



20520006
Antidrastiras DS150
Stainless Steel Reactor

User Manual

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For claims under the warranty please contact your local supplier. You may also send the instrument directly to manufacturer, enclosing the invoice copy and by giving reasons for the claim.

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II. Safety

IMPORTANT Safety Items to be Observed.

Safety Warnings

! DANGER (may cause serious damage to property and / or casualties)

1. Please carefully read this User Manual prior to operating the instrument and observe the instructions on safe operation.
2. The power source must be grounded reliably and away from any sources of electromagnetic interference.
3. Confirm that the voltage and frequency of the power supply matches the specified voltage and frequency specified prior to use.
4. The instrument should be operated on an independent power outlet.
5. Do not allow the instrument to be plugged in or unplugged while the power switch is in the on position.
6. Do not modify the power cord.
7. The working environment must be free of any flammable, explosive, volatile or corrosive substances.
8. The instrument is deenergised only when the power cable is disconnected from the power source.
9. This instrument is for indoor use only.
10. The instrument should be operated in a low humidity, well ventilated, dust, and water free environment, without direct sunshine or an intense magnetic, light or heat source.
11. Ensure that the instrument and its accessories are free of any potential defects.
12. Ensure that the instrument is fastened tightly, and only standard accessories supplied by the manufacturers are used with this instrument.

! WARNING (may cause property damage or personal injury)

13. Prevent water from splashing on the electrical elements of this instrument.
14. Before assembly, disassembly, cleaning or maintenance, the power source must be disconnected.

! ATTENTION (may affect operational performance or service life)

15. When pulling the power plug out from a power source, do not pull out using the power cord directly.
16. Only accredited and qualified professional repair technicians can open the instrument or conduct required repairs. Persons performing repairs on the instrument other than those selected or approved by the Company shall operate to void any warranty contained hereinabove for the product

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18. Do Not Touch the Chamber Door, the Chamber Body, or the Surrounding Surface when the Set Temperature is Over 80°C (176°F) to avoid burns.
19. The 304 Stainless Steel liner is Not Acid Resistant, please adhere to advised Anti-Corrosion measures and NEVER use Acidic media within the Oven to prevent damage

III. Stainless Steel Reactor Introduction

The cylindrical stainless steel reactor is vertically oriented and fixed in place by a supporting stand. The reactor consists of an inner containment chamber and an outer insulating housing chamber. The containment chamber is heated by steam that flows between the inner and outer chamber walls. Steam has the advantage of minimizing the potential of localized “hot spots” and avoiding scorching the containment liquid tank. It also allows the thermal exchange to be done over a much larger surface area than a heating element and permits a more homogeneous heating of the reactor’s content. The reactor is made of acid and heat resistant austenitic stainless steel. It is easy to install and operate and has been shown to be safe and reliable.

3.1 After Sales Support

If problems are encountered or technical support is required when installing or using the instrument, please contact serviceusa@hollandgreenscience.com

The Company may provide technical assistance and information regarding the instrument or equipment or Service without charge at its sole discretion. Buyer assumes sole responsibility for any reliance on or use of such assistance and information, and the Company makes no warranty thereon.

Upon contact the following information is required:

- Product serial number (located on the instrument nameplate)
- Description of issue or problem
- Method and / or operating steps you have undertaken towards resolution.
- Your contact details including telephone number and email address.

3.2 Proper Use

The instrument is designed for non-residential use and to be used in conjunction only with accessories recommended within this manual and by the manufacturer.

IV. Technical Specifications

Model	20520006
Product Name	Antidrastras DS150
Tank Volume	150 L
Steam Pressure	0.8 Mpa
Heat Exchange Area	2.5 m ²
Motor Power	1500 W
Distance Between Discharge Port and Ground	400 mm – 410 mm
Hoisting Weight	200 kg
Receiving Tank Volume	100 L

4.1 Characteristics

- SUS304 stainless steel is used for the reactor. The reactor chamber is a vertically oriented closed cylindrical tank with standard welded oval heads on both sides.
- The reactor top has a liquid inlet port, a tank washer port, an access and vent port. The bottom of the tank has a liquid outlet port.
- The reactor is corrosion resistance and may operate over a large temperature range. It is extremely durable and simple to operate.
- The reactor's containment chamber may be easily cleaned by flushing water in both directions.
- The reactor is equipped with access ports for maintenance and repair.

V. Standards and Conformity

Construction in Accordance with the following Safety Standards:
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EN IEC 60079-0:2018 EN -1:2014 IEC 60079-26-2014 EX II 2 G EXd ia IIB T2 Gc
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Construction in Accordance with the following EMC Standards:

EN ISO 12100:2010 EN 60204-1:2018 EN ISO 13849-1:2015 EN 61000-6-4:2019 EN 61000-6-2:2019
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VI. Inspection

6.1 Packing List

Unpack the equipment carefully and check for any damage which may have arisen during transport. In the event of identified damage, please contact serviceusa@hollandgreenscience.com.

The package includes the following items

Type	Quantity
Main Unit	1
Quick Setup Card	1

VII. Operating Instructions

- The stainless steel reactor is manufactured according to JB/T4735-1997 Steel Welded Atmospheric Pressure Vessels standards. Pressured steam should not exceed the rated maximum working pressure for any significant amount time. Steam should be introduced by slowly opening the inlet valve until the desired pressure is achieved.

If a trap is installed, the valve at the condensate outlet should always be left open. If there is no trap, the valve should initially be turned on until the steam overflows and then the valve should be adjusted for a minimal outflow. The valve can be adjusted to increase or decrease pressure as needed. When operating the chamber, use the reactor inlet valve to adjust chamber pressure in real time.

- A hoist is recommended for installation or relocation of the reactor. It is recommended that thinned cushioning materials are used to cover any part of the equipment that is in contact with the hoist cables to prevent damage. Avoid violent jarring and excessive tilting during transportation and orient the chamber horizontally at the set location for connecting plumbing fixtures and hoses.
- Before using the reactor should be inspected that all valves should be secure and there is no leaking. it is recommended to test for leaks with water.
- The reactor should be cleaned with detergent before use. All valves should be closed prior to cleaning. Make sure the liquid type is allowed to be put into the stainless steel tank.
- Only use liquid that is recommended for cleaning the stainless steel chamber.
- Clearly mark all chemicals that are used for processing to prevent accidents. It is recommended that a drainage ditch and a diluting device are present at the site where the reactor is located.
- The maximum filling volume of the tank should not be exceeded. The maximum filling of the tank can be calculated according to the formula given below:
Maximum filling volume = the filling volume factor x the actual volume of the tank x the saturated liquid density of the medium at the designated temperature.

VIII. Pneumatic driven stirring system (optional)

Motor model	DAM4
Motor power	1/3HP
Torque	2.16NM
Rotational speed	0~900RPM Stepless Speed Control
Max air consumption	267L/min
Drum capacity	80L~150L
1. Regularly add lubricating oil to the control valve and air supply triplet. 2. Periodically drain any standing water in the triple. 3. The air outlet filter cotton of the pneumatic motor needs to be cleaned twice a week. 4. The motor should be serviced at least once every six months.	

IX. Maintenance and Cleaning

- All reactor flanges, joints and sealing rings should be inspected and cleaned as necessary to prevent leakage.
- Thermometers, pressure gauges and safety valves should be regularly inspected and or replaced as required.
- Abrasive tools (such as wire brushes, etc.) should not be used to clean the reactor to avoid scratches and scarring.
- It is recommended that the reactor be cleaned following every use.
- A water pressure safety test is recommended after the first 5 years of usage. Future testing should be done according to the company's own standard.
- If pitting or other damage occurs to the reactor walls that reduce the thickness to less than 3mm, the reactor is not suitable for safe use.