

## HORSE AND CAMEL INCINERATOR

Jongeneleen Burning Systems has developed an incinerator for the incineration of dead horses and camels. See picture below.



In 2009 we have installed a J800 Horse cremation system in the Netherlands. This incinerator is full operating and has passed the Emission Measurements test.

The incinerator can also be use for other dead animals like for instance camels. The incinerator weighs around 70 metric tons. One of the main USP's is its low emission of gasses and particles per cubic meter. Its emission is in line with the legislation in the Netherlands and Germany which are among the most demanding in the world. Other competitors from the USA have higher emission levels.

The incinerator is equipped with a door 1,35 meter high and 2,10 meter width so all horses/camels could be charges without cutting. Because of the composition of horses the incinerator is equipped with six high velocity burners so the whole horse could be cremated fast and easily. The floor is about 10 square meters and the primary room has a volume of 15 cubic meters. The incinerator has also a secondary (afterburner) room, what will burn the smoke for about 2 seconds at a temperature of 850 degree Celsius. The secondary room has two burners. See <http://www.youtube.com/watch?v=ghQasvKMDpl> for movie.



## TECHNICAL SPECIFICATIONS

### Emission levels

The emission levels stated below are without any filtration control system.

- O<sub>2</sub> > 6%
- CO < 5 mg/m<sup>3</sup>
- NO<sub>x</sub> < 175 mg/m<sup>3</sup>
- SO<sub>2</sub> < 130 mg/m<sup>3</sup>
- Dust < 25 mg/m<sup>3</sup>
- Dioxines and Furanen < 0,094 ng/TEQ/m<sup>3</sup>

Lower emission levels can be achieved by using a filtration control system.

### Features

- Separate secondary chamber with more than 2,5 second retain time of combustion air at 850°C or higher.
- Fully automatic – IPC based controls (see enclosed screenshots) including O<sub>2</sub> sensor and control.
- Optional modem link – remote technical support – on line fault diagnostics
- Low maintenance requirements - higher availability
- Stack of 10 meters above ground level
- Six industry high velocity burners in the primary chamber
- Two afterburners in the secondary chamber
- Two hydraulic loading doors
- Pre-wired packaged unit
- Big touchscreen
- The possibility to monitor and control the incinerator on-line.

### Other technical specification

- Weight Incinerator module about 55 metric tons.
- Weight stack about 13 metric tons
- Burn rate about 800 kg in 180 – 300 minutes. (The caloric values of horses and camels are very low)

### Dimensions

- Height 2900 mm
- Width 4100 mm
- Length 4800 mm
- Installed electrical power 18 KW
- Current 230-400 volts/ 50Hz

### Fuel consumption

- Max. Capacity primary burners: 6\*200 KW= 1200 KW
- Max .Capacity secondary burners: 2\*400 KW= 800 KW
- Total Max capacity = 2000 KW

### Total fuel consumption

- Natural gas 230 nm<sup>3</sup>/hr
- LPG 80 nm<sup>3</sup>/hr
- Oil 190 kg/hr