DRESTER DB22C Boxer Double Combo Instruction Manual

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DRESTER DB22C Boxer Double Combo

Product Information

- **Product Name:** Dresser Boxer Double Combo
- **Model:** DB22C / DI22C
- **Languages:** English (ENG), German (DE), French (FR), Swedish (SE), Italian (IT), Spanish (CONTENIDO)
- **Purpose:** The Dresser Boxer Double Combo is designed for cleaning air-driven spray-guns that have been used for painting.

Product Usage Instructions

1. **Mounting the Machine**
   - Follow the instructions provided in the user manual for proper mounting of the machine.
2. **Installation**
   - Refer to the installation section of the user manual for step-by-step instructions on how to install the Drester Boxer Double Combo.
3. **Auffangwanne**
   - The Auffangwanne is a collection tray. Learn how to use and maintain it by referring to the user manual.
4. **Starting the Machine**
   - Follow the provided instructions in the user manual to properly start the machine.
5. **The Coagulation Process**
   - Understand and follow the coagulation process explained in the user manual.
6. **Filter Replacement**
   - Refer to the user manual for guidance on how to replace the filters.
7. **Maintenance**
   - Learn about the maintenance requirements and procedures by reading the maintenance section of the user manual.
8. **Safety Information**
   - Ensure you are aware of the safety guidelines provided in the user manual for the safe operation of the Drester Boxer Double Combo.
9. **Technical Specifications**
   - Refer to the user manual for detailed technical specifications of the Drester Boxer Double Combo.

PURPOSE OF THE MACHINE

The unit is intended for cleaning air-driven spray guns that have been used for painting.

The unit has two separate areas for cleaning:

1. An automatic washer (item 1 illustration 1), intended for cleaning of spray-guns with gravity-fed paint-cups.
   In this washer, either thinner-based solvents or water-based solvents can be used.
2. A sink (item 2 illustration 1), intended for manual cleaning of air-driven spray guns that have been used for painting with water-based paint systems, as well as of other tools used in connection with vehicle water-based paint jobs like filler scrapers, paint brushes, and such.
   In this sink water only shall be used.

All other uses of the unit are not allowed like:

- Emptying excess paint into the unit
- Cleaning of electric chargeable items
- Collecting various waste
- Cleaning of textile materials
- Storing of items
- Cleaning of hands or other parts of the human body
- Cleaning of any items for food or drinks

ASSEMBLY

- First of all, check if the machine has been damaged during the transport. Remove the packaging and check again that the machine has not been damaged during the transport. If so, report this immediately to the transport company.
- Fit the air-driven extractor (item 3 illustration 1) over the flange of the automatic washer, and connect it to the blue air hose (taped on the backside of the unit) by sticking the hose into the connector of the extractor.
- The air-line on the left side of the unit (item 4 illustration 1) is during transport placed inside the unit. Take it out, and fasten it with the magnet in a convenient place on the left side. The air-line can be routed either outside the side wall or through the gap between the front lid and the side wall. This airline is intended to blow out the spray gun after the cleaning procedure.
- The air-gun on the right side of the unit (item 12 illustration
  1) is during transport placed inside the unit. Take it out, and fasten it with the magnet in a convenient place on the right side. The air-line for the air-gun can be routed either outside the side wall or through the gap between the front lid and the side wall.
  This air gun is intended to blow the spray gun dry after the cleaning procedure.

PLACING THE UNIT

The DRESTER BOXER DOUBLE C is equipment Category 2 (ref. ATEX-directive 2014/34/EU) and may therefore be placed in locations classified as Zone 1 (ref. ATEX-directive 1999/92 EC). If the DRESTER BOXER DOUBLE C is installed in locations classified as Zone 2 (or in unclassified locations), the space within 1 m of the DRESTER

BOXER DOUBLE C is to be classified as Zone 2, and the inside of the ducting as Zone 1 (see illustration 17). Within this area, all equipment such as electrical items must be approved for the Zones described. Equipment that generates naked flames or sparks (e.g. welding or grinding equipment) may not be used in this area. Smoking is not permitted. If in any doubt, contact the local fire service authorities for advice.
This manual is part of the unit and must be available at all times.

INSTALLATION

Compressed air

- The unit must be connected to compressed air of 7-12 bar (110-180 psi). When in use, the unit consumes 250 liters/min (9 cfm) of air.
- The air is to be connected to the moisture trap inside the unit (item 1 illustration 2). To access this point, remove the front panel (item 5 illustration 1) by lifting it up and out. The air-line can be led into this point via the slots on the side of the unit, or through the open back of the unit. In either case, make sure that the air-line do not bend the hoses or in any other way harm the pneumatic system of the unit.
- To prevent pressure drops, the airline and couplings must be adequately dimensioned. The regulator on the unit is pre-set to 6.5 bar (100 psi). This is the optimal setting and must not be altered.
- The compressed air supplied to the unit must be clean and dry. If it is not first led through a water trap and filter, it may cause damage to the pneumatic components of the unit, which will invalidate any warranty claims.
- Fit a connector to the airline on the left side of the unit (item 4 illustration 1). This air line is intended to blow out the spray gun after the cleaning procedure.

Grounding the unit
Make sure that the unit is properly grounded by using the grounding cable (item 6 illustration 2).

Ventilation

- The air-driven extractor must be connected to a metal ducting to lead the exhaust outdoors. An alternative is to lead it into a hood that is in turn connected to a suitable ventilation system approved for Zone 1. This hood should have an open design so as to avoid constant extraction (see illustration 10).
- The metal ducting may not be longer than 15 metres, and must be connected in such a way as to ensure grounding.

PERMITTED SOLVENTS

The unit has two separate areas for cleaning:

1. The automatic washer (item 1 illustration 1). In this washer solvents and solvent mixtures intended for spray-gun cleaning, such as acetone, toluene, isobutanol, xylene that are listed as Group IIA according to IEC 79-20 (EN 60079- 20) water or water-based solvents can be used.
2. The sink (item 2 illustration 1). In this sink water only shall be used.

The solvent must have a pH value between 4 and 10. Be sure not to mix the water with the solvent. It is important that all users are informed of what solvent is being used, at all times.
Never use any solvent if it is not provided with an MSDS (Mate-rial Safety Data Sheet). Read the MSDS carefully, and follow all the instructions and procedures provided in the MSDS. If un-sure, or if more information is needed

concerning the solvent, please contact your solvent supplier.

Do not add other chemicals to the solvent including, but not limited to, kerosene, gasoline, detergents, fuel oil or chlorinated solvents.

PERMITTED SOLVENT DRUMS

The DRESTER BOXER DOUBLE C can be used with different types of drums, but they must comply with the following:

- The drums must fit into the unit
- The drums must be leak-free.
- The drums must be made of a conductive material.
- Check for local regulations concerning max allowed volume for keeping solvent in the unit

Solvent drums are not provided by Hedson Technologies, thus Hedson Technologies does not take any responsibility for the drums. Follow the solvent supplier's instructions carefully.

COLLECTING TRAY

The unit must be installed in such a way as to prevent accidental leakage of solvent from spreading into a drain water system, thus representing a hazard to the environment. This can be done by:

- Installing the unit in a location where the floor and walls can hold any accidental drum leakage, or equipping the unit with a collecting tray beneath the solvent drums that is large enough to hold the volume of at least one leaking drum.

PREPARATIONS FOR USE

Solvent drums

- Remove the front panel (item 5 illustration 1) by lifting it up and out.
- Remove the foot-pedal console (items 6 illustration 1) by lifting it up and folding it out to the side (see illustration 2).
- Two drums are needed, both half-full of solvent. Both drums must be of the same size, and they must meet the requirements described under chapter PERMITTED SOLVENT DRUMS. Both drums must be clean on the inside and they must not contain any solids or other objects that could be sucked into the pumps when running.

Drum plugs
There are several types of solvent drums on the market, each with different diameters of the opening. With the unit, cardboard boxes with a selection of tapered plugs are supplied (see illustration 3). Select the plugs that fit well into the opening of the drums, and fit them onto the drum adaptors of the hoses (see illustration 4).

Solvent fill-up

- Use two drums of identical size half-full of clean solvent.
- Place one of the half-full drums under the unit (item 2 illustration 2). Insert the group of hoses containing the

drain hose from the automatic washer into this drum (item 4 illustration 2). Make sure that the hoses are properly led well down into the drum, and that the opening is well sealed by the tapered plug.

- Place the other half-full drum under the unit in front of the first one (item 3 illustration 2). Insert the 6mm hose into this drum (item 5 illustration 2). Make sure that the hose is properly led into the drum all the way down to the bottom, and that the opening is well sealed by the tapered plug.
- The inner drum contains the circulating solvent for the pre-wash cycle, and the outer drum contains the solvent for rinsing. The contents of the outer drum will gradually be used up and transferred to the inner drum.

Note: The free volume in the inner drum must always be larger than the volume of solvent in the outer drum, otherwise, the inner drum might overflow.

The solvent system is now filled up.

Water
Fill the filtrate container (item 7 illustration 2) up to 100mm (4”) under the upper edge with clean water.

Operating instructions
Operating instructions should be formulated on the basis of this manual and translated into the language spoken by the employees. It should always be available close to the machine. To avoid confusion, the employees must be informed about the solvent currently being used in the machine.

OPERATING INSTRUCTIONS FOR THE AUTOMATIC WASHER

- Empty the spray-gun of any residual paint into a separate spills-dish.
- Open the main valve for compressed air (item 7 illustration 1).
- Close the lid for the sink, and open the lid for the automatic washer.
- Place the spray gun inside (see illustration 5).
- Be sure to fit the trigger clip following illustration 6, and to push the spray gun up against the nozzle for the paint channel (item 1 illustration 5) before you lock it into position with the aid of the magnets of the trigger clip.
- If you prior to cleaning prefer to remove the air cap and the needle of the spray gun, then place those items as shown by arrow 5 in illustration 5.
- Close the lid, and start the automatic pre-wash cycle by pressing the foot pedal No.8 in illustration 1. The spray gun will now be automatically cleaned for approx. 1.5 minutes with circulating solvent.
- Open the lid when the automatic pre-wash cycle is completed. The parts of the spray gun can now be rinsed with clean solvent.
- By pressing foot pedal No.11 illustration 1, the clean solvent will be fed through the spray nozzle placed inside the automatic washer (item 4 illustration 5).
- Connect the spray gun to the airline on the left side of the machine (item 4 illustration 1), and blow out the spray gun through the funnel inside the automatic cleaner (item 3 illustration 5). By using this funnel, you prevent the fumes from spreading within the premises.

Finally, the spray gun can be blown dry by using the air gun on the right side of the unit (item 12 illustration 1). Close the lid after cleaning.

OPERATING INSTRUCTIONS FOR THE MANUAL SINK

- Empty the spray-gun of any residual paint into a separate spills-dish.
- Open the main valve for compressed air (item 7 illustration 1).
- Close the lid for the automatic washer, and open the lid for the sink.
- By pressing foot pedal No.10B in illustration 1, recirculating water will be fed through the cleaning brush placed in the sink (item 1 illustration 7). Note that the ball valve on the brush (item 6 illustration 7) must be in an open position. Use the cleaning brush to clean the spray gun.
- The spray gun's paint channel can now be rinsed with clean water. Press the tapered nozzle of the rinse gun (item 2 illustration 7) against the paint channel of the spray-gun. Pull the triggers on the spray- and rinse guns simultaneously. Then rinse the outside of the spray-gun with the rinse-gun.
- When using the rinse gun, the ball valve on the wash brush should be in a closed position.
- The brush and rinse gun in the sink can be used independently of the automatic washer at any time.
- Connect the spray gun to the airline on the left side of the machine (item 4 illustration 1), and blow out the spray gun through the funnel in the sink (item 3 illustration 7). By using this funnel, you prevent the fumes from spreading within the premises.
- Finally, the spray gun can be blown dry by using the air gun on the right side of the unit (item 12 illustration 1).
- Close the lid after cleaning.

THE COAGULATION PROCESS

1. **CHECKING THE FILTRATE CONTAINER**
   When the water level reaches the level of the working platform (item 4 illustration 7), it is time to perform the coagulation process.
   First, check that the remaining content of the filtrate container (item 7 illustration 2) is not higher than 25mm (1").
2. **COAGULATION**
3. **N.B.:** IT IS ABSOLUTELY VITAL THAT THE COAGULATION PROCESS IS CARRIED OUT WITH THE GREATEST CARE SO THAT LARGE FLOCKS OF COAGULATED PAINT ARE FORMED. OTHER-WISE THE FILTERS WILL IMMEDIATELY BECOME OBSTRUCTED, AND CANNOT BE RE-USED.
   - **A:** Remove the working platform (item 4 illustration 7).
   - **B:** Open the valve for the water agitator (item 5 illustration 7). C: Add the coagulation powder as recommended by the paint manufacturer.
   - **D:** Stir the powder with a stick for a moment to avoid that it sinks down to the bottom in lumps.
   - **D:** Allow the agitator to run for a few minutes.
   - **E:** Stop the agitator occasionally for around 30 seconds since this improves the coagulation process. The total coagulation time is around 3-4 min, depending on the amount of powder, the level of contamination, etc.

When this is done, close the valve for the agitator.

FILTRATION

Open the drain valve (item 10 illustration 2) and drain the wash basin completely into the filter (item 11 illustration 2). Clean the inside of the wash basin thoroughly with the clean-ing brush (i.e. with recycled water), so that any remains of residual flocks are completely drained into the filter.
When this is done, close the drain valve

CHANGING THE FILTER

N.B.: MAKE SURE THAT YOU USE ORIGINAL DRESTER FILTERS, NR. 8701 (FINE FILTER), AND NR. 8702 (PRIMARY FILTER). THESE FILTERS HAVE BEEN TESTED AND APPROVED BY THE PAINT MANUFACTURERS.

The primary filter (item 2 illustration 11) collects most of the coagulated sludge, while the fine filter (item 1 illustration 11) collects the finer paint particles.
Remove the sludge from the primary filter after each coagulation process (once it is completely dry, the sludge is easy to remove from the filter). By doing so the primary filter can be re-used up to 10 times.

The fine filter will gradually become blocked after trapping the finer paint particles. In general, the fine filter can be used for up to 5 coagulation processes. The fine filter must however be changed every 1-2 months, otherwise, there is a risk that mold will develop.

N.B.: THE COAGULATION SLUDGE MUST BE HANDLED IN ACCORDANCE WITH REGULATIONS FROM THE APPROPRIATE AUTHORITY. INFORMATION FROM THE PAINT SUPPLIER MAY BE NECESSARY.

SERVICE

Weekly

- Remove the strainer at the bottom of the automatic washer (item 2 illustration 5) and clean it, do not forget to re-fit it!

Monthly

- Remove the five nozzles automatic washer and clean them with clean solvent. (see illustration 8).

When changing drums

- Check and if necessary clean the strainer on the suction hose for circulating solvent.

When changing filters

- Check and if necessary clean the strainer on the suction pipe (item 15 illustration 2).
- Take out the filtrate container (item 7 illustration 2) and empty it completely. Rinse it with water and wipe it off with a cloth or paper.

Every month

- Change the water completely.

SAFETY INFORMATION

Hazards may arise from improper use of the DRESTER BOXER DOUBLE C. Hazards may also arise from improper choice/handling of drums or solvent. In order to maintain the high safety standard of the unit, it is important that these instructions are followed.

- Do not operate the unit until you have read and fully understood this entire User's Manual.
- The unit should be installed as described in the instructions.
- The unit should be used as described in the instructions.
- The unit should be maintained as described in the instruc-tions.
- Only original spare parts may be used.
- This User's Manual must be available and in legible condition in close proximity to the unit. Every user shall know where to find the User's Manual.
- Operating instructions should be formulated on the basis of this User's Manual, and translated into the language spoken by the employees.
- Do not modify or in any way alter the unit.
- Do not operate the unit unless it is properly vented. Do not operate the unit if the extraction of vapors is insufficient.
- Avoid contact with liquid and vapor. Refer to the solvents' MSDS (Material Safety Data Sheet).
- Wear chemical goggles or similar, to protect your eyes. Wear chemical-resistant gloves to prevent skin contact. Wear chemical-resistant clothing to protect against spills or splash.
- Personnel suffering from respiratory problems or allergies to solvents used, must not operate the machine.
- Clean up spills immediately. Solvent vapors are heavier than air and can spread a long way. They may also collect in pits or other low areas.
- Do not smoke, eat, or drink while close to the unit.
- The unit is equipped with a safety valve that will interrupt the automatic wash cycle if the lid is opened before the wash cycle is completed.
- A fire extinguisher must always be kept nearby when working with flammable solvents. Do not use water.
- Spray guns or any other paint equipment items cleaned in the unit must be suitable for cleaning in a Zone 1 area (ref. Category 2 according to EN 13463-1/2001). If unsure, please contact the spray gun manufacturer.
- The unit must be properly grounded using the attached grounding cable. If plastic drums are used, the openings should be wiped off with a damp cloth, to avoid static electricity, before inserting or removing any hoses or other equipment.

TECHNICAL DATA

- **Manufacturer** HEDSON TECHNOLOGIES AB Hammarvägen 4 SE-232 37 Arlöv Sweden
- **Tel.:** +46-40- 53 42 00
- **Type of machine** DRESTER BOXER DOUBLE C
- **Permitted solvents** See section "Permitted Solvents"
- **Max solvent volume** 30 liters (Check for local regulations concerning max allowed volume for keeping solvent in the unit)
- **Maximum drum size** 30 litres
- **Compressed air needed** 7–12 bar (110-180 psi), 350 l/min (13 cfm
- **Extraction capacity** 144-360 m3/h (85-212 cfm) -> 0,2-0,5 m/s (0,7-1,6 fps)
- **Pump capacity** 10 l/min
- **Solvent pressure** 2 bar (30 psi)
- **Weight** 65 kg (140 lb)
- **Overall dimensions** Height: 1510 mm (59,5")

- **Width:** 835 mm (33”)
- **Max depth:** 650 mm (25,5”)
- **Depth at the floor**: 610 mm (24”)

- **Extractor diameter** 80 mm (3 3/16”)
- **Sound pressure level** <70 dB(A)

CONTACT

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Documents / Resources

	DRESTER DB22C Boxer Double Combo [pdf] Instruction Manual DB22C, DB22C Boxer Double Combo, DB22C Boxer Double Combo, Double Combo, Combo, Boxer Combo, Combo, DI22C

References

- Home - Hedson