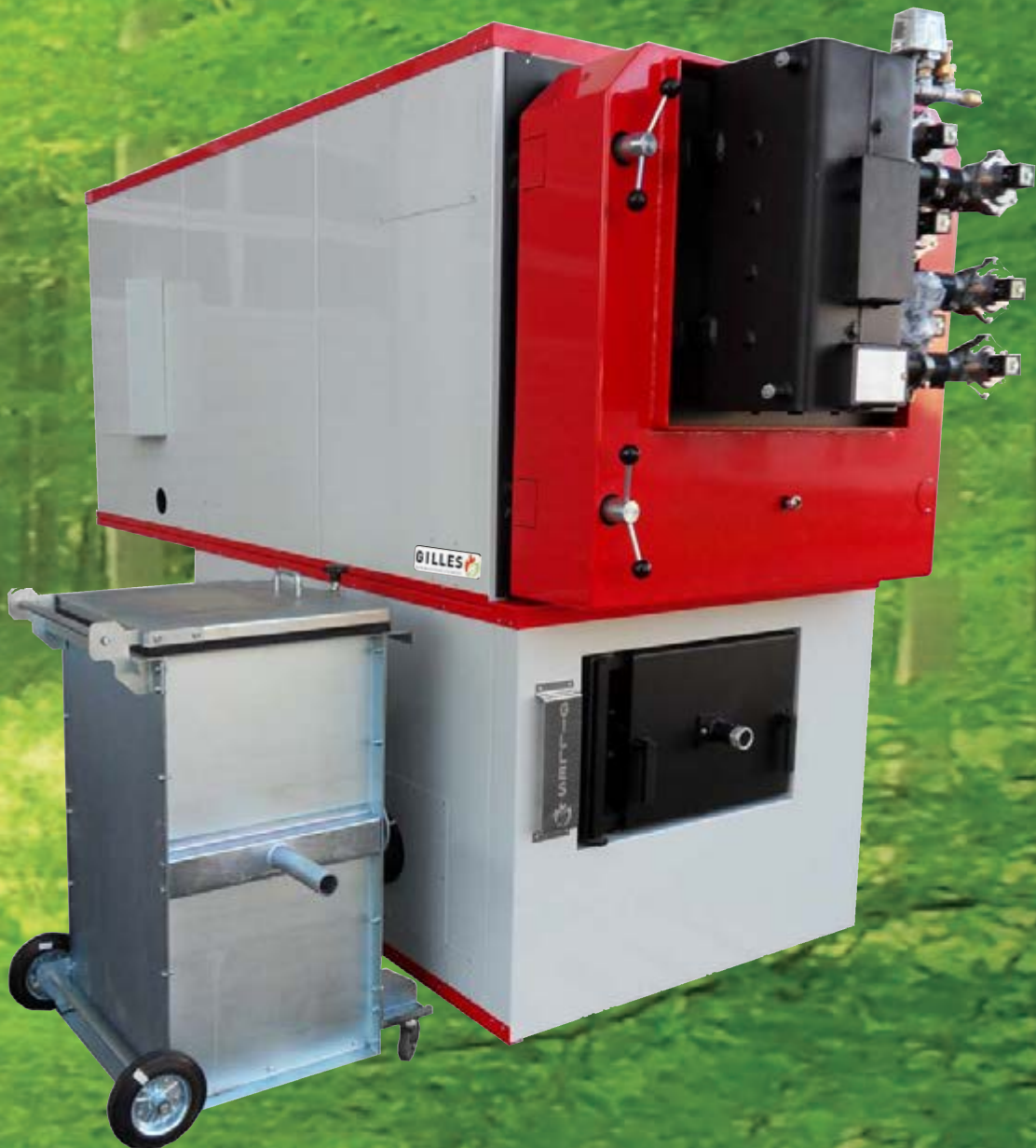


# INDUSTRIAL BOILER

**Moving step grate  
Under feed firing**



**HPKI-R 180 - 550  
HPKI-K 180 - 550**



# INDUSTRIAL

## INDUSTRIAL BOILER HPKI-R 180 - 550

- Moving step grate – air-cooled

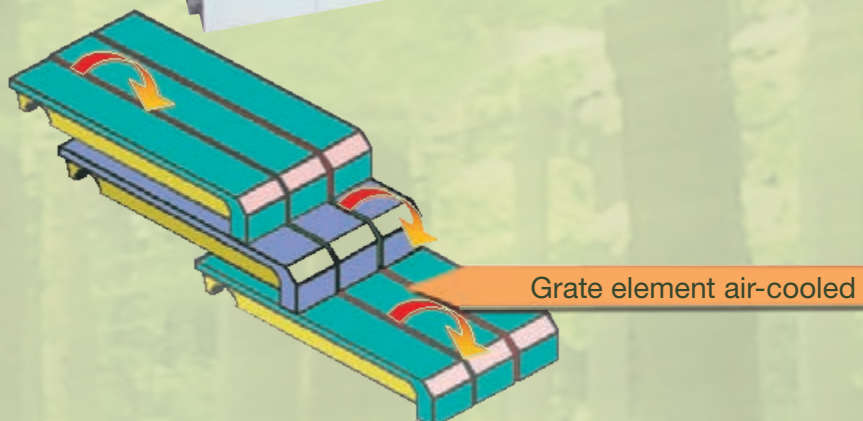


### The high-performance boiler

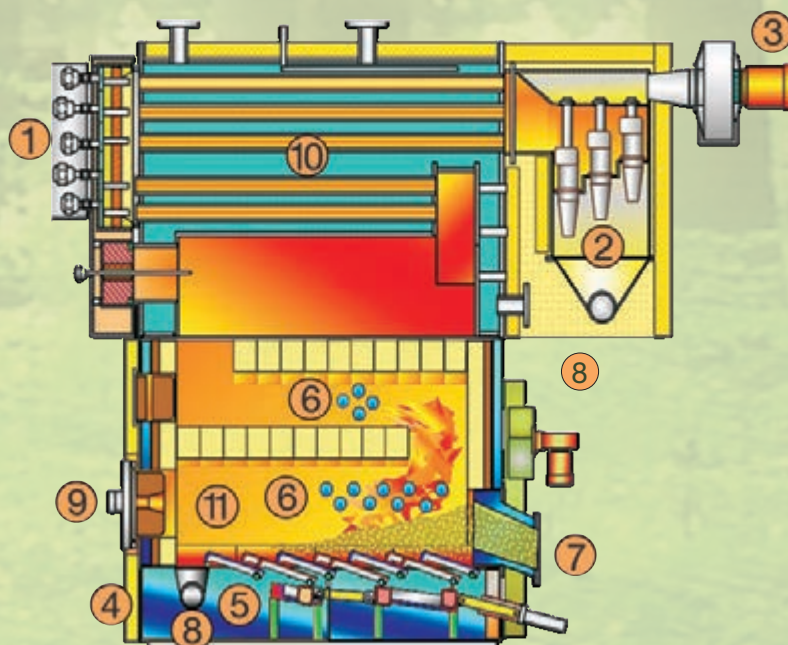
is produced as a stress-free welded construction. The thermally insulated door at the front swings out completely permitting completely free access for cleaning all the boiler flues. The boiler is constructed in accordance with the natural combustion process of the fuel wood. The gasification combustion chamber built on a direct pass principle is fitted with a variable, ceramic (replaceable) radiator roof cladding. High combustion temperatures and a long furnace duration of the gases is the guarantee for a clean burning process.

### HPKI-R:

- Moving step grate for drying, gasification and combustion of the fuel and ash transport from the combustion chamber
- Grate sledge with maintenance free slide rails, easy removal and refitting of grate bars



Wet fuels – air cooling



- 1 Automatic heat exchanger cleaning
- 2 Automatic flue gas dust removal
- 3 Flue gas fan
- 4 Insulation
- 5 Primary air
- 6 Secondary air
- 7 Fuel stoking
- 8 Automatic ash removal in 50/240 litre ash box
- 9 Combustion chamber door
- 10 Heat exchanger
- 11 Combustion chamber



# BOILER

## INDUSTRIAL BOILER HPKI-K 180 - 550

- Under feed firing

### HPKI-K:

Under feed fuel stoking with combustion retort in heat resistant steel and cast alloy

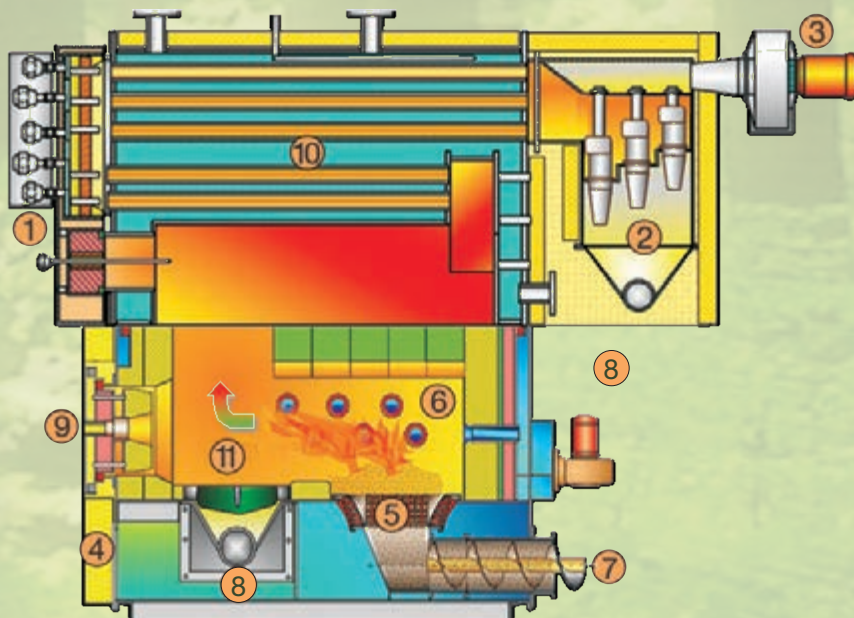
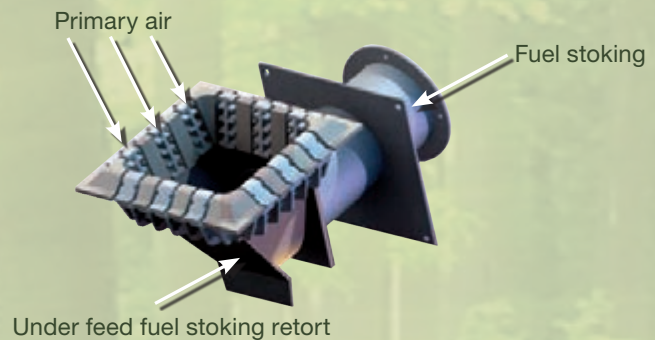
Primary and secondary air are regulated by the combustion air fan and air dampers. Output regulated by flue gas temperature, lambda probe, combustion chamber and boiler temperature.

Double-wall steel housing for pre-heating the combustion air and for cooling the inner anchoring plate of the ceramic lining.

Ceramic lining in high-temperature resistant concrete.

Ash grate bars in heat resistant cast alloy.

Combustion chamber door with safety catch and interlock.



- ① Automatic heat exchanger cleaning
- ② Automatic flue gas dust removal
- ③ Flue gas fan
- ④ Insulation
- ⑤ Primary air
- ⑥ Secondary air
- ⑦ Fuel stoking
- ⑧ Automatic ash removal in ash box  
50/240 litre ash box
- ⑨ Combustion chamber door
- ⑩ Heat exchanger
- ⑪ Combustion chamber



# INDUSTRIAL HEATING

## WOOD CHIP & PELLET TRANSPORT SYSTEMS

### PUSH ROD TRANSPORT SYSTEM



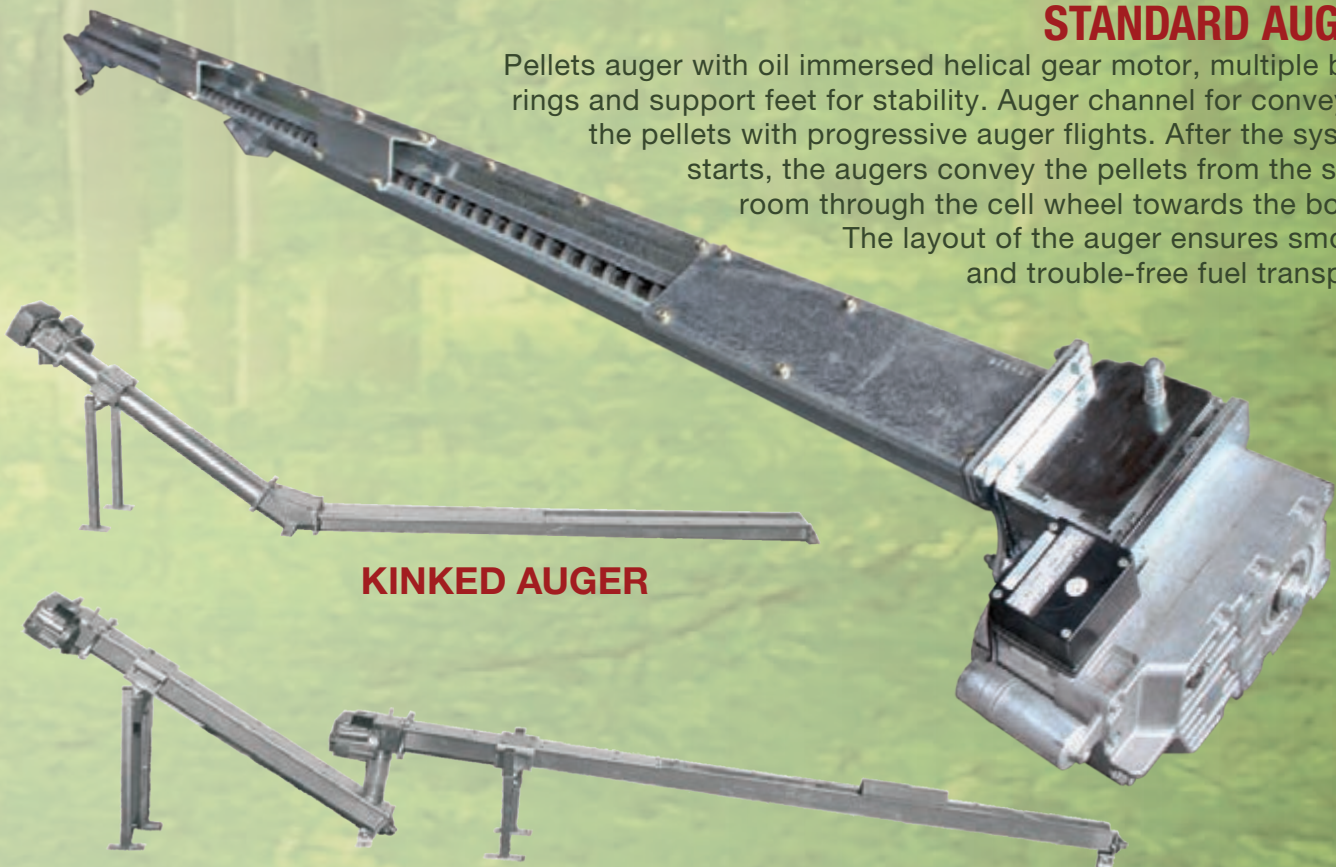
Cross auger



Push rod up to 3 metre width possible per rod

### STANDARD AUGER

Pellets auger with oil immersed helical gear motor, multiple bearings and support feet for stability. Auger channel for conveying the pellets with progressive auger flights. After the system starts, the augers convey the pellets from the store room through the cell wheel towards the boiler. The layout of the auger ensures smooth and trouble-free fuel transport.



KINKED AUGER

RISING AUGER



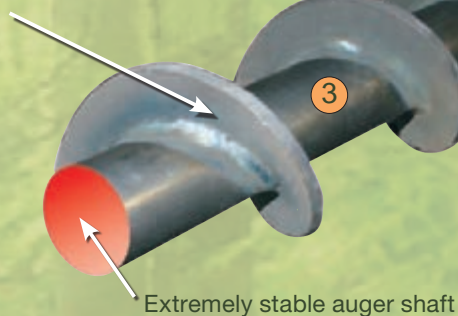
# INDUSTRIAL HEATING

## Transport systems

### WOOD CHIP TRANSPORT SYSTEM HINGED ARM SWEEP COLLECTOR

#### Fuel Transport auger

Continuously welded 8 mm  
auger flights

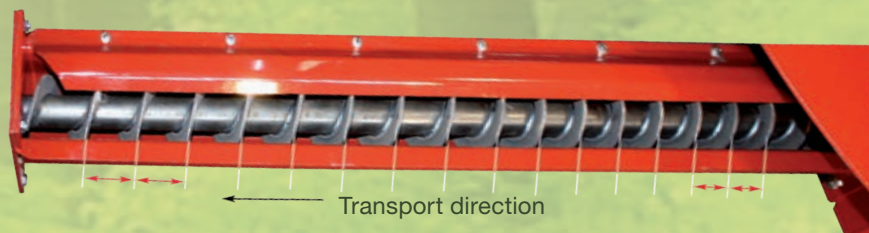


#### Ripping hook

prevents blockages in that larger wood chips are automatically pushed down to then be cut in the cell wheel.



- 1 Drive motor with oil immersed helical gears and start-up cushioning, vibration reduction
- 2 Large dimension auger channel
- 3 Robust auger with progressive flights suitable for wood chips up to G50/P45 Ö-NORM M7133
- 4 Double hinged arm system for optimal clearing of the wood chip storage room
- 5 The helical gear box with shaft lip seal
- 6 Ripping hook
- 7 The helical gear box with shaft lip seal, high efficiency



Transport Auger with continuously progressive 8mm auger flights (stops that material getting stuck)

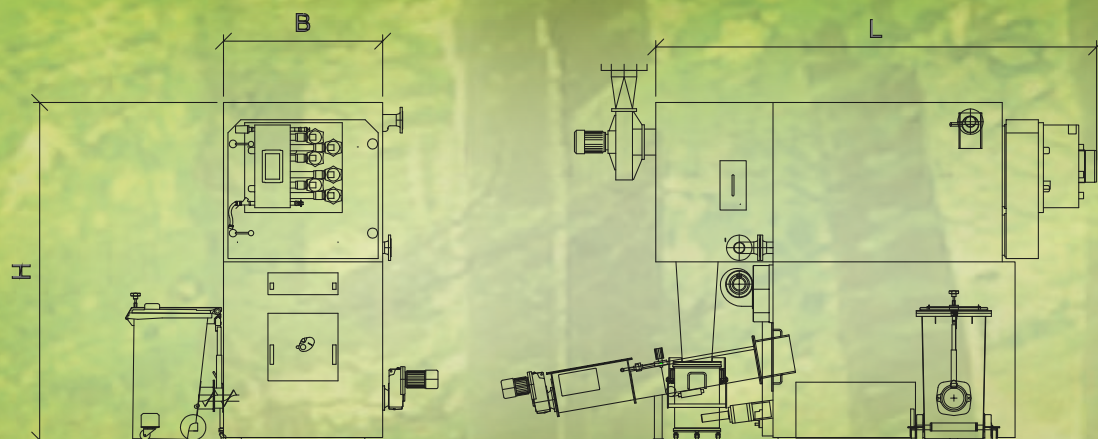


# INDUSTRIAL HEATING

## Specification

### INDUSTRIAL BOILER HPKI-R 180 - 550

Moving step grate – air-cooled

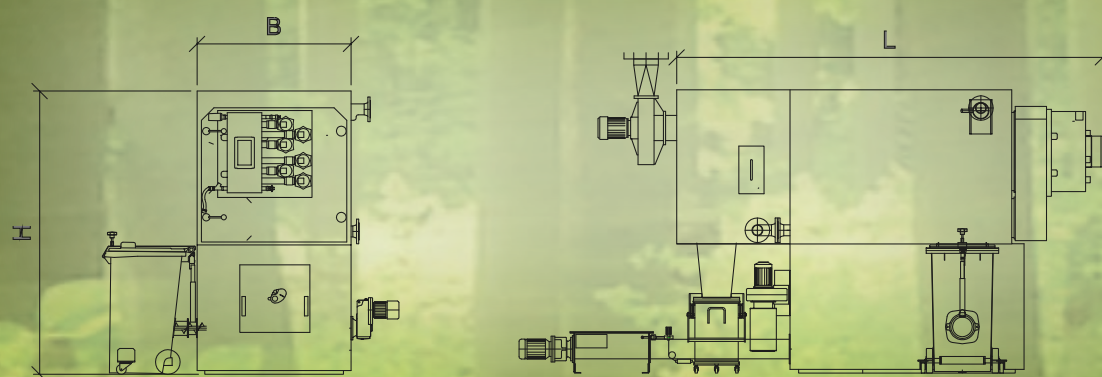


#### HPKI-R 180-550

| Type | Output in kW | L    | B    | H    | Flow/Return | Weight in tons | Water in litre | Flow coefficient in m³/h |
|------|--------------|------|------|------|-------------|----------------|----------------|--------------------------|
| 180  | 180          | 3190 | 1150 | 2550 | 65          | 4,8            | 830            | 48                       |
| 195  | 199          | 3190 | 1150 | 2550 | 65          | 4,8            | 830            | 48                       |
| 240  | 240          | 3190 | 1150 | 2550 | 65          | 4,8            | 830            | 48                       |
| 300  | 300          | 3450 | 1250 | 2600 | 80          | 5,6            | 1100           | 72                       |
| 360  | 360          | 3450 | 1250 | 2600 | 80          | 5,6            | 1100           | 72                       |
| 450  | 450          | 3950 | 1440 | 2880 | 100         | 9,5            | 1550           | 110                      |
| 495  | 495          | 3950 | 1440 | 2880 | 100         | 9,5            | 1550           | 110                      |
| 550  | 550          | 3950 | 1440 | 2880 | 100         | 9,5            | 1550           | 110                      |

### INDUSTRIAL BOILER HPKI-K 180 - 550

Under feed firing



#### HPKI-K 180-550

| Type | Output in kW | L    | B    | H    | Flow/Return | Weight in tons | Water in litre | Flow coefficient in m³/h |
|------|--------------|------|------|------|-------------|----------------|----------------|--------------------------|
| 180  | 180          | 2990 | 1150 | 2200 | 65          | 3,66           | 830            | 48                       |
| 195  | 195          | 3190 | 1150 | 2200 | 65          | 3,77           | 830            | 48                       |
| 240  | 240          | 3190 | 1150 | 2200 | 65          | 3,77           | 830            | 48                       |
| 300  | 300          | 3450 | 1250 | 2250 | 80          | 4,67           | 1100           | 72                       |
| 360  | 360          | 3450 | 1250 | 2250 | 80          | 4,67           | 1100           | 72                       |
| 450  | 450          | 3950 | 1440 | 2480 | 100         | 7,05           | 1550           | 110                      |
| 495  | 495          | 3950 | 1440 | 2480 | 100         | 7,05           | 1550           | 110                      |
| 550  | 550          | 3950 | 1440 | 2480 | 100         | 7,05           | 1550           | 110                      |