

**Report Reference: Tan Professionals Ltd 2011**

**Date: 20 December 2011**

**TEST AND INSPECTION**

**TYPHOON SPRAY TAN EXTRACTOR**

**LOCAL EXHAUST VENTILATION SYSTEM**

**DECEMBER 2011**

<p><u>Prepared For:</u></p> <p>Tan Professionals Ltd 3 Warner Street Accrington Lancashire BB5 1HN Tel (01254) 916333</p>	<p><u>Undertaken By :</u></p> <p>Tom Halliday Tech IOSH <b><i>TC Consulting (Killinghall) Ltd</i></b> 13 Stonecrop Drive Harrogate N. Yorkshire HG3 2SQ</p> <p>Tel/Fax (01423) 549108</p>
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**1. Introduction**

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- 1.1. Tan Professionals Ltd produce a Typhoon local exhaust ventilation system designed for use when performing spray tanning. The company defined a requirement for the 14 monthly full inspection and test under the Control Of Substances Hazardous to Health Regulations 2002 of the various Local Exhaust Ventilation (LEV) equipment.
- 1.2. The survey was performed by **TC Consulting** on 16 December 2011.

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**2. Strategy.**

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- 2.1. The objective was to carry out the examination and testing and to provide records in accordance with the requirements of Regulation 9 of COSHH and the guidance given in HSE document HSG 258.
- 2.2. An initial appraisal of the equipment was carried out and a specification for adequate performance drawn up against the criteria for performance for ventilation systems given in HSE document HSG 258.
- 2.3. Previous records or manufacturers specifications were used where available.

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**3. Methods.**

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- 3.1. The ventilation equipment was tested against the criteria defined by the initial appraisal and a full inspection of the equipment was carried out including the following items:
  - Condition and design of captor hoods
  - Condition and design of ductwork
  - Performance of fan unit
  - Condition of filter / air cleaning equipment where fitted
  - Effectiveness of control of hazardous substances
- 3.2. The methods of testing included the following:
  - Measurement of face capture velocities using a Testo direct reading hot wire anemometer
  - Visualisation of air currents with smoke tubes

**4. Results**

- 4.1 The full results of the survey are included within the individual system records in the Appendix of this report.
- 4.2 The following LEV systems were tested during the survey.

LEV system	Unit performance adequate against HSG 258
Typhoon Spray Tan Extractor	Yes

**5. General Recommendations**

- 5.1 The following regulations from the COSHH Regulations 2002 apply to the maintenance, examination and test of LEV systems.

Regulation 9.1 " Every employer who provides any control measure....shall ensure that it is maintained in an efficient state, in efficient working order and in good repair."

Regulation 9.2" ...Where engineering controls are provided....the employer shall ensure that thorough examinations and tests of those engineering controls are carried out

" In the case of LEV plant, at least every 14 months, or for LEV plant used in conjunction with a process specified in column 1 of Schedule 4, (of the COSHH Regulations 2002), at the interval specified in the corresponding entry in column 2 of that Schedule. "

Regulation 9.4" Every employer shall keep a suitable record of the examinations and tests carried out...and of any repairs carried out as a result of those examinations and tests, and that record or a suitable summary thereof shall be kept available for at least 5 years from the date on which it was made. "

- 5.2 The Approved Code Of Practice of the COSHH Regulations 2002 defines the requirement of maintenance as below.

All engineering control measures in use should receive a visual check where possible and without undue risk to maintenance personnel at least once every week.

Preventive servicing procedures should specify which engineering control measures require servicing, the nature of the servicing required, when the task should be carried out, the allocation of responsibility and how any defects disclosed should be put right.

In accordance with the requirements of the regulations, whoever carries out any function for the purposes of Regulation 9 should be competent to do so.

**APPENDIX**  
**SYSTEM TEST RECORDS**

Company & Address :		Tan Professionals Ltd Accrington BB5 1HN		Location :		Salon		
Asset number / ID		Typhoon Spray Tan Extractor						
Date of test		16-Dec-11		Date last test		N/A New system		
Substances controlled		Spray tan particulate		Conditions at time of test		Normal operations		
System description		Single fan unit recirculating through 30ppi particulate filter.						
Intended system performance		Mean extraction grid face capture velocities in excess of 2.0 m/sec. No point across extracted face to vary more than +- 25% of mean value.						
				System condition at time of test : Overall condition good New filter fitted for test.				
Performance data								
Face capture velocities m/sec								
Point 1	2	3	4	5	6	7	8	9
2.02	2.22	2.21	2.24	2.52	2.15	2.06	2.17	2.15
Mean face capture velocity m/sec		<b>2.19</b>		Maximum variation of single point from mean %		<b>15.6</b>		
Extraction face area sqm			Volume flow rate cum/hr					
0.1089			<b>859.9</b>					
Smoke test indicated good face capture characteristics								
Face capture velocities exceeded minimum value and did not vary more than +- 25% of mean.								
Unit design and performance in accordance with basic design feature recommendations in HSG258.								
Remedial work required								
None								
Tested by :		T Halliday		Signature :				
Date for next test :		Dec-12						