

Ghibli

ENVIRONMENTAL SOLUTIONS



ISO 9001
CONFORME TO THE QUALITY
SYSTEM STANDARD ADAP 21110
and ISO 9001:2008

FD 906
Ed. 30/08/2016



THERMAL WEEDING

Thermal weeding standalone system

THE 100% ECOLOGICAL SOLUTION
AGAINST WEEDS

thanks to the action of high
temperature saturated steam

DHR 5

A standalone system
for thermal weeding



Herbicides danger for urban “décor”

WEEDS IN URBAN AREAS

Weed control is a primary necessity in garden maintenance and in urban areas management to avoid urban decline.



Important scientific studies have demonstrated that herbicides, as the ones commonly used for public spaces maintenance, can cause extremely harmful effects on human health, pets and damages to the ecosystem.



Herbicides can be transported by wind and by the runoff of rainwater with consequent widespread and uncontrolled contamination.

THE SOLUTION: thermal weeding with our DHR 5 is the innovative ecological response against weeds.

THE ECOLOGICAL SOLUTION

IS THERMAL WEEDING COMBINED WITH THE POWER OF SATURATED STEAM

The devitalization of weeds plant cells is guaranteed by the temperature of saturated steam.

Thermal weeding, with the combined action of saturated steam power, exerts very strong action on weeds.



Comparison between grass treated with DHR 5 system and non-treated areas.



THERMAL WEEDING WITH THE DHR 5 SYSTEM

The main parameter of the system is the right temperature of the fluid in the nozzle, as from this depends the system's efficacy.

Thermal weeding has many advantages for the environment and health as:

- it uses only water;
- it is safe, even in close proximity to sensitive places such as kindergartens, schools, hospitals, pet areas, and for wildlife habitat;
- its use does not require prior notification under the legislation in the field;
- it is safe for exposed workers, people and animals, during and after the treatments;
- it can be effectively used in any weather conditions;
- it does not interfere with biodiversity;
- it excludes the possibility of legal actions for improper use of herbicides;
- it excludes the need of health and safety requirements and personal protections for staff;
- It reduces allergies created by weeds and it obviously eliminates the allergies caused by herbicides;
- It eliminates the damages caused by aerial roots (see page 7)

DHR 5

THE 100% ECOLOGICAL
SOLUTION AGAINST WEEDS

BEFORE



5

AFTER



WEEDS CONTROL WITH THE STRENGTH OF OUR STANDALONE DHR 5 SYSTEM

This method is particularly suitable to eliminate weeds from sidewalks, from cracks along roads and walls, from flowerbeds and around the base of trees, even where the transfer of heat to the root system of weeds is more difficult due to the poor permeability of hard surfaces in urban environment as concrete, stone, asphalt, brick, etc.



NOT RECOMMENDED WEEDING SYSTEMS

FLAME WEEDING

The direct flame method has an unacceptable fire risk. Furthermore, the simultaneous combustion of extraneous substances and materials in urban areas can increase the risk of fire and generate toxic fumes / gases, and possible explosions caused by spray tins abandoned in the grass.

The use of open flames in public areas is normally prohibited by law.



REGULATORY ASPECTS FOR THERMAL WEEDING (PESTICIDES USE)

THE CRISTANINI DHR 5 SYSTEM MEETS THE INDICATIONS OF THE EU DIRECTIVES AND OF THE NATIONAL LEGISLATION

Directive 2000/60 /EC (Water Framework Directive - WFD) requires to achieve a “good status” of all European waters before December 31, 2015, identifying the following objectives:

- Reduction of the use of pesticides by 50%;
- Development of organic farming areas;
- Improvement of water quality in primary catchment areas.

In 2009 various directives ("pesticides package") were issued in the EU to reduce the risks for public health and to protect the environment from phytosanitary products, ensuring at the same time an effective protection of farming.

Here below we mention a few of them:

- EC Regulation n° 1107/2009 dated 21 October 2009 concerning the placing of plant protection products on the market, and entered into force on June 14, 2011;
- EC Directive n° 2009/127 dated 21 October 2009 concerning machinery for pesticide application;
- EC Directive n° 2009/128 dated 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides (see below);
- EC Regulation n° 1185/2009 dated 25 November 2009 concerning statistics on pesticides

The European Commission, with the support of the Countries with greater environmental sensitivity, envisages the elimination of chemical herbicides currently in use. In the near future, the adoption of alternative technologies to the use of pesticides, and in particular to the use of chemical herbicides, will be compulsory.

THERMAL WEEDING SYSTEM THROUGH SATURATED STEAM WITH DHR 5 STANDALONE SYSTEM

DHR 5 is a standalone thermal unit for weeding with saturated steam consisting of:

- Standalone engine. The noise level of the system is below 70 dB(A) at 7 meters;
- Pump with ceramic pistons;
- Boiler-burner with exclusive system operating at constant temperature;
- 10-meter long working tube;
- Lance with heatproof handle and double safety valve;
- Fuel tank for the heating unit;
- Water consumption: 2 l/m;
- Weight: 140 kg (without water).



STEAM BELL SAM 700

Accessory for easily rolling on irregular surfaces.



STEAM BELL SAM 600

Accessory to operate on small surfaces.



WW 105

Special stainless steel lance for steam that can be used with different accessories.



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