Dairy producers strive to feed a consistent ration.

Due to variations in the feeding process, however, the same group of cows could receive a different ration because the:

1. The ration created
2. The ration loaded
3. The ration delivered
4. The ration consumed

- are not always the same.

Changes in cow health and performance occur because of changes in the ration. There may be more than one reason why the ration fed can change from one day to the next. It may be changes in dry matter (DM) content of the feeds.

Rations are formulated on a DM basis because cows require a specific amount of dry nutrients each day to meet their requirements for production and health. Even dry feeds are not absolutely dry and have variations in DM.

Dry matter content is a simple concept that can have a significant nutritional impact on the ration that is actually fed.

Moisture Tracker™ Technology

It sounds so easy - just test each ingredient and determine the DM, then reformulate the ration to adjust for differences. However, until now measuring moisture was not as easy as it sounded. You had to take samples and wait at least 40 minutes for your dryer, 24 hours in a dehydrator, or possibly a few days if you sent samples to a lab.

With the Moisture Tracker from Digi-Star you receive quick results for your ingredients in the time it takes to walk from one bunk to the next! From a simple series of trigger pulls, you can have instant and accurate readings of each ingredients moisture and dry matter content.

The Effect of Dry Matter Changes on a Ration

<table>
<thead>
<tr>
<th>Feed</th>
<th>&quot;As-Fed&quot;</th>
<th>Lb</th>
<th>&quot;DM&quot;</th>
<th>Lb</th>
<th>% DM</th>
<th>&quot;As-Fed&quot;</th>
<th>Lb</th>
<th>&quot;DM&quot;</th>
<th>Lb</th>
<th>% DM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haylage</td>
<td>28.2</td>
<td>12.7</td>
<td>45.0</td>
<td>28.2</td>
<td>11.3</td>
<td>40.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corn Silage</td>
<td>36.3</td>
<td>12.7</td>
<td>35.0</td>
<td>36.3</td>
<td>10.9</td>
<td>30.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hi Moisture Corn</td>
<td>21.4</td>
<td>15.0</td>
<td>70.0</td>
<td>21.4</td>
<td>15.0</td>
<td>70.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soybean Meal</td>
<td>7.9</td>
<td>7.0</td>
<td>89.0</td>
<td>7.9</td>
<td>7.0</td>
<td>89.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cottonseed</td>
<td>5.0</td>
<td>4.6</td>
<td>92.0</td>
<td>5.0</td>
<td>4.6</td>
<td>92.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minerals/Vitamins</td>
<td>0.9</td>
<td>0.9</td>
<td>99.0</td>
<td>0.9</td>
<td>0.9</td>
<td>99.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ration Total</td>
<td>99.7</td>
<td>52.8</td>
<td>TMR = 53.1</td>
<td>99.7</td>
<td>49.7</td>
<td>TMR = 49.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ration Supports = 90 lb milk

Michigan State Extension Dairy Employee Education Program

No more waiting for samples to dry, pen and paper, running to the office, or mental math!

Touch Screen Technology™ Pair a Moisture Tracker with Digi-Star's Touch Screen Technology and you can update your rations with a touch of your finger.

See results instantly in your cab based on the readings from Moisture Tracker.
The Value of Moisture Tracker:
• Tests inbound and loaded ingredients to determine the DM
• ROI realized within the first year for many farms
• Minimize fluctuations in cow performance and health

The Benefits of Moisture Tracker:
• Portable, easy and accurate
• Durable and compact; Moisture Tracker will fit in the cab of your tractor
• Convenient, clear and instantaneous dry matter readings
• Easily adjusts to your specific ingredients

Manage Your Moisture:
• Accurate dry matter readings within approximately 1% – 2%
  • Keep probe glass CLEAN
  • Check calibration often
  • Maintain consistency in sampling and scanning techniques
• Time and date stamp on every reading