



'SC' OPERATION & INSTALLATION MANUAL



SC-50 SHOWN ON OPTIONAL MEZANINE TO INSTALL ABOVE BALER

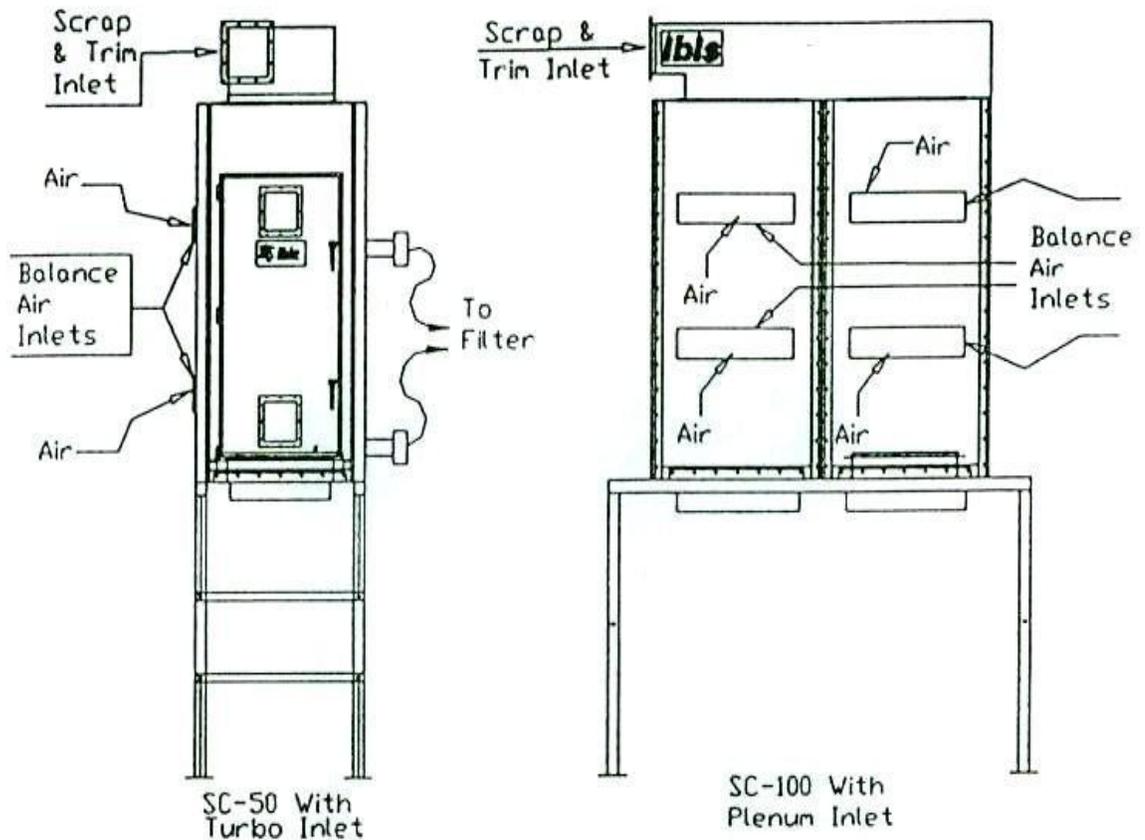


FIGURE 1

INTRODUCTION

The Multi Application Scrap & Trim Collector (“SC”) was developed by ibis International to give a reliable but economical solution to your application requiring collection of various process scrap & trim. The “SC” is a passive type manual collector with no moving parts or power requirements.

The “modular” configuration allows several different versions of the “SC”. This design allows for the maximum amount of flexibility. Units are shipped fully assembled or disassembled (knocked down) for easy shipping and field assembly. Existing units can be extended or modified as required due to the bolted assembly design.

OPERATION

The "SC" design allows for a simple "Balanced Air" principle of collection. The theory of operation is to balance the volume of incoming product conveying air with the outlet air to the filter system and fan.

The collected scrap, trim, culls, etc. will be pneumatically conveyed to the "SC". The inlet may be a "Turbo" or "Plenum" design (see Figure 1). In either case, the inlet connects to one or more internal sleeves. Normally, this sleeve is 30 inches in Diameter (762 mm.) by 84 inches long (2134 mm.) and constructed of a mesh or screen fabric. In some cases of sharp or abrasive scrap, a perforated metal sleeve will be used at the top with the lower portion made from the mesh fabric. As the collected scrap rotates in the vortex within the sleeve, the conveying air passes through the sleeve to outlet air connections to the filter and fan system. Since this is a "Balanced Air" system or "Push-Pull" design, the outlet air must be adjusted to more – or – less equal the inlet air. This is accomplished with outlet duct slide dampers and/or "Balance Air" inlets located across from the outlet slots (See Figure 2).

As the conveying air passes through the sleeve, the cross draft of air carries any remaining fine dust and fiber to the outlets. This creates a "zero" pressure condition allowing the scrap/trim to fall to the bottom of the sleeve and into final collection device.

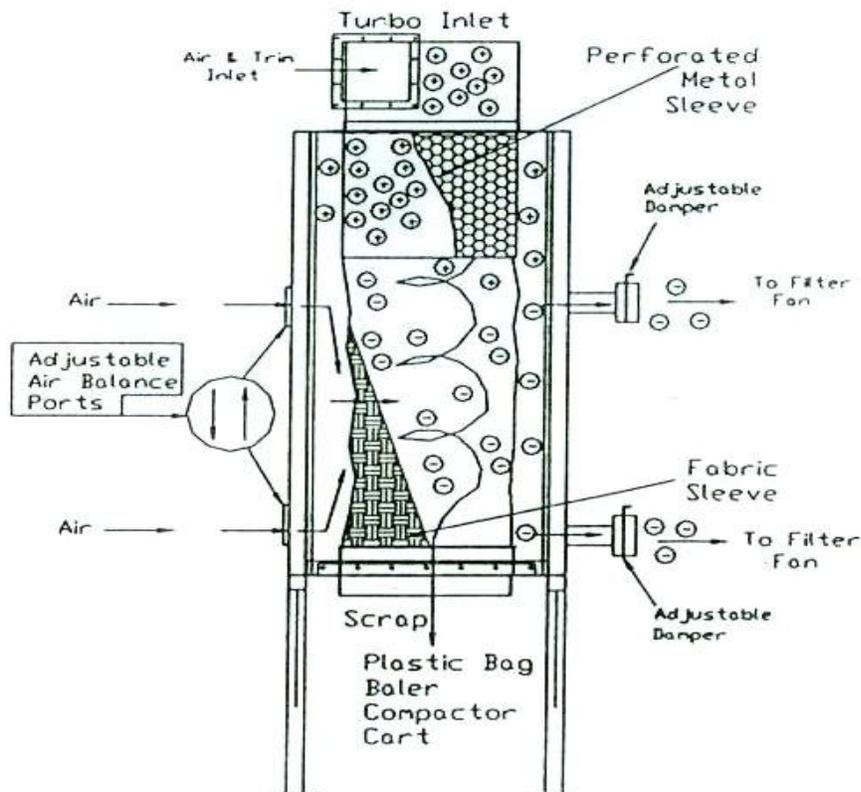


FIGURE 2

MAINTENANCE

Due to the simple design, there is very little maintenance required on the "SC" series scrap trim and cull collectors.

If the unit is fitted with the perforated metal inlet sleeve, it will be attached at the top with an angle ring flange to match the inlet bolt hole pattern. The bottom will be fitted with a sleeve collar and steel holding band to secure the fabric sleeve. The typical unit will have the top 25-30 percent of the sleeve manufactured from perforated metal and the bottom 70-75 percent manufactured from the mesh fabric. The fabric sleeve is secured on the bottom 30" diameter collar (767 mm.) by a small steel holding band. The fabric sleeve will have a plastic hoop in the center to maintain the sleeves shape.

The condition of the fabric sleeve should be checked for any holes or tears and repaired or replaced immediately to prevent excess dust/fiber from going into the filter. Holes and tears can also cause material blockage or "plugs" in the sleeve. The size of the perforated and mesh fabric can vary and can also be supplied in a "bottomless" design allowing almost all of the dust to fall with the collected scrap/trip. For general information on adjusting the inlet "Balance Air" & "Outlet Air to Filter/Fan", see figures 3 and 4.

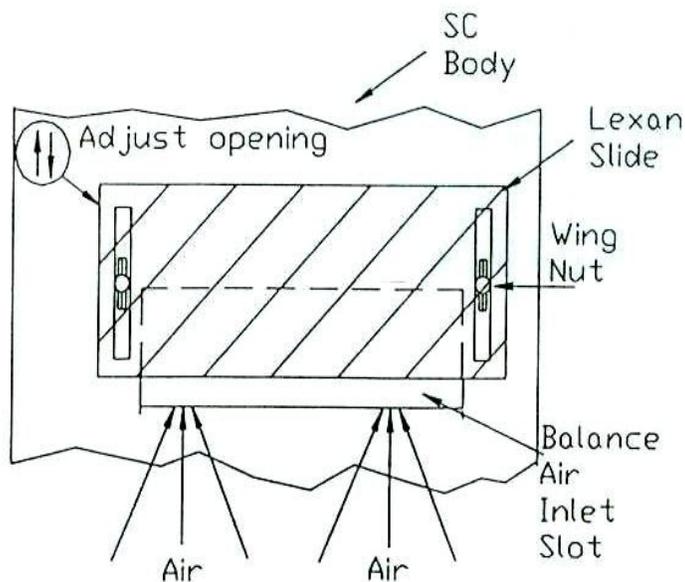


FIGURE 3

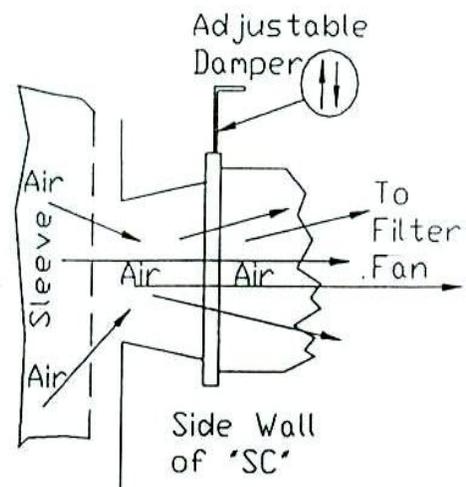


FIGURE 4

CHANGING FABRIC SLEEVES

1. Open access door – remove from “Lift Off” hinges.
2. Loosen top and bottom sleeve holding band held captive with belt loops in sleeve.
3. Remove sleeve and bands from unit.
4. Replace sleeve checking to be sure all raw edges of the fabric seam are in direction of vortex or sir rotation within the sleeve.
5. Normally, a plastic pipe “hoop” is installed in belt loops in the center of the fabric sleeve. This keeps the sleeve “open” and promotes the falling of the material while preventing blockage.

CHANGING THE PERFORATED CYLINDER/SLEEVE

1. Remove fabric sleeve and hoop.
2. Loosen/remove bolts in top angle ring of perforated metal cylinder.
3. Remove cylinder assembly.
4. Repair and replace by reversing the procedure listed above. In some cases you may change the perforated hole sizes or add a fabric mesh sleeve over the perforated.

BALANCING THE UNIT

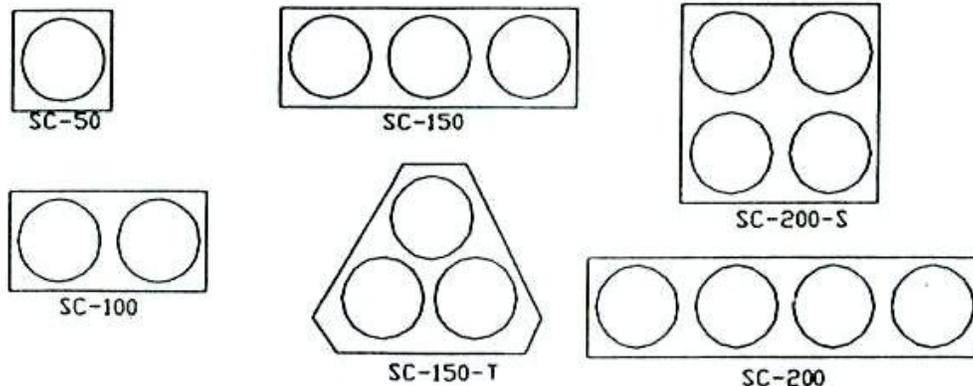
Balancing a “push-pull” System requires some trial and error procedure. The air outlet(s) of an “SC” must connect to a negative (-) air filter and fan system. This is the “pull” part of the system. Normally the Lexan “Bleed Air” ports will only be open 25-35 mm. (+ -) creating a slight cross draft to the outlets(s) to the Filter & Fan System. Allow the outlet dampers to be completely open when starting the balance procedure. The material in the sleeve should “Fall” or “Float” quickly to the bottom of the sleeve and into the final collector. The bottom of the “SC” should be almost neutral with very little airflow. If too much air is blowing out of the bottom, open dampers and or increase filter fan speed. If air is being pulled back into the sleeve at the bottom, begin to close the damper to the Filter/Fan and/or begin to open the “Bleed Air” ports. The collected scrap/trim should not have excessive “Float” or “Hang Time” in order to minimize jams.

The final balance should consist of fine adjustments between “Bleed Air” ports and outlet air dampers. In all cases, the Filter/Fan System must have a 10-15 percent greater capacity than the incoming or conveying air. This is the only way that you can be assured of maintaining a very slight negative (-) or vacuum in the Scrap Collector.

IBIS RECOMMENDED SPARE PARTS

PART NO.	DESCRIPTION
22012	SC-50 52 mesh sleeve 30 X 62
41409-2	Holding band 30" DIA with draw latch
22077	Plastic bag, 4 ml, 28 x 24 x 60
22099-1	Center Hoop Assembly for sleeve, 30" diameter

POSSIBLE VARIATIONS:



Ibis also supplies:

- Rotary Drum Central Fiber Reclaim/Air Filter systems for flat belt formers & drum formers used on baby diaper, adult diaper, and feminine care machines.
- High Efficiency Cartridge "Final Filter" modules (99.9%+).
- Polymer (SAP) dosing and insertion equipment with "NO FLOW" detection system & special augers for Ibis & Osprey units.
- Fluff Reclaim/Seperation Systems (FSS-300) for scrap/waste.
- Acoustical Enclosures for your Hammermills, fans, pumps, etc.
- Ibis Volumetric Feeder for Fiber Metering & Blending.
- Fiber/Fluff Bale Opening Equipment for reclaimed fiber.
- Metal Detection & Fire Suppression Systems (dry chemical, halon, CO2) Explosion venting and suppression equipment.
- Air Quality Testing and Air Flow Analysis (Mg/M3, M3/Hr, M/sec).
- Parts, seals, lubricators and filter media for Osprey drum filters, fluff separators, SAP units, etc. Drum filter modifications (expand).
- Central and Portable Vacuum Cleaning Systems.
- Scrap/Trim Handling Collectors, Balers, Fans, Ventilators.

HAVE A PROBLEM? NEED PARTS OR SERVICE?

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