

CultiClean 1500



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Product description



General information

The CultiClean machine works the bed tops with dual rotivators. The first rotivator works to a depth of 5 cm creating loose soil with ideal conditions for wroot development. The second rotivator works to a depth of 4 cm, pasturising this top layer with heat, effectively killing fungus and germinating weeds. The HOAF burners, including the gas and elektrical fittings are placed in a metal casing, hence creating a technical separation of mechanical engineering and burner technology.



Drive

The CultiClean is a mechanically driven machine linking to the tractor's p.t.o. with a three point linkage. The drive technology consists of a right angle transmission with a discontinuous X-Y axis running in opposite ways. The X-Y axis drives the front rotor and the back rotor by means of a chain transmission.



Operation

The operations of the CultiClean are all executed from the tractor cabine.



How it works

The culticlean consists of 2 rotor axles.

The front rotor axle (1st) turns in the same direction as the tractor motion. Mounted on this axle are cultivator blades working the soil to a depth of 5 to 6 cm, throwing the loosened soil backwards.

The back rotor axle (2nd) turns in the opposite direction of the tractor motion and is fitted with steel pins. This 2nd axle has a depth difference with the 1st axle. By turning in the opposite direction it reworks the soil thrown backwards by the 1st axle.

This finer soil is transported past the HOAF burners hence pasturizing it. This unique combination creates an optimal seedbed consisting of coarser soil at the bottom and finer pasturized soil on the top. The desired working depth can be set by means of depth wheels and top link adjustment.

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Gas-Technical details

Burners

The CultiClean is equipped with four burners each singularly fitted with its own ignition and safety precautions. As opposed to conventional weed burning technology, the CultiClean uses pre-mix burners with ventureries. These ventureries create an optimal mix of gas and air, resulting in a big, strong, blue flame.

The capacity of the CultiClean of the order that it uses a gas vaporization system, ensuring a unchanging high power without freezing problems. It therefore requires a liquid take-off system for the gas coming from the tank.

A hydraulically driven fan, placed on the metal cabinet, provides a slight overpressure in the burner cabinet resulting in an excess of available oxygen enhancing an optimal combustion. After shutting down the burners, the fan provides cooling for burners and fittings.

Nanometers have been placed on top of the cabinet visible from the tractor cabine. This enables a read out of the individual gas pressure per burner.

Control of the gas supply

The gas pressure is set at 1.0 bar as standard. Due to the unique venturie system in the burners, it is possible to vary the gas pressure up to a maximum of 1.5 bar, without destabilizing the gas and air mixture.

Operation

In the tractor cabine a water resistant swith box enables the operation of the burners. This box contains connector cables and signal lights and an acoustic malfunction detector.

Air assisted cleaning

The CultiClean is fitted with a 12V air compressor and a pressure vessel. Upon sut down of the burner, the pressure vessel blows air through the gas pipes and nogas nozzles. This effectively minimizes formation of soot in the nozzles.

Gas supply

Gas supply is not part of the equipment delivered. HOAF advises to use mobile ADR approved gas tanks. The machine comes with 7 meters of gas hose (0.5") to be fitted to these tanks by means of a standard gas coupling.

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Technical details

Gas	: Liquid propane / LPG.
Gas supply	: Liquid take-off gas tank.
Gas pressure	: 1.0 bar.
Theoretical gas use	: approx. 125 kg per hour.
Capacity	: approx. 1727 kW.
Power supply	: 12VDC-25Amp.
Ignition	: Electric.
Safety	: automatic shutdown. Ionization security.
Hydraulic capacity	: apporx. 20 liter per minute.

Dimensions

Working width	: 180 cm.
Width	: 2.40 m.
Length	: 2.00 m.
Height	: 1.40 m.
Weight	: 1300 kg.



The CultiClean bears the following hallmarks:

