

QUOTATION

UNIVERSAL SURFACES UK LTD

**Emission Testing
of
Vapour Degreaser**

Global Surface Coatings Covered



Quotation

Reference: TS030810
Date: 13 August 2010
Client: Universal Surfaces UK Ltd
Beckingham Business Park
Tolleshunt Major
Maldon
Essex
CM9 8LZ
Tel: 01621 868700
F.A.O. John Royce

Project : Emission Testing of Vapour Degreaser

WORK	Price
Measure the VOC emission concentration from the extract serving the vapour degreaser. Measurements will be carried out under normal operating conditions. It will take one person 0.5 day on site to complete the work. A test report will be produced detailing the sampling procedures and results.	
Total price excluding VAT.	£ 1050

Approved:

Tim Sullivan
PRA Environmental Services

I.0 Quotation Supplementary Notes

I.1 Introduction

Universal Surfaces UK Ltd has asked PRA to submit a proposal for determining the VOC and emission concentration from the extract serving their vapour degreaser. The aim of this test survey is to provide emission data for comparison with emission limits given in PG 6/45 (04) "Surface Cleaning".

I.2 Test Procedures

I.2.1 Flow

The gas velocity and volume flow rate in the exhaust stack will be measured using a calibrated pitot tube and manometer in accord with the principles of ISO 10780.

The gas temperature will be measured using a calibrated digital temperature indicator and K type probe at the same points across the duct that the flow measurements are taken.

I.2.3 VOC

The VOC emission will be measured using an activated carbon adsorption technique in accordance with BS EN 13649 : 2002 "Determination of mass concentration of individual gaseous organic compounds." Three measurements will be made over three cleaning cycles.

N.B. This test method is not UKAS accredited.

I.3 General Requirements

A 10 mm sample port will be drilled in to the duct if a suitable sampling port is not already available.

Safe access (e.g. step ladder) to the sample port must be provided by the client.

2.0 Conditions

- 2.1 Paint Research Association (PRA) agrees to provide a high standard of professional service. However, the results will be advisory in nature and neither the PRA nor its employees have any liability for the clients subsequent use of the data or the information provided.
- 2.2 It is PRA's Environmental Services policy to only use the most appropriate sampling protocols and verified standard test methods when carrying out emission monitoring. All on-site testing is carried out in accordance with PRA's Environmental Services quality control procedures. PRA's Environmental Services total VOC and particulate emission monitoring procedures are UKAS accredited. All on-site test work is carried out by MCERTS certified personnel (Accreditation No. MM03456).
- 2.3 PRA will treat the investigation and results obtained in confidence. It will not publish or make known to others the nature or results of the work carried out, without prior written approval of the client.
- 2.4 The client will be responsible for providing PRA with such access and information as is required to fulfil the tasks described in this quotation.
- 2.5 The client will be responsible for advising PRA of site hazards and safety procedures. Where appropriate, permits to work should be issued. PRA will provide its staff with necessary personal protection equipment.
- 2.6 The quotation assumes that the plant will be fully operational and available for testing over the test period. PRA reserve the right to make additional charges for any additional site visits required to complete the test surveys should plant operations not allow completion on the first visit. Any extra charge will be agreed with the company before invoicing.
- 2.7 The client will be responsible for providing :
- i. safe working access to the plant and sample points.
 - ii. power supply.
 - iii. sample points in duct and pipework
- 2.8 Work will commence on receipt of an order from the client. The date(s) of testing is to be agreed with the client. Normally we require 10 working days notice to mobilise the field team. A test report will normally be delivered within 20 working days of carrying out the test work.
- 2.9 Payment is due 30 days from receipt of our invoice. The client will be invoiced after delivery of the test report. The quotation is valid for 30 days.