Optimising performance - the dynamic parlour test

The dynamic parlour test from Genus combines the milking machine, the cow and the operator. It gives a fantastic insight into how all three interact with each other, helping you to reduce mastitis, cut milking times, and increase yields. For the average herd the cost is just 2.5 pence per cow per week.

Recently, the Red Tractor Food Assurance Scheme has made some important new recommendations:
1. that a dynamic milking machine test be undertaken;
2. that milking machine testing is undertaken by a competent engineer or technician.

Milking machine mastitis

On average, 26% of mastitis is caused in the parlour. 70% of parlours have problems that reduce the quality of milk. Our dynamic test enables you to quickly pinpoint in-parlour issues and offers solutions.

What our dynamic test measures

1. **Actual teat end vacuum level.** This is the ONLY way to assess the correct static vacuum level settings. (The vacuum gauge has no correlation to what is going on at the teat end.)

2. **Milk flow rates.** This confirms if adequate teat preparation is taking place to ensure speedy milk let down and reduced “unit on” time, leading to improved cow longevity. It also checks capacity of equipment to deal with the high flow rates of modern cows.

3. **The degree of under/over milking.** The only accurate way to determine when the milk flow stops and allows precise setting of the Automatic Cluster Removers (ACRs).

Recent findings

In a recent survey of 25 farms where Genus carried out dynamic tests the following issues were highlighted: 42% of tested machines had low claw vacuums which can cause liner slippage (audible and non-audible); 47% had poor unit placement; 58% had mistimed ACR removal leading to over-milking and increased teat damage; 16% had mismatched equipment e.g. liners versus shells or incorrect settings; 100% made changes to their milking routines to improve mastitis.

Testimonials

“A dynamic test has to be done. I was amazed how long we were over-milking, but there it was in black and white. After we reduced the vacuum it was plain to see that the cluster attachment was a lot kinder.”

(Steve Wilson – Hobb Lane Farm, Cheshire)

“Since completing a dynamic test we have seen a reduction in teat-end damage and our cell count has reduced from 180 to 126,000. The dynamic test... was important in making sure the parlour was set up properly, and the report helped everyone involved follow a routine with some science behind it.”

(James Steel – Anns Hill, Cockermouth)

Graph shows the correlation between correcting teat-end vacuum levels and reducing milking machine mastitis.
Consult these charts to gauge the condition of your herd’s udders and teats. Use them to keep a tally of their condition over time. Used in conjunction with dynamic testing you will be able to quickly and effectively control mastitis in your herd.

**TEAT CONDITION SCORING CHART**

Score at least 80 cows or 20% of the herd –

This chart will score 200 teats (using a \ for the first cow and a / for the second) - use multiple pages

<table>
<thead>
<tr>
<th>Score N</th>
<th>Score S</th>
<th>Score R</th>
<th>Score VR</th>
</tr>
</thead>
<tbody>
<tr>
<td>No ring</td>
<td>Smooth or Slight ring</td>
<td>Rough ring</td>
<td>Very Rough ring</td>
</tr>
</tbody>
</table>

| 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 6 | 7 | 8 | 9 | 10 |
| 6 | 7 | 8 | 9 | 10 | 6 | 7 | 8 | 9 | 10 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 | 15 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 16 | 17 | 18 | 19 | 20 | 16 | 17 | 18 | 19 | 20 | 16 | 17 | 18 | 19 | 20 |

Total Number of Teat scores: ________
Number of teats scored N: ________
Number of teats scored S: ________
Number of teats scored R: ________
Number of teats scored VR: ________

Percent of Teats R & VR: ________

The goal is <20% VR and R and <10% VR

Are you seeing more than 10% with a very rough ring?

This is teat-end Hyperkeratosis – mainly caused by extended “unit on time”. Studies indicate that cows with rough or very rough teat ends are more prone to having high SCC or clinical mastitis.

**UDDER HYGIENE SCORING CHART**

Score udder hygiene on a scale of 1 to 4 using the criteria below.

Place an X in the appropriate box of the table below the pictures. Count the number of marked boxes under each picture.

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Free of dirt.</td>
<td>Slightly dirty. 2-10% of surface area</td>
<td>Moderately dirty. 10-30% of surface area.</td>
<td>Covered with dirt. &gt;30% of surface area</td>
</tr>
</tbody>
</table>

| 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 6 | 7 | 8 | 9 | 10 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 | 15 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 16 | 17 | 18 | 19 | 20 | 16 | 17 | 18 | 19 | 20 | 16 | 17 | 18 | 19 | 20 |

Total Number of udder scores: ________
Number of udders scored 1: ________
Number of udders scored 2: ________
Number of udders scored 3: ________
Number of udders scored 4: ________

Percent of udders scored 3 & 4: ________

Udders scored 3 and 4 have increased risk of mastitis as compared to scored 1 & 2

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Chart developed with input from Dan Schreiner and Mike Maroney.