

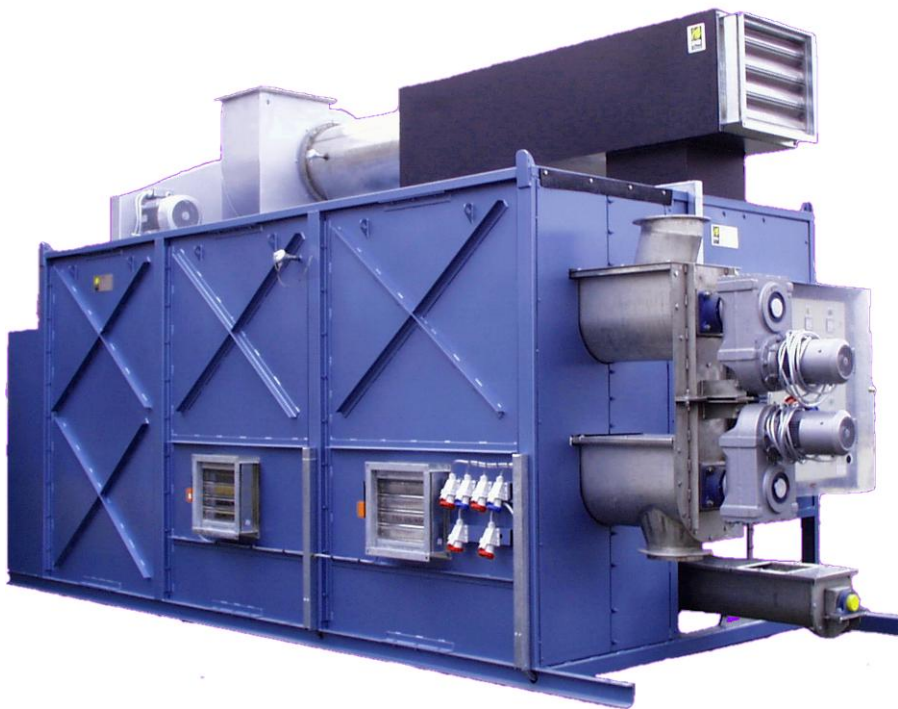


International Limited

Combustion Engineering for the 21st Century

TD5000

Oil Based Drill Cuttings, Soil, Sand & Sludge Decontamination Plant



Mobile TD5000 (Thermal decontamination system)

The TD5000 was developed for the decontamination of oil based drill cuttings, oily sludge's, oil contaminated soil and sand, ideal for small volume applications which require a mobile and compact solution to decontamination. The TD5000 provides a proven and reliable facility which is energy efficient and designed for continuous 24 hour operation.

Throughput capabilities for the TD5000 are up to a maximum of 2.0m³/hr for lower levels of oil contamination. Typically applications operate to optimum capacity of about 1.0m³/hr with an oil/hydrocarbon contamination level of 5 to 7% by volume and water content of between 15 and 20% by volume.

Mobile & Self Contained System

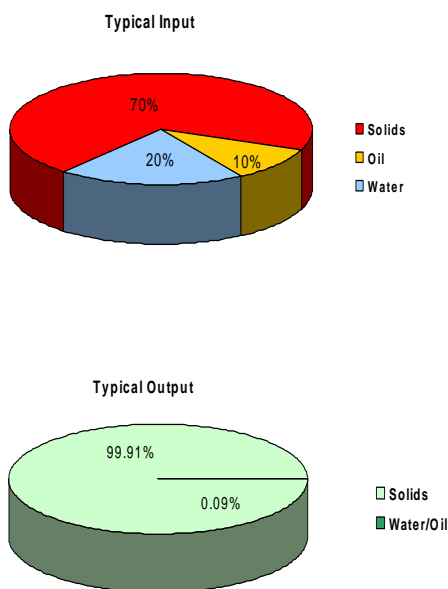
Emission Compliant

Proven Technology

Continuous 24 hour throughput



System Performance



Flue Gas emissions

	Run 1 (mg/m ³)	Run 2 (mg/m ³)
Total Particulate Matter	88.1	96.1
Volatile Organic Compounds	1	1
Cadmium	<d1	0.0004
Lead	0.2	0.1
Hydrogen Chloride	0.7	0.8
Carbon Monoxide	17.7	28.1
Nitrogen Oxides	26.1	10.1
Sulphur Dioxide	5.4	0
Mercaptan	<0.03	<0.03
Dioxins & Furans	<0.01	<0.01
Oxygen	19.0	20.0

No Mercaptan peaks were detected on the MS scan. No compounds of greater concentration than 5 µg were present. All results are expressed at reference conditions: Dry STP (273K, 760mmHg) 11% O₂

Specification

The TD5000 is a unique system which incorporates state of the art technology to achieve compliance with international air emission standards, while the treated cuttings or contaminated material meet international standards allowing the treated material to be used as road base or safe to be sent to normal landfill.

Systems can be diesel or gas fired, customers would need to provide a fuel supply capable of operating the plant for the required cycle. Typical fuel usage is dependent upon the level of hydrocarbon contamination in the cuttings or contaminated material, from field experience the normal fuel consumption would be 10 to 12USG/hr.

The TD5000 is a fully automated plant requiring minimal supervision, typically one plant manager and one operator.

The contaminated materials are loaded via bucket lift into the in feed conveyor system, processed materials are discharged by the high temperature out feed conveyor, making the loading and discharge a simple and clean operation.



Air pollution control is achieved by high temperature and residence time, the fumes and pollutant gases are re-heated up to 850°C to 900°C in a secondary combustion chamber where they are held for up to 1.5 seconds, mixed with secondary air and cooling air to complete combustion and then discharged to atmosphere.

Mobility is key to the TD5000 versatility; the system is compact and is easily loaded on to a 40ft low loader flat bed trailer.



Site Requirements

The TD5000 only requires a level base, fuel and power services, and the in feed and out feed conveyors require connection to the main process conveyors. The TD5000 can be supplied suitable for various voltages. Power requirements: 20kW

Fuel consumption: Diesel 10 to 12 USG/hr (Based on 5% hydrocarbon contamination).

Nat Gas 40Nm³/hr

Propane 22Nm³/hr



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