

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

Material

The RUF briquetting systems from the Biomass series process dust, shavings and wooden chips into briquettes with reliably high quality and density. Varying bulk densities are offset automatically during the process.

For various materials:

- Wood
- Cotton
- Miscanthus
- and many more.
- 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 reduces both the volume as well as the dust formation of the loose material.

RUF wood briquettes are recognised worldwide as a high quality product and meet the exacting standards of DIN EN ISO 17225-3. The briquettes are used as valuable fuels in traditional fire places 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 10kg with film sealing).

Machines

The systems can be fitted with various options, allowing for optimal adaption to meet customer requirements. 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/cm² during the briquetting process and thereby ensures a consistently high briquette quality, even in continuous operation.

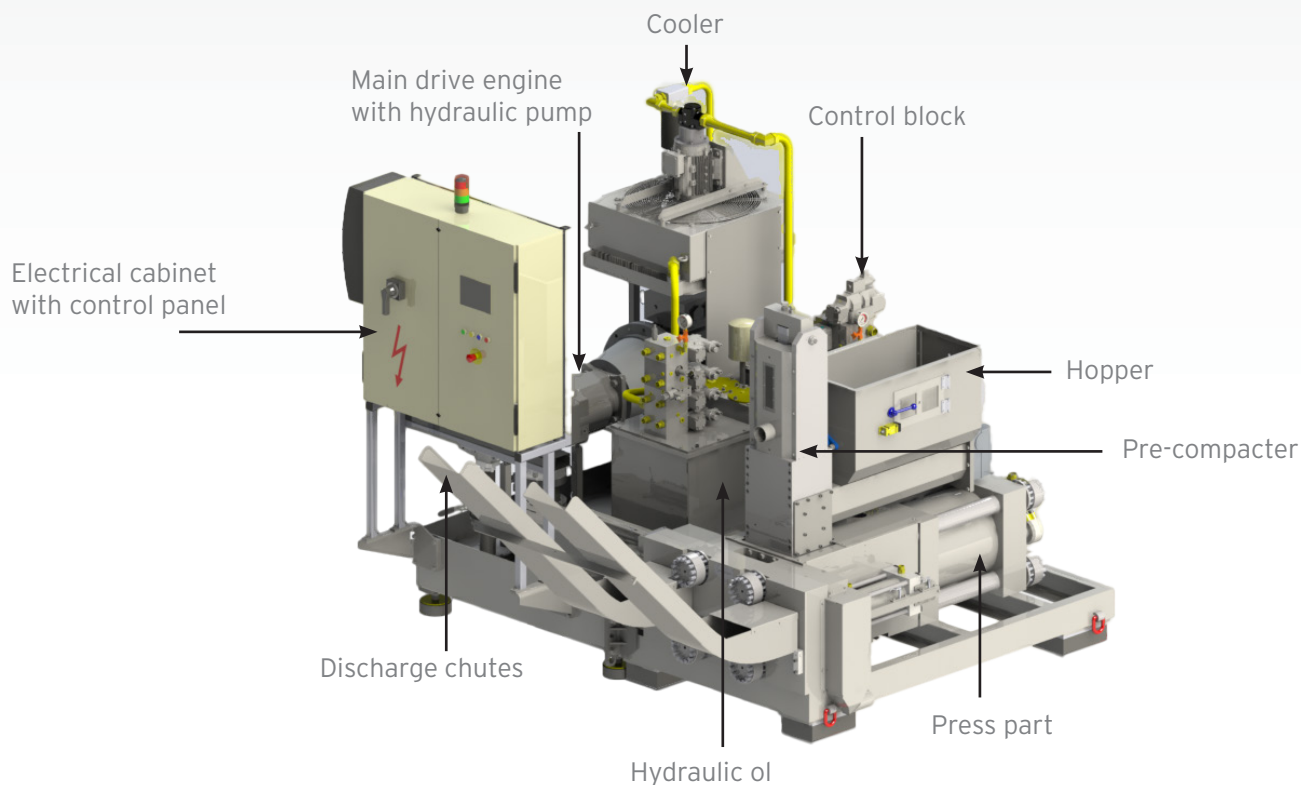
The throughput capacities of the RUF Biomass presses range between 50 and 1,300 kg/h.



Benefits

- ▶ Suitable for fully automatic 24 hour operation
- ▶ Direct integration into existing production facilities
- ▶ Compact design
- ▶ No special foundation needed
- ▶ Minimum mounting effort/easy installation
- ▶ Customised machine configurations depending on the customer's individual requirements

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 main motors	✓
Discharge chutes	✓	Hydraulic oil	✓	Electrical cabinet heater	•
Piston with RUF logo	✓	Hydraulic oil tank heater	•	Signal lamp	•
Exhaust port	•	Water cooler	•	Integration into company networks	•
RAL machine colour differing from standard	•	Model in accordance with the water resources act (WHG)	•	Additional control for motors	•
Hopper door with safeguard	•	Individual component marking	•	Additional fi II level sensors	•
Packaging table with film sealing	•			Air conditioning for the electrical cabinet	•
Company initials on press piston / briquette)	•			Remote function	•
Extra large hopper/silo	•				
Conveyor system	•				
Wear-resistant model for extremely abrasive materials	•				

Legend: ✓ = Standard • = Option

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

MACHINE OVERVIEW

RUF BIOMASS SERIES

BIOMASS	RUF 4 to RUF 11	RUF 100 to RUF 800	RUF 1100+	RUF 1200	RUF 1500
Max. throughput rate (kg/h)	45-177	127-720	1.020	1.090	1.225
Power (kW)	4-11	7,5-37	75	55	90
Spec. pressure, max (kg/cm ²)	700-3.700	1.700	1.700	1.700	1.700
Briquette formats (mm) width x height	 Ø 80  60x40  60x60	 150x60  150x70  150x75  150x75	 240x70  240x80  240x80	 240x70  240x80  240x80	 260x100
Size (m) length x width x height	1,3x1,5x1,9 - 1,6x1,6x2,0	1,8x1,6x2,0 - 2,0x2,0x2,1	2,7x2,4x2,4	2,7x2,4x2,4	3,0x3,3x2,3
Weight (t)	1,3-2,0	3,0-4,2	6,5	7,0	12

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

RUF 100 - RUF 800: The calculation basis is a weight of 0,85 kg/briquette, which results from the briquette form 150x60mm, with a length of 90mm and a density of 1 kg/l.

RUF 1100+ and RUF 1200: The calculation basis is a weight of 1,7 kg/briquette, which results from the briquette form 240x70mm, with a length of 95mm and a density of 1 kg/

The throughput increases with larger briquettes.

Benefit from our experience from over 6,000 briquetting systems.
Don't hesitate to contact us!



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