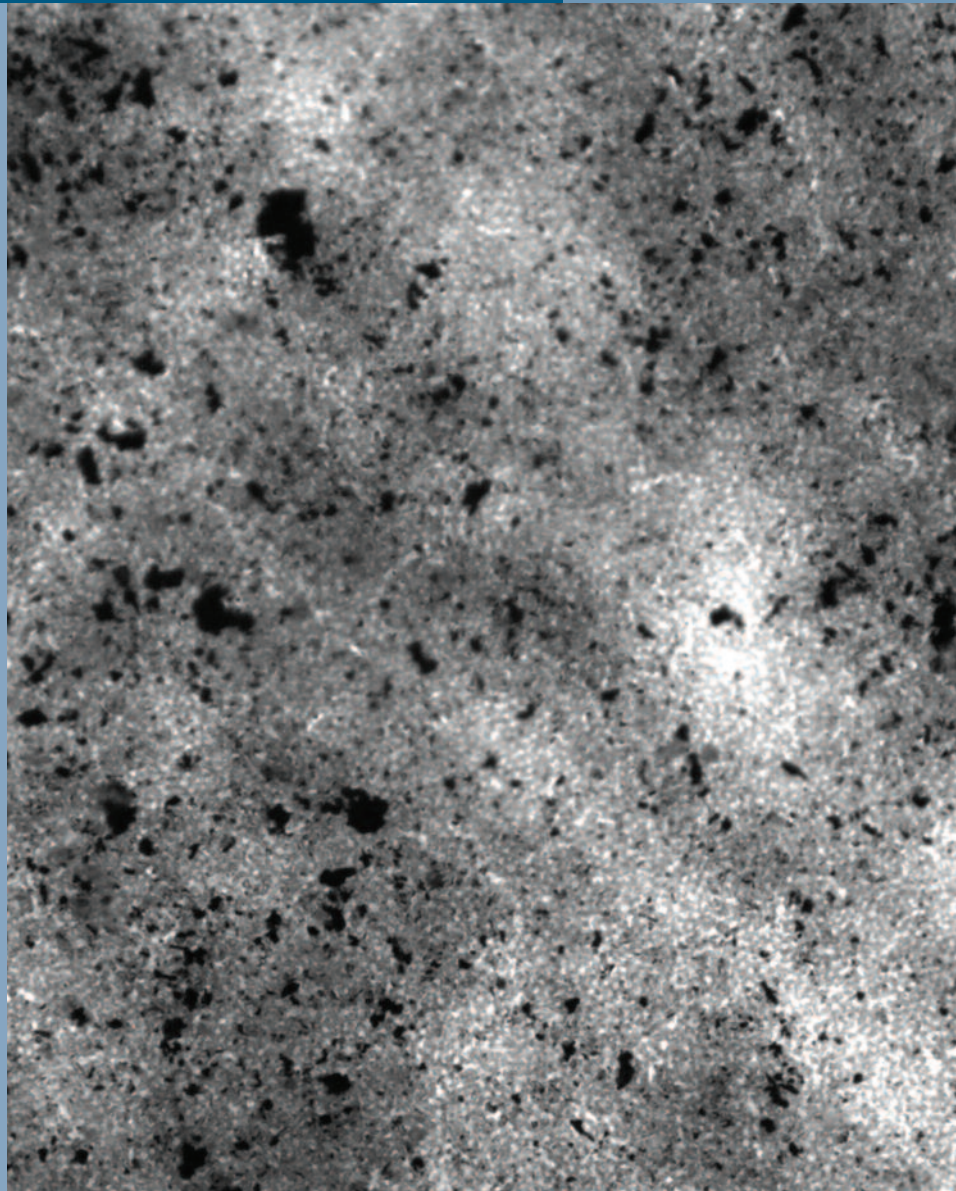


# BUEHLER® OmniMet®

## IMAGE ANALYSIS APPLICATIONS SOLUTIONS *86-3525 Cleanliness Assessment Module*

- **Accurate Determination of the Cleanliness Assessment of Particles on Filter Paper with Results Generated According to ISO 4406**
- **Used to Assess Contamination Levels in Fuel Delivery and Hydraulic Systems**
- **Analysis is Done Over a User Defined Number of Fields**
- **Automated Measurement Assures Ease-of-Use, Repeatability and Reproducibility**
- **Impressive Report Generated in Microsoft® Excel in Just a Few Mouse Clicks**



**The 86-3525 Cleanliness Assessment Module** has been designed for use with either the OmniMet® Express Image Analysis System or OmniMet® Enterprise Image Analysis System and provides automatic cleanliness assessment of particles on filter paper according to the requirements of ISO 4406.

After a prescribed volume of solvent is flushed through the system being checked, the debris deposited on the filter paper must be classified by particle size. Image analysis systems provide a rapid and accurate means for automating the detection and classification of each debris particle.

**Automated Analysis** is accomplished by:

- Detecting and measuring all of the particles via the OmniMet software.

The guard frame prevents double counting.

- The module calculates the degree of cleanliness based on the values entered by the user for the filter paper diameter and solvent volume
- The user also selects which particle sizes are of interest and can set pass/fail limits for each class

**Benefits of the Automated Assessment of Cleanliness** with

OmniMet Express and OmniMet Enterprise:

- The Microsoft® Excel based reports are complete with the cleanliness rating and a pass/fail determination for each class selected
- The reports may be saved in the OmniMet PC, a networked drive, e-mailed and printed

- All images are calibrated and may be archived in the OmniMet database and retrieved later
- Professional reports showing images and databased information are easily generated in Microsoft® Word® using the built in OmniMet Report Generator\*

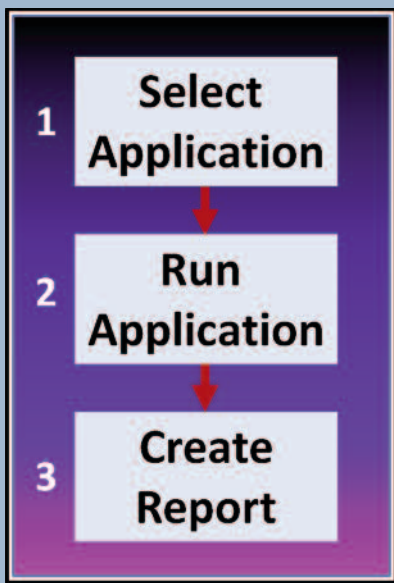
**Industry Use**

Customers needing to assess the degree of contamination in fuel delivery and hydraulic systems

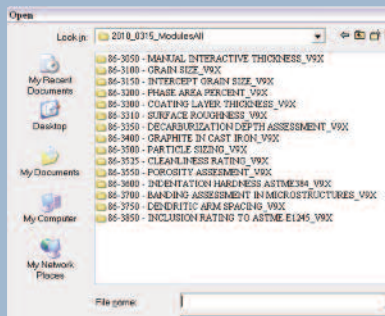
**Running the 86-3525 Cleanliness Assessment Module is as simple as 1-2-3!**

\*The built in Report Generator is available in version 4.0 and later OmniMet® Express and OmniMet® Enterprise

**With the OmniMet® Applications Solutions Simplicity is the Essence**



**Step 1.**  
Select the application from the folder.



**Step 2.**  
Push the "Run multifield" button to run the analysis for as many fields as needed. Open the results window to see the data collected.



**Step 3.**  
Run the OmniMet application macro to generate the desired report.

Filter Paper Diameter (mm)	30
Filter Paper Area (cm²)	706.85
Solvent Volume (ml)	100

µm	PC	PPM
1	4.74	1.79
2	0.41	0.16
3	0.20	0.08
4	0.10	0.04
5	0.05	0.02
6	0.02	0.01
7	0.01	0.00
8	0.01	0.00
9	0.01	0.00
10	0.01	0.00
11	0.01	0.00
12	0.01	0.00
13	0.01	0.00
14	0.01	0.00
15	0.01	0.00
16	0.01	0.00
17	0.01	0.00
18	0.01	0.00
19	0.01	0.00
20	0.01	0.00
21	0.01	0.00
22	0.01	0.00
23	0.01	0.00
24	0.01	0.00
25	0.01	0.00
26	0.01	0.00
27	0.01	0.00
28	0.01	0.00
29	0.01	0.00
30	0.01	0.00
31	0.01	0.00
32	0.01	0.00
33	0.01	0.00
34	0.01	0.00
35	0.01	0.00
36	0.01	0.00
37	0.01	0.00
38	0.01	0.00
39	0.01	0.00
40	0.01	0.00
41	0.01	0.00
42	0.01	0.00
43	0.01	0.00
44	0.01	0.00
45	0.01	0.00
46	0.01	0.00
47	0.01	0.00
48	0.01	0.00
49	0.01	0.00
50	0.01	0.00
51	0.01	0.00
52	0.01	0.00
53	0.01	0.00
54	0.01	0.00
55	0.01	0.00
56	0.01	0.00
57	0.01	0.00
58	0.01	0.00
59	0.01	0.00
60	0.01	0.00
61	0.01	0.00
62	0.01	0.00
63	0.01	0.00
64	0.01	0.00
65	0.01	0.00
66	0.01	0.00
67	0.01	0.00
68	0.01	0.00
69	0.01	0.00
70	0.01	0.00
71	0.01	0.00
72	0.01	0.00
73	0.01	0.00
74	0.01	0.00
75	0.01	0.00
76	0.01	0.00
77	0.01	0.00
78	0.01	0.00
79	0.01	0.00
80	0.01	0.00
81	0.01	0.00
82	0.01	0.00
83	0.01	0.00
84	0.01	0.00
85	0.01	0.00
86	0.01	0.00
87	0.01	0.00
88	0.01	0.00
89	0.01	0.00
90	0.01	0.00
91	0.01	0.00
92	0.01	0.00
93	0.01	0.00
94	0.01	0.00
95	0.01	0.00
96	0.01	0.00
97	0.01	0.00
98	0.01	0.00
99	0.01	0.00
100	0.01	0.00

The OmniMet application macro quickly generates a professional report for cleanliness assessment according to ISO 4406.

Buehler continuously makes product improvements; therefore, technical specifications are subject to change without notice.

© 2010 BUEHLER®, a division of Illinois Tool Works, Inc. Printed in U.S.A. 25M0305 FN01265 Rev.1 \*For metallurgical consumables produced by BUEHLER®  
 © 2010 Microsoft Corporation. All rights reserved.

**BUEHLER**  
 BUEHLER®, a division of Illinois Tool Works, Inc.  
 – Worldwide Headquarters  
 41 Waukegan Road • P.O. Box 1  
 Lake Bluff, Illinois 60044-1699 USA  
 Tel: (847) 295-6500 • Fax: (847) 295-7979  
 Sales: 1-800-BUEHLER (1-800-283-4537)  
 www.buehler.com  
 Email: info@buehler.com

**BUEHLER GMBH - European and MESA Headquarters**  
 In der Steele 2 • 40599 Düsseldorf  
 Postfach 16 03 55 • 40566 Düsseldorf  
 Telefon: (49) 211 974100 • Telefax: (49) 211 9741079  
 www.buehler-met.de  
 Email: info@buehler-met.de

**BUEHLER FRANCE**  
 Téléphone: 0800 89 73 71  
 Télécopie: 0800 88 05 27  
 www.buehler.fr  
 Email: info@buehler.fr

**BUEHLER UNITED KINGDOM**  
 Telephone: 0800 707 6273  
 Fax: 0800 707 6274  
 www.buehler.co.uk  
 Email: sales@buehler.co.uk

**BUEHLER CANADA**  
 10 Carlow Court, Unit #2  
 Whitby, Ontario L1N 9T7  
 Telephone: (905) 430-4684  
 Fax: (905) 430-4647  
 Sales Telephone: 1-800-268-3593  
 Email: info@buehler.ca

**BUEHLER, ASIA-PACIFIC**  
 5/F Vogue Centre  
 696 Castle Peak Road  
 Lai Chi Kok, Kowloon  
 Hong Kong, SAR, China  
 Telephone: (852) 2307 0909  
 Fax: (852) 2307 0233