

DustScan

Dust Monitoring and Dust Consultancy Services

DS100-F Combined Directional and Deposition Dust Gauge

The DS100-F has been developed in conjunction with Ian Hanby. It combines the DustScan directional gauge and the Frisbee deposition gauge in one unit for simultaneous measurement of dust flux and dust deposition.

The DS100-F is simple to install and use. It can be used to provide comprehensive environmental monitoring data in a wide range of site locations.

DustScan directional gauges have a directional sensitivity of 15° and results are reported as AAC% (Absolute Area Coverage) and EAC% (Effective Area Coverage). Various “custom and practice” nuisance criteria have become established to measure dust levels. DustScan is an optical dust measurement system which we consider to be a more reliable and informative approach to nuisance assessment than dust mass. Our guidance note number 3 gives more information.

Dust mass is sometimes still a required measurement to satisfy some site conditions. The DS100-F can be used to satisfy this requirement while also collecting more meaningful directional and nuisance level data.

Frisbee samples are analysed using the SEI - Y (2005) method and reported as a deposition rate of undissolved solids in mg/m²/day.

Griffin House, Market Street,
Charlbury, Oxford, OX7 3PJ, UK
Tel: (44) 1608 810110
Fax: (44) 1608 810227

Email: info@DustScan.co.uk

www.DustScan.co.uk

DustScan

Dust Monitoring and Dust Consultancy Services

Analysis and Reporting

The DS100-F features our directional gauge.

A standard report is issued for each directional sample processed. This can be in paper or electronic formats. The standard report provides a statement of overall AAC% (Actual Area Coverage) and EAC% (Effective Area Coverage), directional data for each 15° segment of the 'sticky pad' and directional 'dust rose' plots for each of these measurements. AAC represents the dust coverage of a surface irrespective of colour. It is widely used to identify dust sources. EAC is a measure of dust soiling, or the loss of reflectance of a surface. It takes into account the colour of dust and therefore is used to assess the nuisance potential of a dust source. Guidance note number 3 gives more information.

A 'dust rose' is similar to a wind rose, in that the length of the bars represents the magnitude of the dusting. In the example on the right, most of the dust came from the north-west, so it was heading in a south-easterly direction. Dust roses can be used to help predict where dust may travel away from a site, or to see if dust is arriving at a site from specific sources.

Dust roses can also be superimposed onto site plans and provide information on environmental controls.

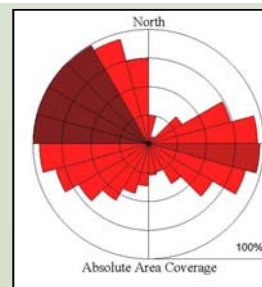
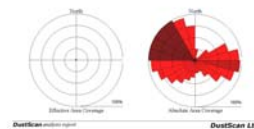


DustScan
FACTUAL DUST MONITORING REPORT

Client: [] Site: []
Project Ref: [] (located near site entrance on surrounding land)
Date Taken: 21 October 2010 Date Rep: 27 October 2010
Observer: [] Photo Ref: []

STATEMENTS AND RESULTS

Segment	SAC	SAC*	SAC*	SAC*	EAC	Warning	AWC	Warning	Warning	Warning
	Percent	Percent	Color	Color	Level	Level	Level	Level	Level	Level
000-015	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
015-030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
030-045	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
045-060	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
060-075	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
075-090	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
090-105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105-120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120-135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135-150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150-165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165-180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180-195	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
195-210	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210-225	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225-240	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
240-255	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
255-270	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
270-285	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
285-300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300-315	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
315-330	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
330-345	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
345-360	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
360-375	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
375-390	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
390-405	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
405-420	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
420-435	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
435-450	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
450-465	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
465-480	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
480-495	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
495-510	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
510-525	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
525-540	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
540-555	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
555-570	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
570-585	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
585-600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
600-615	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
615-630	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
630-645	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
645-660	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
660-675	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
675-690	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690-705	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
705-720	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
720-735	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
735-750	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
750-765	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
765-780	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
780-795	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
795-810	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
810-825	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
825-840	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
840-855	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
855-870	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
870-885	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
885-900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
900-915	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
915-930	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
930-945	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
945-960	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
960-975	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
975-990	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
990-1000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Griffin House, Market Street,
Charlbury, Oxford, OX7 3PJ, UK
Tel: (44) 1608 810110
Fax: (44) 1608 810227

Email: info@DustScan.co.uk

www.DustScan.co.uk