VULCAN INSPECTION SERVICES

N° 1 CYCLONE FANS Offside in House

In any correspondence relating to this report please quote:

District	**E045**
Policy	**NF05X3276645**
Item No.	**N2**

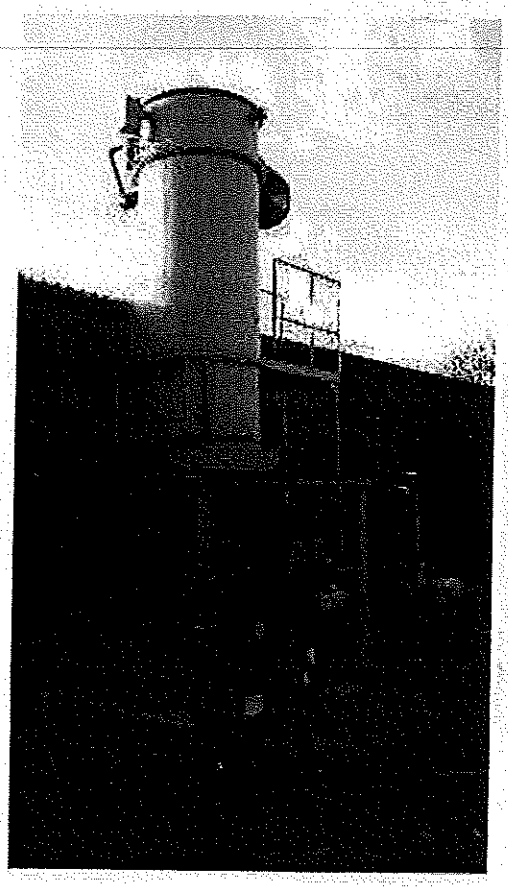
CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH (COSHH) REGULATIONS 2002
REPORT OF THOROUGH EXAMINATION AND TEST BY A COMPETENT PERSON OF LOCAL EXHAUST VENTILATION EQUIPMENT
TO MEET THE REQUIREMENTS OF REGULATION 9.(2)

1 *Name of Employer responsible for the plant* **W RIGBY & SON LTD**

2 *Address of Employer* **CHINLEY HOUSE**
BUXWORTH
HIGH PEAK
SK23 7NP

For the attention of **Simon Rigby**

3 *Location of local exhaust ventilation (LEV) plant.* **Waste Product Warehouse**



4 *Process and hazardous substances concerned.* **The extraction of waste product dust such containing Flour & Oat which is created from the separation process. Hazard Band 'E'**

5.1	*Identification of LEV plant*	**LEV 2**
5.2	*Manufacturer*	**-**
5.3	*Moveability of plant.*	**Fixed plant**
5.4	*Description of plant.*	**WASTE PRODUCT DUST IN THE SEPARATION PROCESS**
6.1	*Condition of LEV plant at time of test: normal production or special conditions*	**Stood down run on test**
6.2	*Is the performance of the system Satisfactory or Unsatisfactory?*	**Unsatisfactory**
6.3	*Defects requiring immediate attention to avoid danger to users employees*	**The start and finishing part of the process allowed the product to become dispersed into the air which was visually seen whilst onsite. This happens when the raw product is being dropped off and when the finished product is being transported from the collection point to the trucks. This should also be risk assessed as it is releasing the contaminate into the air and covering the surrounding area near local electrical equipment and personnel. It is recommended that air sampling be carried out to see if the WEL (Workplace exposure Limit) is being exceeded in these areas. A site notice of immediate defect was issued to Mr Rigby on 20/02/19 for the mentioned defects above.**
6.4	*Defects requiring attention 'as soon as reasonably practicable' to avoid danger to users employees*	**None**
6.5	*Were the following documents available:*	
	a) The Intended Operating Performance (IOP)/commissioning report	**No**
	b) System log book	**Yes**
	c) Material Safety Data Sheet(s)	**Yes**
	d) User Manual	**No**
	e) Previous Inspection reports	**Yes**
6.6	*Have any changes been made since the last inspection to:*	
	a) The extraction system	**Yes**
	b) The work processes	**No**
	c) The substances (or their form) being used	**No**
6.7	*Does the process involve any of the following:*	
	a) Blasting carried out in, or incidental to, the cleaning of metal castings in connection with their manufacture	**No**
	b) Jute cloth manufacture	**No**
	c) Processes, other than wet processes, in which metals (other than gold, platinum or iridium) are ground, abraded or polished using mechanical power, in any room for more than 12 hours per week	**No**
	d) Processes giving off dust or fume in which non-ferrous metal castings are produced	**No**

NEW MISTING SYSTEM INSTALLED

7	*Is the LEV plant continuing to achieve its Commissioning Intended Operating Performance for controlling the hazardous substance(s) for the purposes of Regulation (7)?*	**This could not be ascertained, as the Intended Operating Performance for controlling the hazardous substance(s) for the purposes of Regulation 7 was not available at the time of this inspection. Measurements of engineering parameters allied to visual techniques, indicated that the hazardous substance was not being fully controlled. A further assessment in accordance with regulation 6 to show compliance with regulation 7 should be undertaken.**
8	*Define methods used to make judgement at (7) above*	**Air flow measurement, Pressure measurement, Smoke test, Visual observation**
9	*Does this system return exhaust air to the workplace*	**No, exhaust air not returned to workplace**
10	*Date of last thorough examination and test.*	**24/01/2018**
11	*Observations*	**The MSDS were available at the time of this inspection but did not state the H phrases so that it can be allocated into a hazard band. COSHH Regulation 6 requires this data for hazardous substances used with the process. Therefore, we have allocated the highest hazard band for the system, until suitable MSDS information is provided.** **A smoke test was carried out at the viewing slot which showed the air being drawn in thus a negative pressure in the hooper area.** **The readings for the emptying hopper was taken at the picking area viewing slot with all the doors closed and the internal fan switched off. The hopper was situated at high level and loaded by machinery.** **Current HSE guidance requires the provision of a User Manual and also indicates the need for an airflow indicator at every hood to provide the operator with some simple indication that the hood is working correctly.** **The hopper duct connects to the main duct on a 90 degree angle. This is not recommended as it reduces the extraction flow to this point.** **The outside exhaust ducting was missing a grill which stops anything entering the system such as birds which may damage the extraction unit.** **Air Sampling is recommended around this area to see if the WEL (Work Exposure Limit) is being exceeded.**
12	*Details of instruments used in this inspection*	**Inspection and test results obtained using the following calibrated instruments:-** **1. Manometer Pressure meter TA4650852007** **2. Anemometer Hot vane Probe P09400006** **3. Anemometer Rotating vane Probe P09420021**

13 *Limitations to the Thorough Examination and Test which constitute a Non-Thorough Examination for the following element(s):*

Hood/Face/Component/ System ID	Location	Reason for Limitation	Expected Client Action
Bag Filters	Outside extraction Unit	Chris on site engineer did not want me to access inside the filter compartment as the bolts that seal the hatch are likely to shear off. I was advised the parts were on order.	Replace the securing bolts so that the filters can be access .

PERFORMANCE DATA MEASURED DURING THIS EXAMINATION AND TEST

ENCLOSURES AND HOODS (Maximum number to be in use at any one time 2)

Hood No.	Location or position	Static Pressure (kPa)		Face Velocity (m/s)	
		Measured	IOP	Measured	IOP
FV1 (300mm x 200mm)	Picking Area (Viewing Slot)	-0.13	-	0.48	-
FV1.1 (300mm x 200mm)	Picking Area (Viewing Slot)	-0.13	-	0.49	-
FV2 (350mm Duct)	Top Waste Paper Conveyor	-0.15	-	Enclosed	-

DUCTING

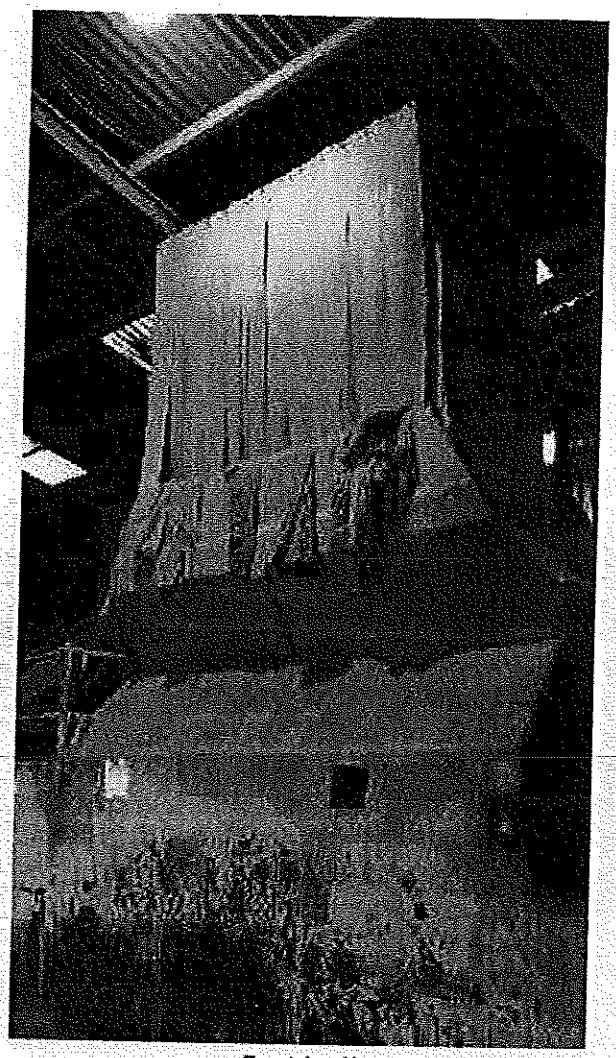
Duct No.	Dimensions (mm)	C.S.A (m^2)	Transport Velocity (m/s)		Volume Flow (m^3/s)	
			Measured	IOP	Measured	IOP
TV Waste Paper	350	0.096	8.46	-	0.81	-
TV Emptying Hopper	350	0.096	10.45	-	1.00	-
TV Main	400	0.126	10.63	-	1.34	-

FILTER/COLLECTOR

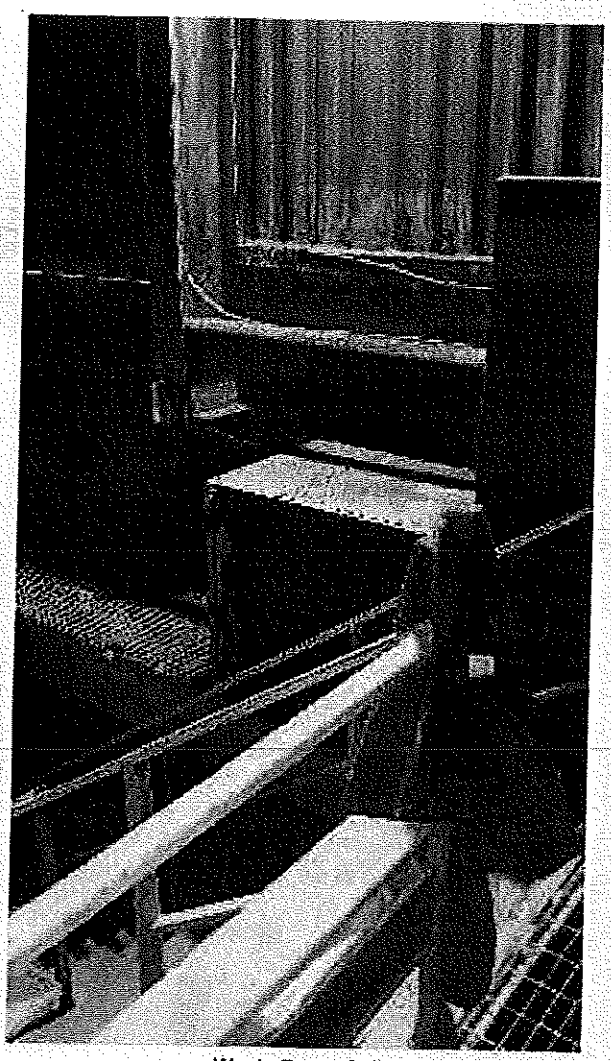
Specification	Volume Flow (m3/s)	Static pressure at inlet (kPa)		Static pressure at outlet (kPa)		Static pressure across filter (kPa)	
		Measured	IOP	Measured	IOP	Measured	IOP
1.Cyclone Filter	1.34	No Test Hole	-	-0.49	-	-	-
2.Fabric Sock Filter	1.34	-0.49	-	-1.34	-	0.85	-

FAN OR AIR MOVER (Est 4kw)

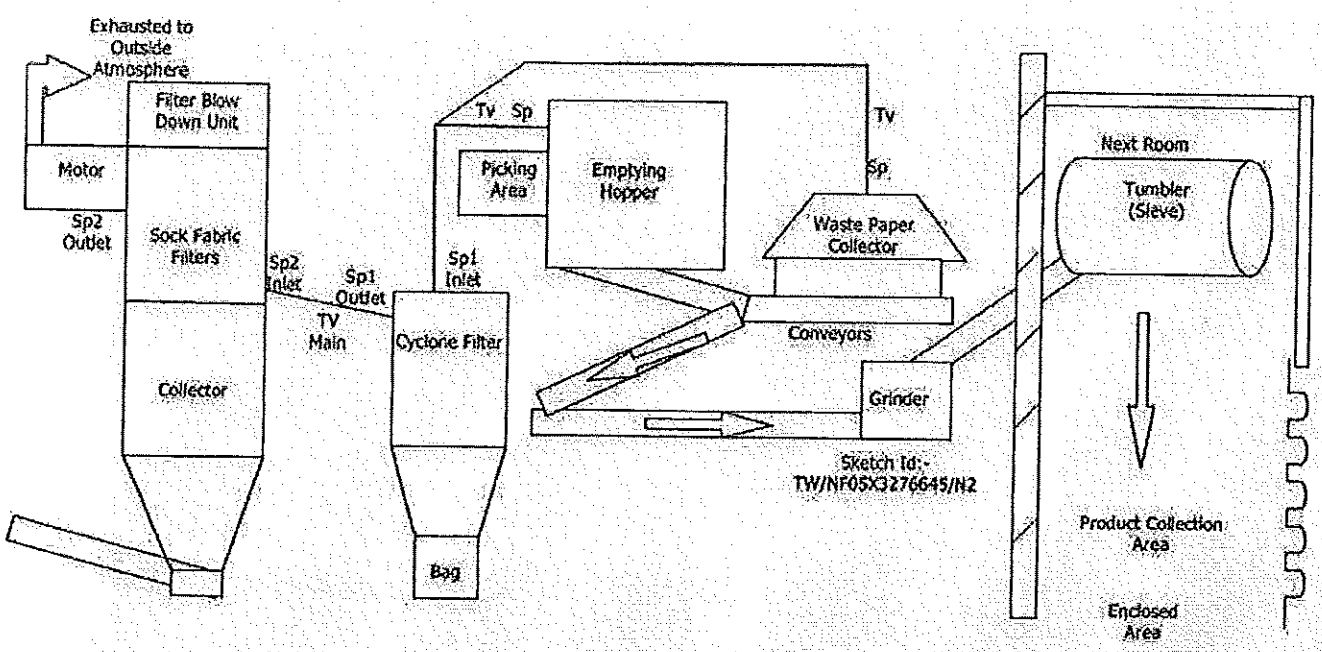
Specification	Direction of Rotation	Volume Flow (m3/s)	Static pressure at inlet (kPa)
Bifurcated Direct Driven	Clockwise	1.34	-1.34



Emptying Hopper



Waste Paper Collector



This report is a suitable record in respect of a thorough examination and test of the above noted LEV plant, as required for the purposes of Regulation 9.2 of COSHH Regulations

Unless otherwise stated, this inspection has been completed in accordance with Procedure 05-20-P01.

Date of Examination	**20/02/2019 to 20/02/2019**
Report Date	**21/02/2019**
Next Thorough Inspection Due Date	**20/02/2020**

For Occupational Hygiene Services
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