

# **MACHINE OVERVIEW**

## **RUF BIOMASS SERIES**

BIOMASS	RUF 4 to RUF 11	RUF 100 to RUF 800	RUF 1100+	RUF 1500
Max. throughput rate (kg/h)	50-150	120-660	1,020-1,100	1,300
Power (kW)	4-11	7,5-37	75	90
Spec. pressure, max (kg/cm²)	700-3,700	1,700	1,700	1,700
Briquette formats (mm) width x height	Ø 80 60 x 40 60 x 60	150×60 150×70 150×75	240x70 240x80 240x80	260x100
Size (m) length x width x height	1,3 x 1,5 x 1,9 - 1,6x 1,6x 2,0	1,8x1,6x2,0 - 2,0x2,0x2,1	2,7x2,4x2,4	3,0x3,3x2,3
Weight (t)	1,3-2,0	3-4,2	6,5	12

We reserve the right to make technical changes - throughput rate depends on the source material

Benefit from our experience from over 4,000 briquetting systems. Don't hesitate to consult us!



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**BIOMASS** 

- ► FOR VARIOUS BIOGENIC MATERIALS

  (E.G. WOOD, PAPER, TEXTILE DUST,

  AGRICULTURAL RECYCLING MATERIALS)
- → HIGHEST FLEXIBILITY, NUMEROUS OPTIONS, FULLY CUSTOMISABLE
- **VARIETY OF BRIQUETTE FORMATS**





#### **RUF BRIQUETTING SOLUTIONS**

### FOR BIOMASS

#### **TECHNICAL DATA**



#### **Material**

The RUF briquetting systems of the Biomass series process dust, shavings and wooden chips into briquettes of consistently high quality and density. Varying bulk densities are reduces both the volume as well offset automatically during the process.

#### For various materials:

- Wood · Cotton
- · and many more. · Miscanthus
- · Straw

These materials can be pressed into a compact form without the use of binders. It is important that the moisture content of the chips is below 15%, preferably under 12%, and that the chip size does not exceed 50mm. The general rule is that the finer the material is, the smoother and more solid the surfaces and edges of the resulting briquette.

### **Briquettes**

RUF briquettes can be pressed into a standard rectangular form or an alternative briquette format. The briquetting process dramatically as the dust formation of the loose material.

#### **RUF** wood briquettes

are recognised worldwide as a highquality product and meet the exacting standards of DIN EN ISO 17225-3. The briquettes are used as valuable fuels in traditional firing installations and wood burning stoves. Perfectly consistent weight of the briquettes is ensured by the improved briquette length control. It also offsets variations in the bulk weight of the input material. This way the rectangular RUF briquettes can be perfectly stacked and bundled into packages (usually 10 kg with foil coating).

#### **Machines**

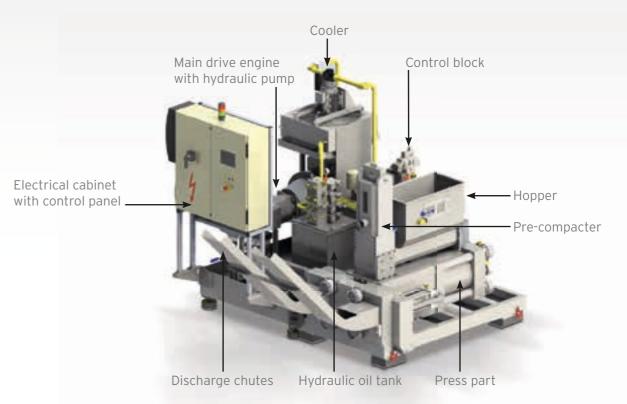
The systems can be equipped with a multitude of options, thus optimally adapting them to customer needs. The Biomass series offers maximum flexibility. All briquetting systems are extremely energy efficient thanks to the innovative RUF hydraulic system.

Depending on the model, the machines are equipped with motors ranging between 4 kW and 90 kW. Here RUF exclusively uses electrical motors of the energy efficiency class IE3. The hydraulic system creates a specific pressing power of more than 1,700 kg/cm<sup>2</sup> during the briquetting process and thereby ensures a constantly high briquette quality, even in continuous operation.

The throughput capacities of the RUF Biomass presses range between 50 and 1,300 kg/h.



#### PROCESS AND EQUIPMENT



RUF Biomass series equipment and additional options								
Mechanics		Hydraulics		Electrics				
Compact combination of mechanics, hydraulics and electrics	•	Hydraulic power unit	•	Electrical cabinet	•			
Charging hopper with agitator and feeder screw	•	Hydraulic oil tank with oil cooler	•	PLC control with control panel	•			
Pre-compacter	•	Recirculation filter	•	Level sensor in hopper	•			
Pressing part	•	Ventilation filter	•	Briquette length control	•			
Main pressing ram	•	Low oil level and overheating detection	•	IE3 motors	•			
Discharge chutes	•	Hydraulic oil	•	Electrical cabinet heater	0			
Piston with RUF logo	•	Hydraulic oil tank heater	0	Signal lamp	0			
Exhaust port	0	Water cooler	0	Integration into company networks	0			
RAL machine colour differing from standard	0	Model in accordance with the water resources act (WHG)	0	Additional control for motors	0			
Hopper door with safeguard	0	Individual component marking	0	Additional fill level sensors	0			
Packaging table with foliation	0			Air conditioning for the electrical cabinet	0			
Company initials on press piston / briquette	0			Remote function	0			
Extra large hopper/silo	0							
Conveyor system	0							
Wear-resistant model for extremely abrasive materials	0							

• = Standard • = Option

There are many more options and customisation possibilities for the Biomass series - don't hesitate to contact us!