

## **CORRECT USE OF the Boss 1330 & the CHIEF 700 (PronixNova Portable, Electric, ULV Mist Applicators)**

This Technical Bulletin discusses how best to use the machines SAFELY, EFFICIENTLY and EFFECTIVELY

### **Safety is the No.1 Priority:**

- 1. Be aware of the Machine in Use and the contents it carries. Read the Operating manual before operation.**
- 2. The BOSS 1330 and CHIEF 700 - are powered by ELECTRICITY – they are no different from the other electrically powered “Power Tools” and must be given the same respect as one would give a power drill, a power router or a saw.**
- 3. When using these machines – lift and carry the machines using the handle only – do not lift and support the machines with a hand under the Formulation Tank – there is a real possibility of transferring chemical residues to the body – picked up through spillage and every time the machine is at rest on a surface. Similarly, the power cord is a potential source of contamination. Wipe clean after every operation.**
- 4. The BOSS 1330 and CHIEF 700 – are designed to apply (spray) a range of liquids, as fine droplets, such as Pesticides, Odour Neutralisers, Disinfectants and Sanitizers. These machines are ‘space sprayers’ of fine droplets and are not for use with heavily applied products. Safe use of all these compounds is also paramount. READ and UNDERSTAND the label of each and every chemical/disinfectant type to be applied.**
- 5. When treating enclosed areas ALWAYS turn off all ignition points – such as pilot lights and other naked flames.**
- 6. Do not overtreat in enclosed areas. Do not apply more than 3 litres of spray product in a space volumes of 1400m<sup>3</sup> or less.**

### **Before spraying a building, room or space:**

- 1. Decide on the treatment site to be sprayed**
- 2. Measure the volume of the treatment site – Length x Width x Height.**
- 3. Measure the volume of all the internal fixtures and total the volumes of those in the treatment site.**
- 4. Subtract from the Volume of the treatment site (2) above, the total volumes measured in (3) above.**

5. The resulting volume calculated is the **TOTAL VOLUME to be treated**. This is the most important figure.
6. Cover all sensitive equipment in the area to be treated – ie. computers, telephones, exposed items which cannot be removed for spraying. Wipe these surfaces with a suitable product if disinfecting or sanitising.
7. Select the chemical product to be used. Understand the application rate that needs to be applied – according to the chemical product chosen and recommended on its label.
8. From the chemical label determine the amount of chemical product to be applied and mix with the required amount of water (as recommended on its label). This is called the solution.
9. Pour the solution into the formulation tank of the machine.
10. Apply the solution to the space to be sprayed.
11. Depending on the size of the space to be treated there is generally no need to step inside the treatment site, i.e.  
  
for household rooms, offices, bar areas of pubs, hotel & motel rooms, smaller restaurants just apply the solution from the doorway - close the door after treatment.  
  
for large spaces divide the treatment site into 2 or 3 areas, spraying the furthest area first then walking back toward the exit door spraying as you go until the total area is treated. In the larger treatment sites the use of circulatory fans is an advantage.
12. When all the solution is applied to the space to be treated the job is completed. When the spraying is completed thoroughly wash and clean all application equipment. Do not store the equipment unless it has been cleaned.

### **When spraying is completed:**

When the spraying is completed thoroughly wash and clean all application equipment.

Do not place in storage equipment unless it has been cleaned.

### **Do's and Don'ts:**

1. Wherever possible do not let the power cord drag along the surface or into areas already sprayed.
2. Do not leave the machine operating continuously at one site – certainly not without the assistance of circulatory fans to push the ambient air around the treatment site.
3. Do not let the machine “suck” back into its system previously sprayed droplets.

**4. Do not hold the machine by any part other than by the Handle – be aware that the machine will become contaminated by the solution being applied during a spraying operation. Avoid a much contaminant as possible. Always use personal protection equipment such as gloves and face masks as recommended for the product being sprayed.**

**5. Do make sure all nozzle, tank and filtration caps are fully secured.**

**6. Do not spray directly into small cracks, crevices, corners – this will create a run-off situation and that indicates the rate of spray in those sites to be far too high.**

**7. Do ensure children, pet animals and other livestock are not in the treatment site during or after the spraying operation. Read the label of the product being applied for information on when you may re-enter the treated site.**

### **Output per hour, per minute, per m<sup>3</sup>**

The basic starting point must be SAFETY – do not spray (apply) more than 3 litres of solution liquid (which is converted to droplets) per 1400 m<sup>3</sup> of an enclosed environment (approximately 2.14 mls per m<sup>3</sup>)

**For example, in a room 5m x 5m x 5m = 125 m<sup>3</sup> volume, DO NOT SPRAY more than 268 ml of solution into that space.**

Note: The above has a significant margin for error, 2-3 times, calculated in it as a suggested safety margin and is governed by the flammability of the product being applied so labels must always be read.

How to determine the amount of solution being applied into a volume?

### **Output**

We supply a choice of FSFR's, flow rate valves which can be fitted to the machine.

Based on approximately 2.14 ml spray solution misted per m<sup>3</sup>

<b>FSFR Value</b>	<b>Output/minute</b>	<b>Space volume treated per minute</b>
#20	83 ml	39 m <sup>3</sup>
#28	167 ml	78 m <sup>3</sup>
#37	270 ml	126 m <sup>3</sup>
#42	342 ml	161 m <sup>3</sup>
#47	433 ml	203 m <sup>3</sup>

Using only the needle valve and no FSFR valves –

Fully Open	1000 ml	467 m <sup>3</sup>
4 Turns	667 ml	312 m <sup>3</sup>
2 Turns	333 ml	156 m <sup>3</sup>