

# HYBRID Trac

## Rapid Moisture & Fat Analysis of High & Low Moisture Products

Rapid analysis is essential in the food industry where time is critical. For over ten years, quality control experts have trusted the CEM SMART Trac™ for testing fat and moisture in products containing more than 12% moisture. Now, they also have a CEM option for low-moisture products. The new HYBRID Trac combines CEM's new SMART 6 moisture analyzer with a second generation, patent-pending NMR system to provide fast, accurate results for a wide variety of wet and dry products.



- More accurate and robust than NIR
- 2nd generation NMR technology provides accurate results in only 2 minutes for dry samples
- Results comparable to standard methods
- Easy to use intuitive touch screen interface
- Create methods with only 3 samples
- No solvents
- No costly calibration maintenance
- Accurate results that are not affected by change in additives, color or granularity

## Advanced Technology for Speed & Accuracy

HYBRID Trac utilizes the drying capability of the SMART 6™ to quickly dry wet samples before they are placed in the NMR. The NMR is a 2nd generation technology featuring two new patent-pending capabilities: Interference-Free Moisture™ (IFM) Technology and QuikPrep™. IFM Technology allows the system to accurately determine moisture for dry samples over a broad fat content range, which first generation NMR systems are not able to do. QuikPrep is a rapid sample conditioning feature that enables the HYBRID Trac to complete a test in only 2 minutes for dry samples, making the system fast enough to compete with NIR for at-line use. More accurate than NIR (Near Infrared), the system's methods are also more robust and the results are not affected by changes in additives, color, or granularity. The versatility and fast analysis coupled with NMR's accuracy compared to NIR and other rapid testing technologies puts the HYBRID Trac in a league of its own for fat and moisture analysis of any product.

## Easy-to-Use

Easy-to-read results are displayed on the system's touch screen at the end of the test, at which time the operator is informed whether or not the results were within specification for the sample type. The HYBRID Trac features an intuitive, easy-to-use touch screen interface and methods can be created with only three samples. Methods transfer easily from unit-to-unit and site-to site for dependable reproducibility. Whether used in the lab or at-line, HYBRID Trac delivers the accuracy users need to ensure the highest quality in their products.

# Results You Can Depend On



As industry and regulatory standards tighten and profit margins shrink, it has never been more critical to have confidence in your component values. The HYBRID Trac enables you to quickly and accurately test incoming, in-process, and finished products (wet or dry) on one instrument, saving you time and bench space.

- Test incoming, ingredients to ensure supplier accuracy and optimize formulations
- Rapid test results allow changes to be quickly made to product in-process, reducing out-of-specification product
- Test finished products for quality control before release

## HYBRID Trac Fat & Moisture Solids Results

Wet Sample: Cream		
	Solids %	Fat %
1	45.59	39.83
2	45.61	39.95
3	45.53	40.01
4	45.63	39.92
5	45.56	39.83
6	45.61	39.86
7	45.59	40.01
8	45.66	40.00
9	45.56	39.85
10	45.65	40.00
<b>Average</b>	45.60	39.93
<b>Reference Values</b>	45.57	39.96
<b>Standard Deviation</b>	0.04	0.08

Dry Sample: Powdered Infant Formula		
	Moisture %	Fat %
1	2.82	27.66
2	2.80	27.66
3	2.81	27.63
4	2.81	27.68
5	2.81	27.71
6	2.79	27.69
7	2.80	27.70
8	2.83	27.69
9	2.80	27.72
10	2.81	27.66
<b>Average</b>	2.81	27.68
<b>Reference Values</b>	2.81	27.66
<b>Standard Deviation</b>	0.01	0.03