

# **RanHeat** **Engineering Ltd**

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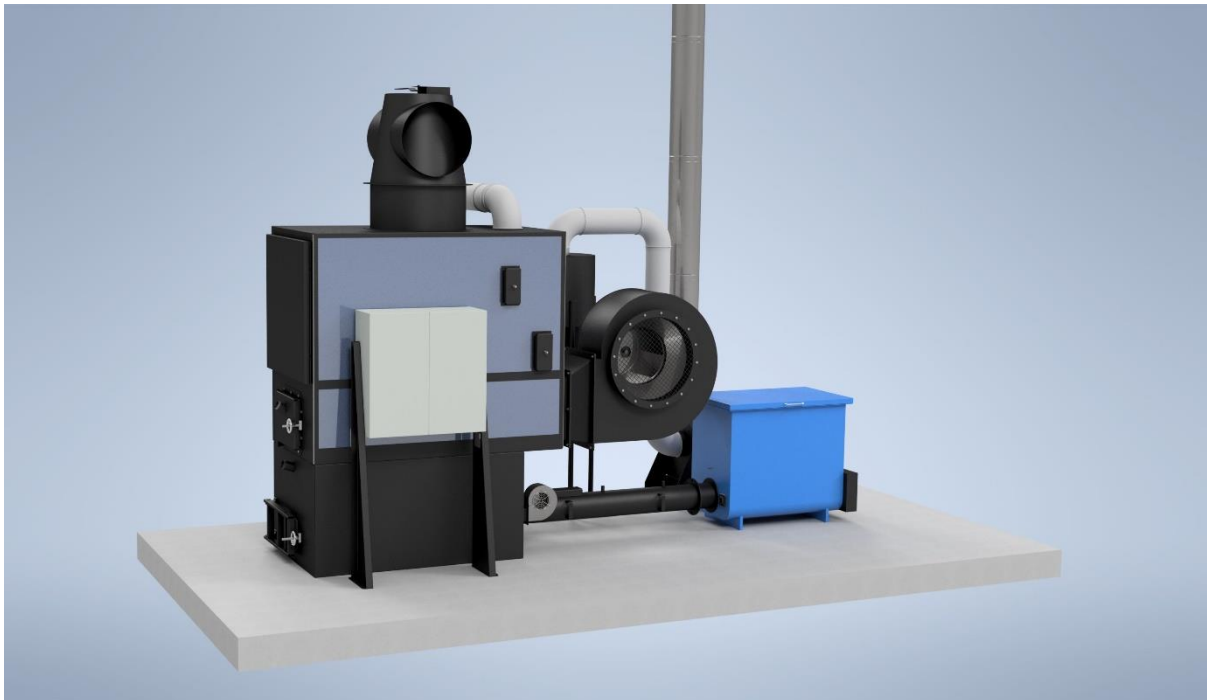
E-mail: [sales@ranheat.com](mailto:sales@ranheat.com) Website: [www.ranheat.com](http://www.ranheat.com)

Thursday, 09 November 2023

## Ranheat WA 150 BagLoader

Ranheat proposes a WA 150 BagLoader, comprising of a WA 150 burner and heat exchanger and bag loaded fed stoker.

The BagLoader is a simple method of supplying fuel to the burner. The lid is lifted, and a bag of machine wood waste is emptied into the container. The lid contains a safety switch that cuts out the motor and stops all moving parts. This safety feature allows safe operation of the BagLoader. The fuel is then transferred, via the auger to the burner.



The motor is attached to the auger via chain and sprockets, these need to be checked periodically, as do the bearings.

Only granulated or machine waste dust can be placed in the BagLoader. Small offcuts may be introduced in the front door.

### Who is the Bag Loader for?

The Bag Loader is for customers in the woodworking industry with bagged or binned dust extraction systems and require a save method of burning their wood dust but do not have enough scale for require a silo with an automatic feed into a burner.

## How much can a WA 150 Bag Loader Burn?

A bag of dust around 0.5m<sup>3</sup> will run the system for 2 hours. So, assume 20 hours a week of constant running is around 0.5tons. If you are wanting to burn more waste than this, it might be worth looking at a siloed system with an automatic feed. This will give you greater throughput, automation, and labour savings.

## What do I do if I produce more Wood than I can Burn with a Bag Loader?

If you find you need greater heating consistency and throughput in the future, Ranheat can retro fit a silo, full WA 150 control panel and transfer system. This reuses the fire chamber, heat exchanger, flue gas cleaning and chimney.

This for the sum of **£45,000.00 plus VAT**

## Options

### Energy Saving Inverters

This changes all the motors in the panel from direct online motors to inverter controlled. The WA 150 BagLoader has a combined 8.5kW of maximum energy draw. The inverter control of these motors reduces the electrical load by 2/3. At an energy cost of 25p/kWh this is a return on investment of 2-years.

**£5,600.00 plus VAT**



### Touch Screen HMI

The default system comes with just switches and dials to operate the machine with a Web HMI to look at usage and other settings. Customers can choose to have a physical HMI on the screen to change settings with requiring another device.

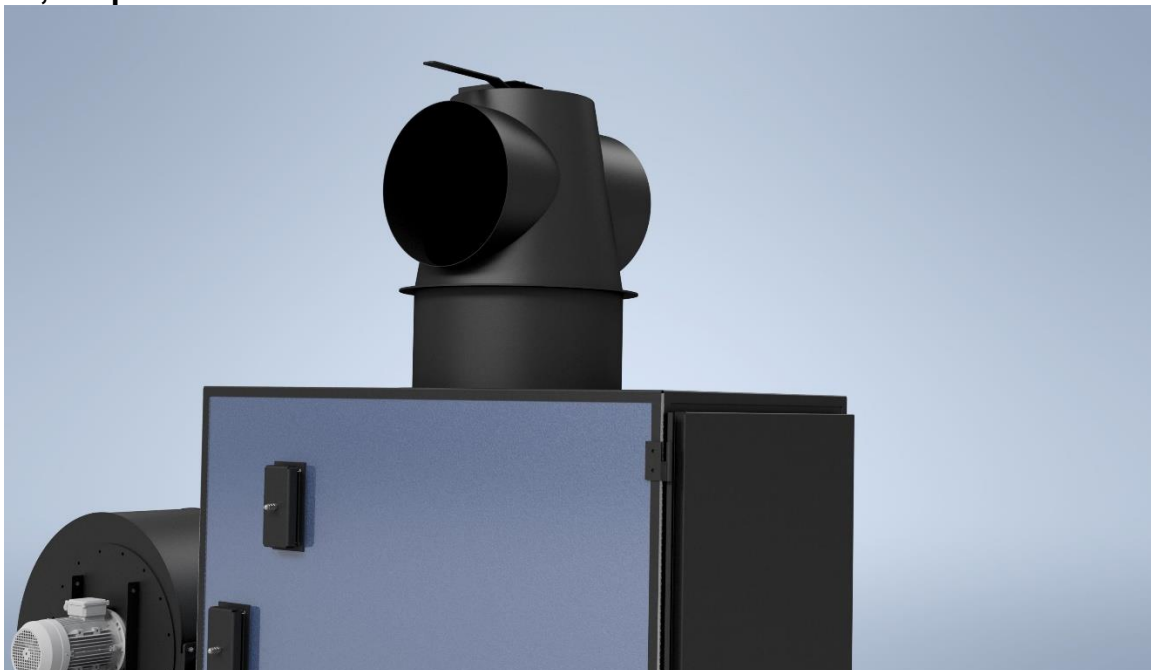
**£1,750.00 plus VAT**



### Automatic Winter Summer Diverter

Includes a thermostat and actuator on the winter summer diverter to automatically divert heat outside when the set temperature is met. On the base unit, this would be done with a manual diverter valve.

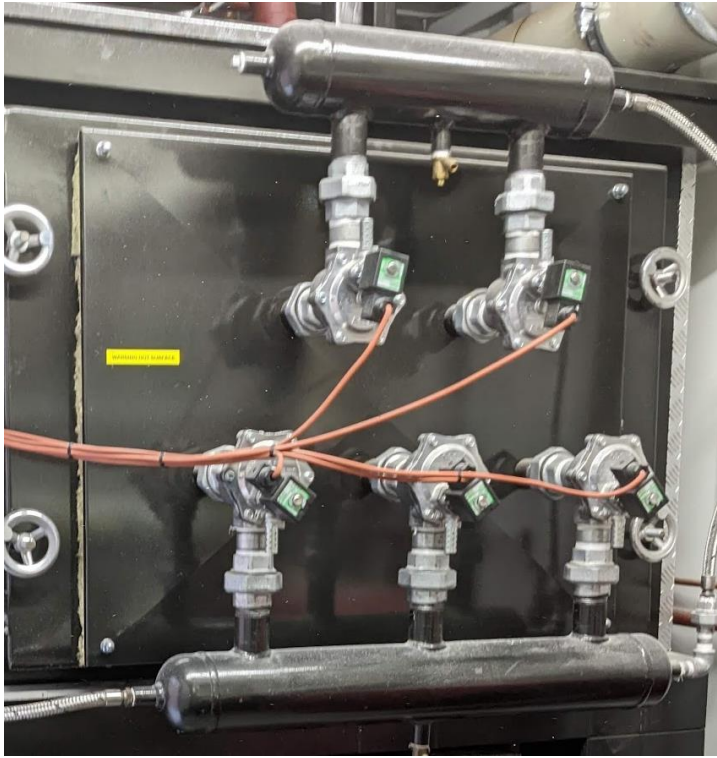
**£2,500 plus VAT**



### Automatic Tube Cleaning

To maintain best performance with the base system, heating tubes need to be cleaned with a brush and rod every week. Automatic Tube cleaning blasts the fire tubes with compressed air and regular intervals to break down soot buildup in the tubes, removing the requirement for weekly manual cleans. Manually cleaning the tubes can be done during base deashing and takes around 20 minutes a week.

**£12,850.00 plus VAT**



#### Payment Terms

This for sum of **£45,000.00 plus VAT + Options Taken**

30% with order 60% on advice of delivery, 10% on commissioning.

Lead time 4-6 weeks

#### Exclusions

- Building Works
- Access Equipment
- Forklift
- External Electrical Supplies
- Internet Connection
- 10mm Water Connection
- Ducting

[Terms and Conditions - see separate sheets](#)

#### Planning and EHO Approvals

- Planning consent must be sought for the chimney prior to installation. (Most local authorities may consider it to be permitted development)
- A chimney height approval must also be obtained from the local EHO.
- A permit under SWIP section 5.1 part B will be required by the local authority. ( small waste incineration plant )
- It is an offence under the clean air act 1993 section 4(1) to install an appliance without prior notification to the local authority.
- If the company is authorised under IPPC then the equipment may be included under the existing authorisation. This would normally be under the guidance note PG1/12 (13)

I hope you find this quotation helpful, please get in contact if you have any other questions.

Your Faithfully

**Alexander Franklin**

**Director**

**Ranheat Engineering Ltd**

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***RanHeat***

## Full Specification

### Ranheat WA 150 Industrial Wood Waste Warm Air Heater Comprising

- Ranheat WA 150 Air to Air Heat Exchanger
- Ranheat WA 150 Fire chamber
- Ranheat 150kW Combustion Unit
- Ranheat Stoker Bagloader Assembly
- Ranheat 150kW Cyclone cleaning and ID Fan
- Twin Walled Chimney to 8m supported off existing building with brackets
- Ranheat WA 150 control Panel

The following items to be manufactured installed and commissioned on customer site UK mainland.

### Explicit Exclusions

Chimneys over 8m

Self-supported chimney

32A C TP+N Electrical Supply

15mm Cold Water Supply

### Fuel

Max chip size 20mm x 20 mm x 5 mm.

No minimum particle size

Moisture content 25%

Fuel to be wood and wood based fuels including

- Hardwoods
- Softwoods
- MDF
- Chipboard
- OSB

Moisture resistant MDF and Fire retardant MDF can be used but do reduce the out of the system and lead to higher ash contents. This can cause increased wear on the fire chamber. We have customers that burn mostly Fire retardant MDF and they do it successfully with these caveats.

### Safety and Training

All operators and maintenance personnel to attend training during installation and commissioning. All operators to use the system with accordance to the manual.

## TERMS AND CONDITIONS OF SALE AND TRADING

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### 1. GENERAL

These conditions shall cover any sale of goods or services by the Company to the exclusion of any other terms or conditions except such as are approved in writing by a Director of the Company on the Company's behalf.

### 2. QUOTATIONS AND ACCEPTANCES

No estimate or quotation given by the company constitutes an offer. The contract is made only when the company accepts an offer or order made by the customer. Any quotation is open for acceptance within 30 days only.

### 3. PRICE

The Company reserves the right to vary prices (whether specifically quoted or otherwise) to take into account increases in the cost of raw materials, manufacture, packing, transport, wages or variations in exchange rate, arising before delivery. Typographical and clerical errors on quotations are subject to correction.

### 4. PAYMENT

The Company's terms of payment are stated on the quotation. The Company reserves the right to charge interest on any overdue amount at the rate of 1.5% above the Bank of England minimum lending rate per annum.

### 6. PLACE OF DELIVERY

If no place is named in the contract for the delivery of the goods the place of delivery shall be the Company's Works.

### 7. PASSING OF TITLE

The risk in the goods shall pass to the customer seven days from receipt of notice from the Company of its readiness to deliver on actual delivery (whichever is the earlier). The title in the goods shall pass to the customer only when payment in full has been affected.

### 8. PERFORMANCE

No condition is made or to be implied nor is any warranty given or to be implied as to the life or wear of the goods supplied or services rendered or that they will be suitable for any particular purpose or for use under any specific conditions, notwithstanding that such purpose or conditions may be known or made known to the company. However the benefit of any warranty given to the Company by the manufacturers of goods or parts of goods supplied by the Company shall be passed by the Company to the customer.

### 9. DRAWINGS

All specifications, drawings and particulars of weights and dimensions supplied by the Company are approximate and for general descriptive purposes only. The property in such documents however remains in the Company and they should not be reproduced in whole or in part without the Company's prior written consent.

### 10. PATENTS

The customer shall indemnify the Company against all damages, penalties, costs and expenses to which the Company shall become liable as a result of work done in accordance with the customer's specification which involves the infringement of any Letters Patent, registered design or trademark.

### 11. DEFECTS

Where any goods supplied or services rendered by the Company are alleged by the customer to be defective or unsatisfactory they shall not form the subject of any claim for work done by or on behalf of the customer or for any loss, damage or expense whatsoever arising directly or indirectly from such defects from unsatisfactory work but such goods (or in the case of services rendered the goods to which they relate) if returned to the Company and accepted by them as defective shall at the Company's discretion be either repaired or replaced by the Company or credit for the price thereof will be given to the customer by the Company.

### 12. DEFAULT

If the customer shall make default in or commit a breach of contract on any of its obligations to the Company or if any distress or execution shall be levied upon the customer's property or assets or if the customer shall make or offer to make any arrangement or composition with creditors or commit any act of bankruptcy or if any Petition or Receiving Order in Bankruptcy shall be presented or made against the customer or if the customer is a Limited Company and any Resolution or Petition to Wind Up such Company's business (other than for the purpose of amalgamation or reconstruction) shall be passed or presented or if a Receiver of such Company's undertaking property or assets or any part thereof shall be appointed the Company shall have the right forthwith to determine any contract then subsisting and upon written notice of such determination being posted to the customer's last known address any subsisting contract shall be deemed to have been determined without prejudice to claim or right the Company may otherwise make or exercise.

### 13. ACCEPTANCE OF GOODS

The customer shall be deemed to have accepted the goods or services as being in strict accordance with the specific requirements of the customer unless within seven days from the receipt of the goods or services he shall notify the Company that such goods or services and not in accordance therewith.

### 14. RETENTION AND RECOVERY

The Company shall have the right to retain any goods in the possession of itself or its agents and a particular lien over such goods in order to secure the payment of any monies due to it in respect of those goods from the customer or from the owner or the consignee thereof. If the customer takes delivery of any goods supplied to it by the Company before making full payment of the price, the Company shall be entitled to repossess the goods immediately upon the customer committing any act of insolvency or other act which would entitle the Company to determine the contract under

### 14. RETENTION AND RECOVERY CONTD.

Clause 12 above. For the purpose of repossession the Company's agents may enter upon any premises where the goods are situated. If any monies due to the Company as aforesaid are not paid within 21 days after repossession or as the case may be after notice has been given to the customer the owner or the consignee from whom such monies are due, that the goods are being retained, the goods may be sold at the absolute discretion of the Company and the proceeds of sale thereof shall be applied in or towards the satisfaction of such indebtedness the expenses of the sale and the payment of reasonable charges for the care and custody of the goods for the period after the rights of retention, lien or repossession were exercised.

#### **15. ARBITRATION**

In the event of a disagreement or dispute arising between the Company and the customer, either of them by notice in writing to the other require the disagreement or dispute to be referred to the decision of any agreed Arbitrator, or if such Arbitrator cannot be agreed by both parties within 14 days of the date when such notice is delivered, by an Arbitrator appointed by the President for the time being of the institute of Mechanical Engineers. In giving his decision the Arbitrator will not be acting as an expert, his decision will be accepted by both parties as final and his costs and expenses shall be born at the Arbitrator's absolute discretion by the customer or Company or both of them as he sees fit.

#### **16. LAW**

These conditions in this contract shall be subject to and construed in accordance with the Laws of England.