



**JOSEPH EGLI AG**

**Incineration plants with**

**MultiZon incinerator  
for batch operation**

**MZ**



for:

**solid and liquid waste**

capacity range:

**400 kg/day and 800 kg/day**



The MZ models are a further development of the reliable and successful "Hoval MultiZon" incinerators.

**Application** The MZ range serves to incinerate waste materials and production residues. There are two sizes available, with daily throughput capacities of approximately 400 kg/day and 800 kg/day.

The unit has been conceived for batch operation with manual charging. This means that the unit is filled once per batch and then the combustion of the whole waste material is automatic and does not require any further operator attendance. For this reason, the unit is particularly suitable for the incineration of hospital waste and for the disposal of smaller amounts of waste materials within industry and trade. For waste with a high humidity like animal carcasses, waste from the kitchen or catering we develop the MZ 10. As an option a liquid injection system is available.

**Benefit** With the MZ unit, the waste disposal can be carried out on-the-spot. Through the incineration the amount of material will reduce to about 3% by volume and to about 12% by weight. Correspondingly reduced are also the costs for transportation and disposal.

It is possible to utilize the valuable energy which is contained in the waste material. With a heat exchanger it is possible to produce warm water.

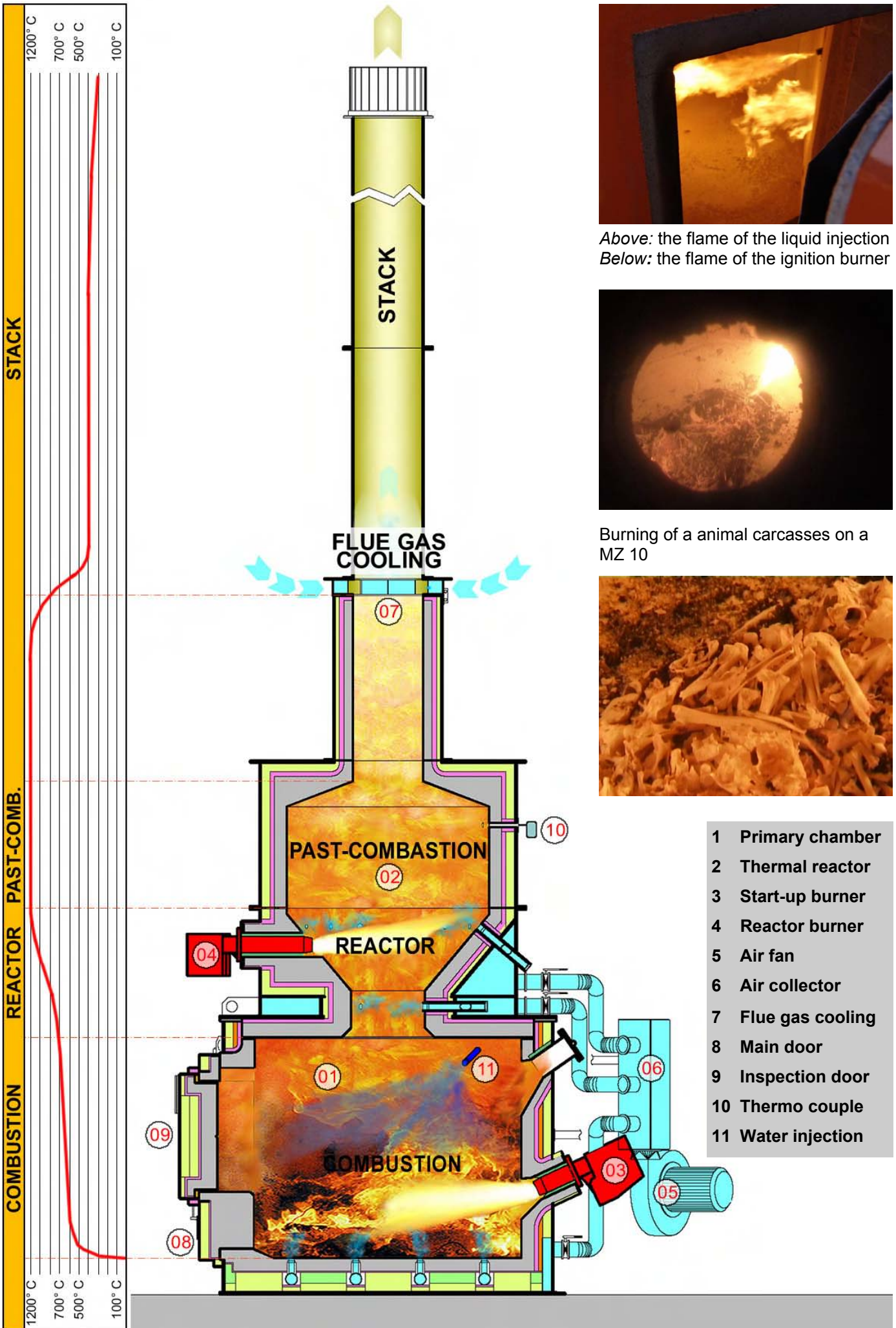
One is independent with a MZ unit. Independent with respect to the disposal of waste materials and more independent with regard to the provision of energy.

**Multizonal combustion** The essential difference between a multi-stage, "multizonal" combustion and the conventional combustion is the fact, that the various process stages evolve separately, both in time and with regard to location. With this, it is possible to control each partial process individually and to optimize it. The result is a stable combustion, which is practically independent of the composition of the fuels and is low in noxious substances and smoke-free.

## **Environmentally acceptable**

Waste disposal must be environmentally acceptable. This high requirement is met by the multizonal combustion:

- The low air flow in the primary chamber avoids the dragging along of solid particles practically completely. The dust emission is therefore exceedingly low in comparison with conventional incinerators.
- Thanks to the particular design of the guaranteed conditions (temperature and residence time), virtually ideal incineration end products are obtained. The combustion is free of soot.
- The ash remaining in the primary chamber is absolutely sterile after the combustion. Losses through the firing bed can be excluded.



# TECHNICAL DATA

## Modell

**MZ 4**  
1000° C / 0,5 sec

**MZ 8**  
1000° C / 0,5 sec    1200° C / 1,0 sec

**MZ 10**  
1000° C / 0,5 sec    1200° C / 1,0 sec    1200° C / 2,0 sec

### Capacity

Thermal capacity	kW	210	420	420	420	420	420
Burning capacity	kg/h	50	100	100	100	100	100
Feeding time	h/day	8	8	8	8	8	8
Daily throughput	kg/day	400	800	800	800	800	800

### Combustion

Combustion chamber volume	m <sup>3</sup>	1,0	2,3	2,3	2,3	2,3	2,3
Burner capacity	kW	60 - 83	60 - 83	60 - 83	60 - 83	2x (60 - 83)	2x (60 - 83)
Incineration temperature	°C	500 - 700	500 - 700	500 - 700	500 - 700	500 - 800	500 - 800

### Post-combustion

Post-combustion chamber volume	m <sup>3</sup>	0,4	0,60	1,2	2,4	1,2	1,2
Burner capacity	kW	60 - 190	60 - 190	60 - 190	60 - 190	60 - 190	2x (60 - 190)
Post-combustion temperature	°C	1000	1000	1200	1200	1200	1200
Residence time	sec	0,5	0,5	1	2	1	2

### Consumption

Fuel: Heating oil light (Diesel)	kg/h	10	18	20	24	22	26
Alternative: Natural gas (G 20)	Nm <sup>3</sup> /h	12	22	24	29	26	31
Electricity 230/400 V - 50 Hz	kW	1,0	2,0	2,0	2,0	3,0	3,0

- The technical data for our standard systems were recorded at the time of printing. They are, however, subject to continuous modification and cannot be guaranteed.
- All data are based on waste with a lower heating value of 15 MJ/kg and 10 % moisture.
- All consumption data are experience values, highly dependent on the composition of the waste and operating conditions and are therefore only indicative and not guaranteed.
- All weights and dimension are approximately, weight by wet refractory material before drying.

**PRELIMINARY**

<p><b>MZ 4</b> 1000° C / 0,5 sec</p>		<p>4100 kg</p>
<p><b>MZ 8</b> 1000° C / 1,0 sec 1200° C / 0,5 sec</p>		<p>7250 kg / 7850 KG</p>
<p><b>MZ 8</b> 1200° C / 2,0 sec</p>		<p>11'850 kg</p>
<p><b>MZ 10</b> 1000° C / 1,0 sec 1200° C / 0,5 sec</p>		<p>7300 kg / 7900 KG</p>
<p><b>MZ 10</b> 1200° C / 2,0 sec</p>		<p>11'900 kg</p>

# FLEXIBLE & EASY



◀ **BURNERS**  
for light oil or gas available

▶ **LARGE MAIN AND FEEDING DOORS**  
for easy feeding and easy manual deashing



◀ **EASY OPERATION**  
on automatic or manual mode

▶ **EASY MAINTENANCE**  
on clearly arranged and easy to adjust control board

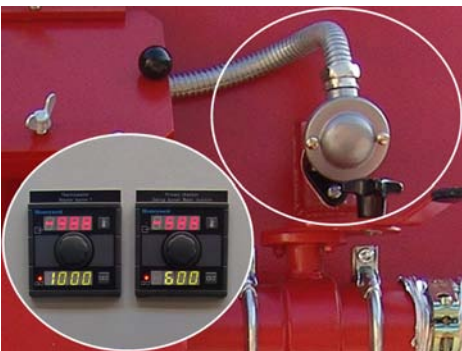


# SAFE



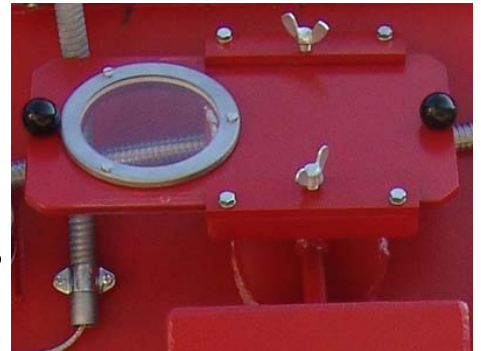
◀ **OPERATOR PROTECTION**  
by automatic door locking device

▶ **INCINERATOR PROTECTION**  
by water spraying nozzles



◀ **TEMPERATURE CONTROL**  
Precious and safe temperature control

▶ **VISUAL CONTROL**

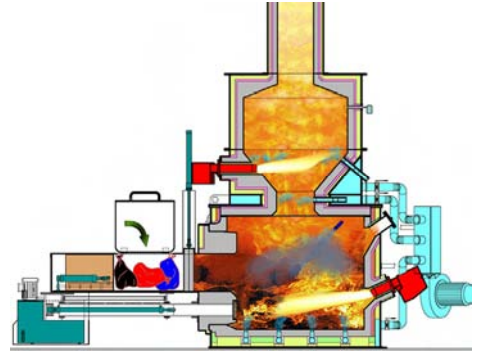


# USEFUL OPTIONS

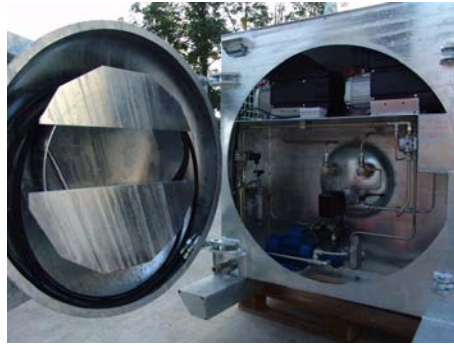


## RAM FEEDER FOR SOLID WASTE

hydraulic driven and also container typing device available



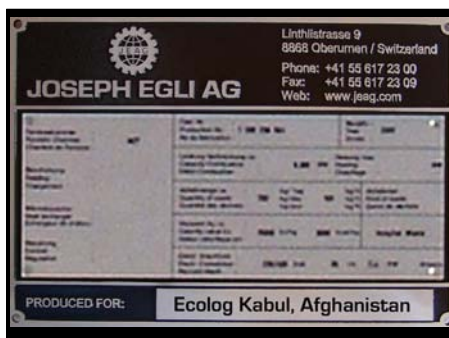
## LIQUID INJECTION FOR LIQUID WASTE



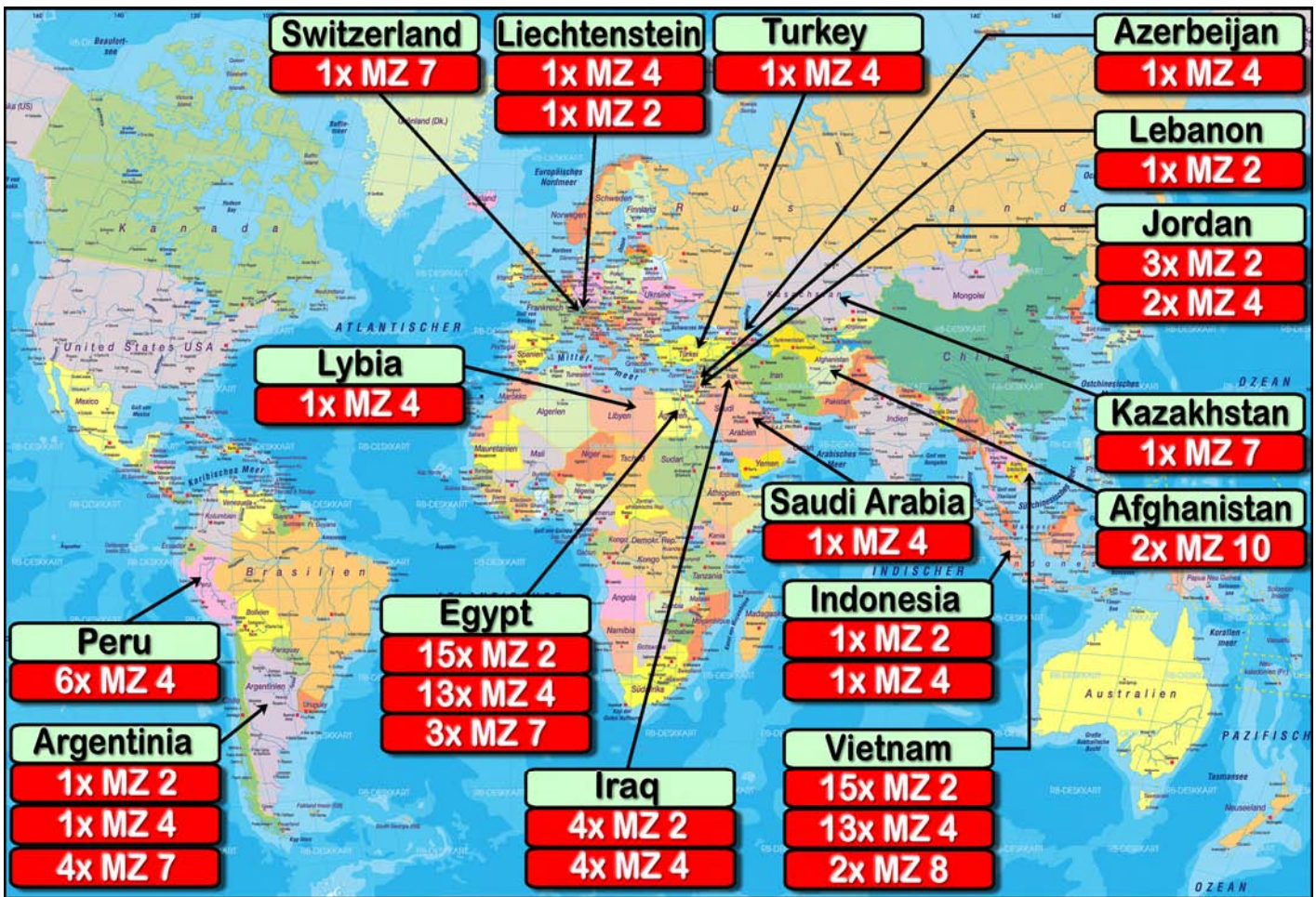
# SWISS QUALITY



## DESIGNED, PRODUCED, TESTED AND PROOFED BY



# WORLDWIDE OVER HUNDRED MZ INCINERATORS IN OPERATION



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