



Industrial Application Note

8011+ Reporting Standards feature and Synopsis

Reporting Standards available within the 8011+

A Reporting Standard is a required element for creating a Run Recipe in the 8011+ Setup. The primary purpose of selecting a Reporting Standard is for displaying and reporting the test results in a desired or required format after sampling is completed. The following table details what Reporting Standards can be selected based on the Type of Calibration that was performed on the 8011+ instrument. One of the new performance enhancements within the 8011+ is the ability to run a particular fluid sample and then report the results from that sample to a multitude of Reporting Standards. For example: If my Run Recipe has the Reporting Standard ISO 4406 selected, but I would also like to see the results of that particular sample reported in the SAE AS4059 format then I can simply go to the Home screen, select the **Historical Data** option, then select the **More** option, and then select **Change report standard**, and select **SAE AS4059**. Now the data from your chosen sample is now reported in the SAE AS4059 format. Note – If the original sample is run with the Reporting Standards set to **Run Counter (Counts/ml)**, **Run Counter (Raw)**, or **Custom Report** the “Change report standard” feature is disabled.

Calibration Type	Reporting Standard									
	ISO 4406	NAS 1638	SAE AS4059	NAVAIR 01-1A-17	DEF STAN 91-91	GOST Apdx A	ASTM D7619-12	Custom Report	Run Counter Counts/ml	Run Counter (Raw)
ISO-MTD	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ISO-11171	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ACFTD	NO	YES	NO	YES	NO	NO	NO	YES	YES	YES
PSL	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES

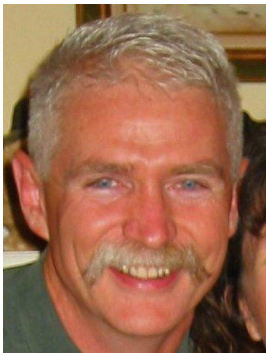
A brief synopsis of the Available Standards reporting options is below:

- **ISO 4406** – Displays cumulative counts per milliliter for the 4 µm(c), 6 µm(c), 10 µm(c), 14 µm(c), 21 µm(c), 25 µm(c), 30 µm, 38 µm, and 70 µm sizes. Reports classification codes per the ISO 4406 standard.
- **NAS 1638** – Displays differential counts per 100 milliliters for the 5, 15, 25, 50, and 100 µm sizes. These sizes are translated to ISOMTD sizes for ISOMTD calibrated units. Reports classification codes per the NAS 1638 standard.
- **SAE AS4059** – Displays cumulative counts per 100 milliliters for the 4 µm(c), 6 µm(c), 14 µm(c), 21 µm(c), 38 µm, and 70 µm sizes. Reports classification codes per the SAE AS4059 standard.

- **NAVAIR 01-1A-17** – Displays differential counts per 100 milliliters for the 5, 10, 25, 50, and 100 μm sizes. These sizes are translated to ISOMTD sizes for ISOMTD calibrated units. Reports classification codes per the NAVAIR 01-1A-17 standard.
- **DEFSTAN 91-91** – Displays cumulative counter per milliliter for the 4 $\mu\text{m(c)}$, 6 $\mu\text{m(c)}$, 14 $\mu\text{m(c)}$, 21 $\mu\text{m(c)}$, 25 $\mu\text{m(c)}$, and 30 μm sizes. Reports classification codes per the ISO 4406 standard.
- **GOST** – Displays cumulative counts per milliliters for the 4 $\mu\text{m(c)}$, 6 $\mu\text{m(c)}$, and 14 $\mu\text{m(c)}$ sizes. Reports classification codes per the ISO 4406 standard.
- **ASTM D7619-12** – Displays cumulative counts per milliliter for the 4 $\mu\text{m(c)}$, 6 $\mu\text{m(c)}$, and 14 $\mu\text{m(c)}$ sizes. Reports classification codes per the ISO 4406 standard.
- **Custom Report** allows the users to report count data from 1 to 18 channel sizes within the selected calibration dynamic range, report counts in Cumulative or Differential mode, and report counts in Raw Counts or Counts/ml concentration mode.
- **Run Counter (Counts/ml)** - Displays count data for all calibrated channel sizes from the selected sensor calibration in Counts/ml concentration mode.
- **Run Counter (Raw Counts)** - Displays count data for all calibrated channel sizes from the selected sensor calibration in Raw Counts mode.

Author Biography

Bill F. Bars is an Application Scientist for Beckman Coulter Life Sciences Company in Grants Pass, Oregon, USA. He has created and developed many of the Industrial Systems production processes and



procedural tools for the Beckman Coulter / Hach Ultra Particle Counting Business Units products. These products include but are not limited to the: **HIAC PODS, 8011, 8011+, 8012, HRLD Sensors, PM4000, ROC, and the Calibration Fluids Lab.** He was a primary technical resource for the Hach Ultra Particle Counting ISO 17025 accreditation project which culminated in receiving their formal ISO 17025 Accreditation Certificate from A2LA. He received his Electronics Engineering degree from DeVry Institute of Technology in 1982. He has worked for the Beckman Coulter/Hach Ultra Companies for 17 years in a multitude of engineering capacities ranging from Metrology to Service Training and Industrial Application Support.

Beckman Coulter Life Sciences
Particle Counting and Characterization
481 California Ave
Grants Pass, OR 97526 USA
www.particle.com
Information 1-800-866-7889, Ext 6195
Email Bill Bars at: bbars@beckman.com