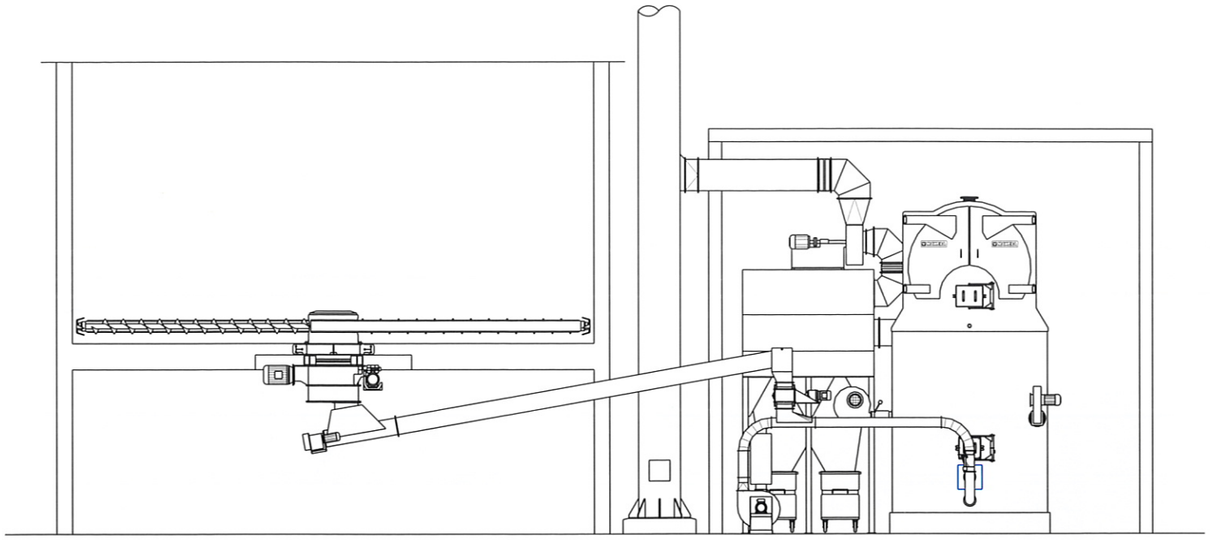
INSTALLATION OPTIONS



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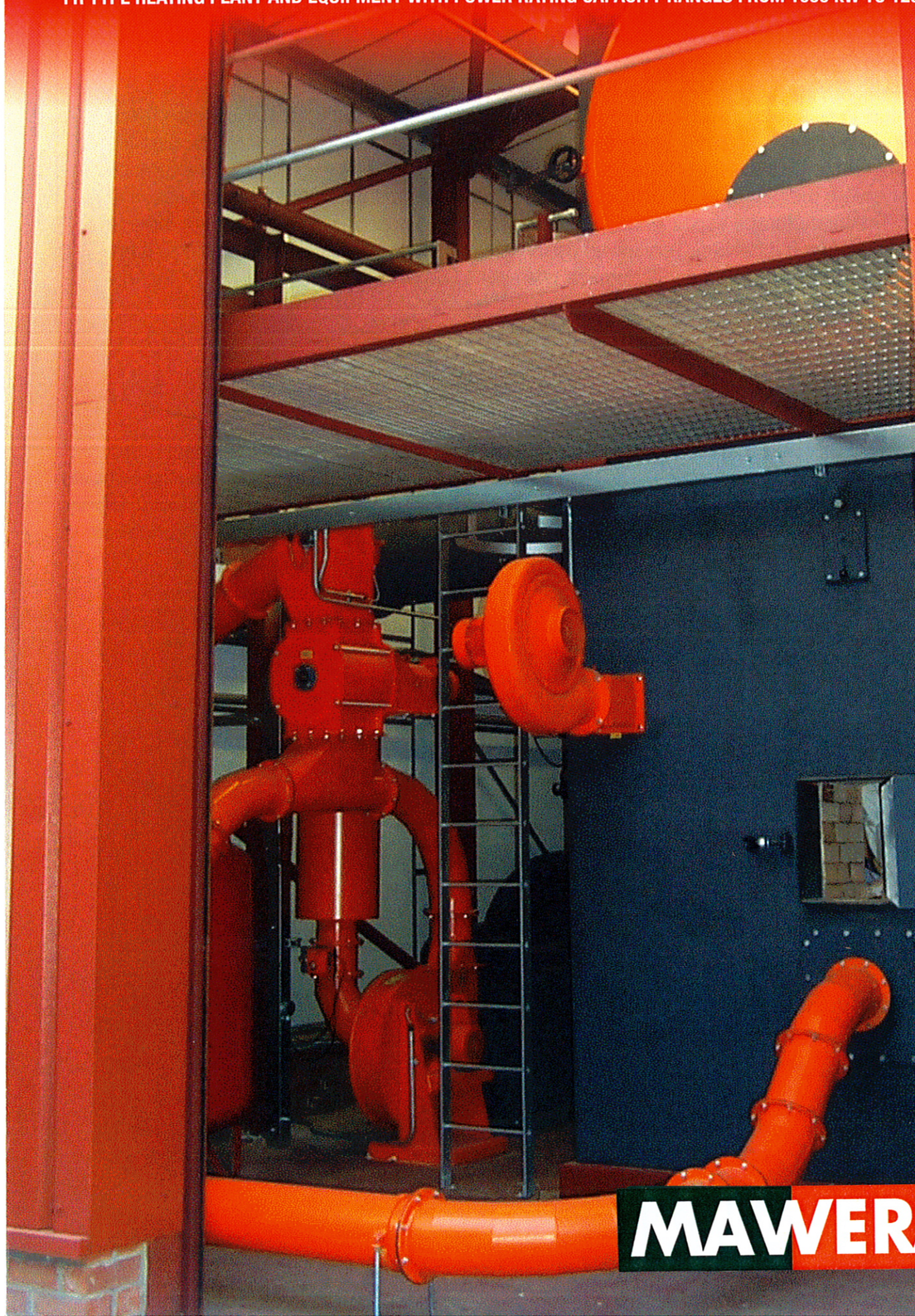
FR TYPE AIR INJECTION FIRING SYSTEM

FR TYPE HEATING PLANT AND EQUIPMENT WITH POWER RATING CAPACITY RANGES FROM 1000 kW TO 12000 kW



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FIRING SYSTEM FR CONSTRUCTION AND FUNCTIONING

Air injection firing system with high temperature ash combustion for the energetic exploitation of wood waste from the woodworking trade.

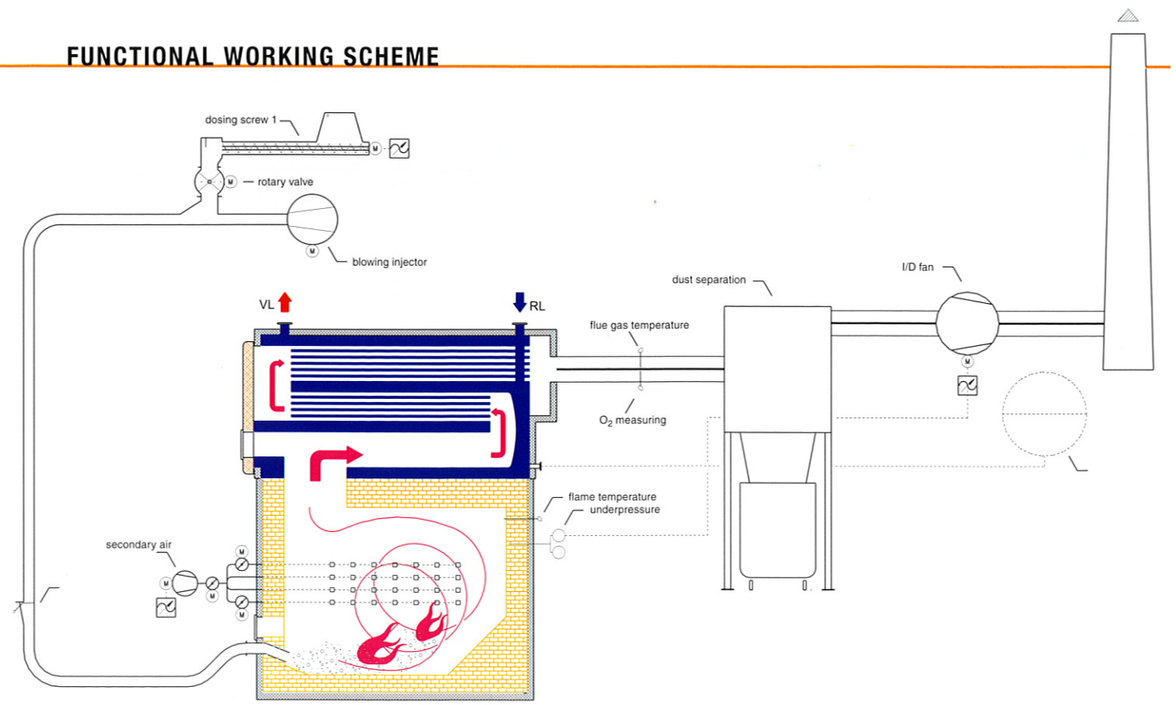
The dry fuel in dust form is injected into the fully firebrick clad and high grade insulated furnace chamber via air injection ducts. The injection air flow also serves as the primary combustion air. The arrangement of the air jets together with the specially designed geometry of the furnace chamber ensure the necessary turbulence and gas flow conditions for an optimal combustion of the fuel. The heat storage capacity in the firebrick cladding generates the appropriate furnace temperatures, which guarantee very low emission values. The horizontal three pass flame-tube, flue gas-tube boiler is located on the furnace chamber to produce hot water, steam, or thermal oil heating vessels can also be supplied.

RANGES OF POSSIBLE FUELS

Sawdust, wood chippings as well as wood dust from woodworking waste in a dry state: **Classification according to Quality Categories Q1 to Q3 and/or Groups 1 to 2,** respectively, such as natural, untreated wood and timber, plywood, chip- and fiberboard, bonded wood, uncoated, unpainted and lacquered as well as coated timber and wood free of organic-halogen, all corresponding to Austrian Standard 4. BImSchV, No. 1.2..

Consistence density: dust form.
Water content: w < 25%
Bulk density: S 100 bis S 500

FUNCTIONAL WORKING SCHEME

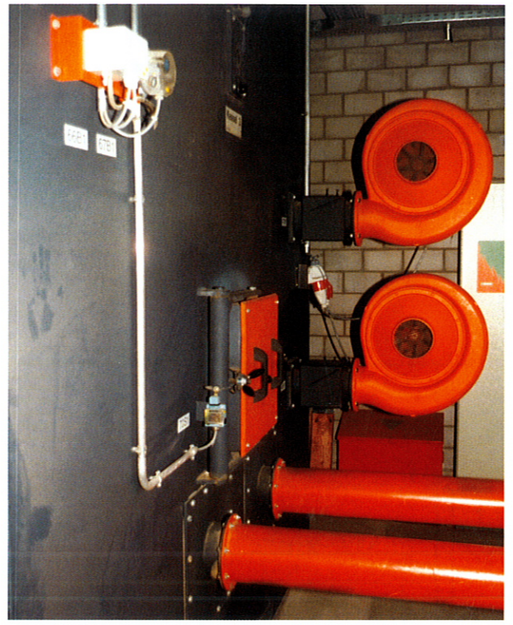


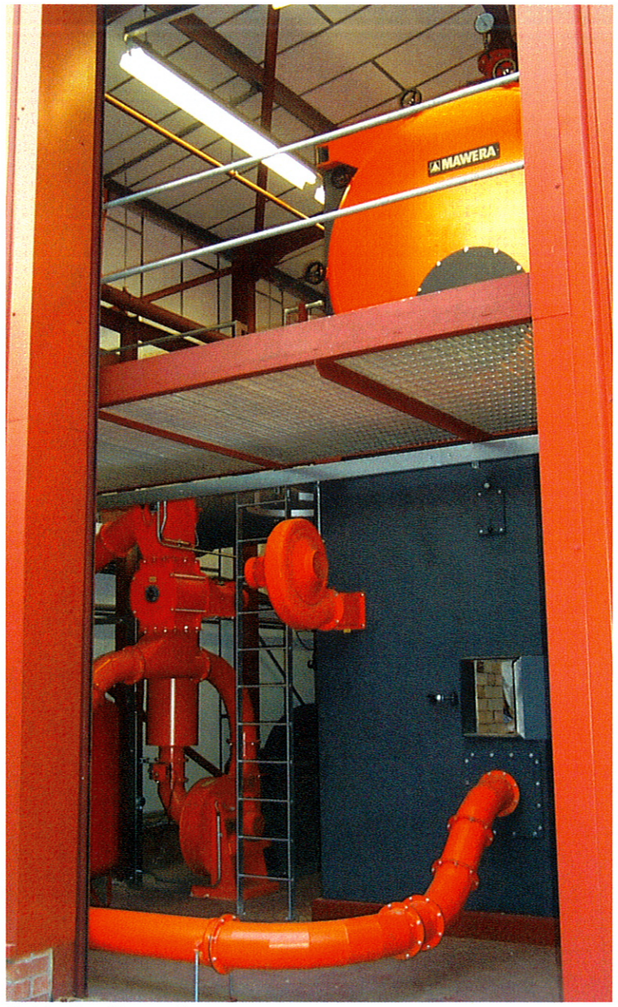
THE ADVANTAGES OF AIR INJECTION FIRING:

- Tripie flame-tube heat exchanger with flue gas temperatures of under 190° C at full loading .
- Integrated emergency heat exchanger to maintain a rapid regulating ability to German DIN Standard 4751, Part 2.
- Sliding scale loading regulating facility from 35% to 100%, dependent on type of plant and equipment and fuel employed.
- Low servicing and maintenance costs, as there are no mechanical parts in the furnace.
- Air injection principle for charging the furnace with fuel, and thus no wear and tear on the air injection fan.
- Low ash removal expenditure from the furnace due to ash combustion.

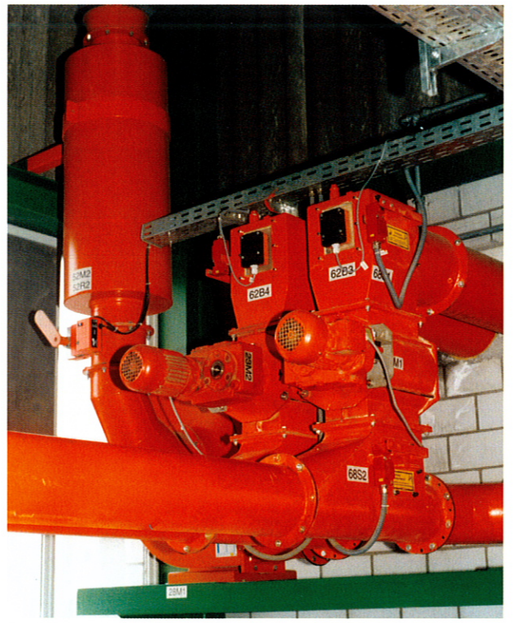
OPTIONS:

- Automatic inserted and extracted ignition burner.
- Ash removal facility

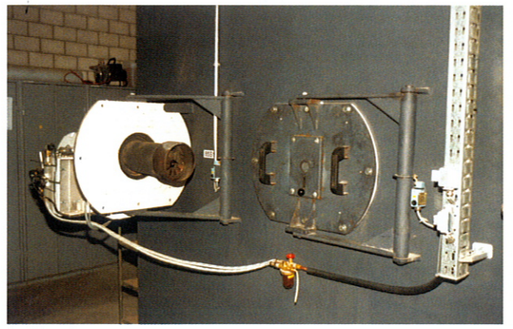

Fuel injection leads



Air injection firing system



Fuel dosing with injection fan


Ignition burner