the operator-friendly design enables optimum access for easy maintenance and exchange of spare parts (e.g. cage bars).

Nevertheless, not only the press design but also dedicated geometries and customized solutions are important. Due to more than 150 years of experience in mechanical engineering and pressing applications, portable operation at the highest standards is guaranteed.

### **Features**

- > Longest service life of wear parts (reduced downtimes)
- Energy saving drive systems
- Online press monitoring
- Optional cake-breaking device
- Shear pin and safety coupling solutions to separate the drive from the press most advanced hard facing technology
- Screw press from the proven SP-press family for processing dried semi-finished product
- Simple design for easy operation and optimum access for maintenance
- Self-centering, free-floating shaft

SP160R	SP220SR	SP220R	SP280R	
3,440	4,550	4,550	5,210	
1,160	1,360	1,360	1,780	
1,600	2,200	2,200	2,800	
45	90	110-132	160-200	
8,500	10,000	11,000	16,000	
1.5-3.5	5.0-8.0	09-11	14-17	
0.6-1.4	1.9-3.1	3.4-4.2	5.3-6.5	
	3,440 1,160 1,600 45 8,500 1.5-3.5	3,440       4,550         1,160       1,360         1,600       2,200         45       90         8,500       10,000         1.5-3.5       5.0-8.0	3,440       4,550       4,550         1,160       1,360       1,360         1,600       2,200       2,200         45       90       110-132         8,500       10,000       11,000         1.5-3.5       5.0-8.0       09-11	3,440       4,550       4,550       5,210         1,160       1,360       1,360       1,780         1,600       2,200       2,200       2,800         45       90       110-132       160-200         8,500       10,000       11,000       16,000         1.5-3.5       5.0-8.0       09-11       14-17

## Disc Dryer 100-400 m<sup>2</sup>

Due to indirect heating and appropriate arrangement of the rotor, the HF disc dryer guarantees optimal, uniform drying of sticky and difficult drying materials. The hollow disc agitator and the hollow discs are heated by steam and realize highly efficient water evaporation.

The disc dryer is suitable for different feed material, such as slaughter offal, animal carcasses, municipal and industrial sludge, rape (canola) seed, corn gluten, etc. and can also be used as a cooker and heater.

### **Features**

- Low operating costs
- Long operating life
- Stainless or mild steel possible

Series	Heating surface (m <sup>2</sup> )	Pressure (bar)	Drive (KVV)	Ø Stator (mm)	Height stator (mm)	Length stator (mm)	
HF 100	100	6-10	75	1,680	2,800	6,100	
HF 200	200	6-10	90	1,930	3,050	7,860	
HF 300	300	6-10	110	2,180	3,200	8,625	
HF 400	400	6-10	132	2,400	3,250	8,975	

## Meat Pulp Collecting Vessels

### V20-V100

The meat pulp collecting vessels are the ideal temporary storage vessels for sterilized meat pulp for the optimum combination of batch and continuous processes. The horizontal vessel is equipped with an agitator, but can also be implemented with the double jacket for heating if desired.

### Features

- Capacities: 20-100 m<sup>3</sup>
- Stainless or mild steel possible
- Tailor-made design according to customer's requirements

## Sterilizer

### E2000-E7000

The HF sterilizers are the best products for the optimal thermal treatment and sterilization of all kinds of animal byproducts. The horizontal pressure vessel can also be designed and operated as a dryer or hydrolyzer for feathers. The jacket and the agitator are heated by steam and thereby guarantee consistent mixing and heating of the material.

		<ul> <li>Features</li> <li>Suitable for different feed materials, e.g. fats and tallow</li> <li>Service-friendly</li> <li>Stainless steel or mild steel possible</li> <li>Capacities: 5.0-15.0 m<sup>3</sup></li> <li>Heating surfaces: 40-80 m<sup>2</sup></li> </ul>			
Series	E2000	E5000	E6000	E7000	
Drive (kW)	37	55	55	75/90	
Total length (mm)	7,200	8,600	6,100	9,750	
Total height (mm)	1,850	2,100	2,250	2,300	
Outer diameter (mm)	1,500	1,800	2,100	2,000	

Capacity (mt/h) processed as sterilizer/dryer 0.875-1.6 1.5-4.0 2.0-4.0 2.0-5.0 Capacity (mt/h) processed as sterilizer/extractor 0.8-1.5 1.0-1.7 0.5-0.8 1.2-2.0 25,000 Weight (kg) 13,700 20,300 31,300 Heating surface incl. agitator (m<sup>2</sup>) 80 40 60 40-70



#### Harburg-Freudenberger Maschinenbau GmbH Seevestrasse 1 | 21079 Hamburg | Germany Phone +49 (0)40 / 77 179-122 | Fax +49 (0)40 / 77 179-451 plt@hf-group.com | service-plt@hf-group.com | hf-press-lipidtech.com

Dated: May 2016. We reserve the right to technical amendments without prior notice. Texts, graphics, and images are the intellectual property of Harburg-Freudenberger Maschinenbau GmbH. Any use requires the prior written consent of Harburg-Freudenberger Maschinenbau GmbH.