

# Unitron Scandinavia a/s Handling of Pregnancy Diagnosis

„VetScan TFT“

## DLG Test Report 5413 F



**Manufacturer**  
Scan View Ltd.  
3360 A Sartelon  
St. Laurent  
Quebec H4R 1E3  
Tel: 001 (514) 336-7333  
Fax: 001 (514) 336-7723  
Email: kmenassa@mitcanada.ca  
Internet: www.mitcanada.ca

**Registering company**  
Unitron Scandinavia a/s  
Jernbanegade 13  
DK-7160 Tørring  
Tel.: 0045 (0) 75 80 21 22  
Fax: 0045 (0) 75 80 18 29  
Email: mail@unitron.dk  
Internet: www.unitron.dk



Deutsche Landwirtschafts-  
Gesellschaft e.V.  
Prüfstelle für Landmaschinen

### Scope and conditions of the test

VetScan TFT was tested according to the following criteria:

- Clarity of the instructions of use
- Handling during general operation of the implement
- Handling during practical use (getting the implement ready for use, pregnancy diagnosis, cleaning)
- Management of the accumulator

The test persons for practical application were two farmers who keep 250-300 sows each as well as two professional scanner service providers.

The two devices were used for 8 weeks.

With the aid of the device, the farmers and the scanner service providers examined a respective number of ca. 50 and 100 sows of different races and at different stages of pregnancy.

In addition, the specifications, the instructions of use, and the accumulator management were tested in the laboratory.

## Short description

The scanner registered for the FokusTest is characterized by the following specifications (measured values)

### Implement

|                         |                                     |
|-------------------------|-------------------------------------|
| Designation of the item | VetScan TFT (scanner based on a PC) |
| Length                  | 195 mm                              |
| Width                   | 115 mm                              |
| Height                  | 80 mm                               |
| Display dimensions      | 115 x 79 mm                         |
| Mass                    | 1398 g                              |

### Sonic transmitter

|                  |                                     |
|------------------|-------------------------------------|
| Type designation | Sector probe with a „freeze button“ |
| Length           | 120 mm                              |
| Diameter         | 40 mm                               |
| Frequency range  | 3,5 / 5,0 Hz                        |
| Focus range      | 4 – 24 cm (adjustable in 5 steps)   |

### Connecting cable

|                |   |
|----------------|---|
| Kind of cable  | Taut cable                                |
| Cable length   | 1700 mm                                   |
| Cable diameter | 7 mm (reinforced at the end of the probe) |

### Energy supply

|                                     |  |
|-------------------------------------|--|
| Accumulator                         | Internal (acc. to manuf. also available as an external device) |
| Charging set dimensions (L / W / H) | 110 / 60 / 35 mm   |
| Mass of the charging set            | 246 g  |

### Other information

|                                      |  |
|--------------------------------------|--|
| Delivery includes                    | Scanner with an integrated accumulator;<br>external probe with cable and PS2/2-connection;<br>charging set;<br>250 ml + 5 l contact gel;<br>USB Memory-stick;<br>bag + belt;<br>English instructions of use + German brief instructions; |
| Storage                              | Stable plastic case with a foamed plastic inset,<br>space just sufficient  |
| Total weight (scanner, probe, cable) | 1737 g   |

# Results

## Instructions of use

During the test period, the instructions of use were only available in English. Their content is clearly structured. Illustrations make it easier in particular for non-professional users to familiarize themselves with the functional principle and the basic functional possibilities of the implement.

For the German market, brief instructions in German are included in the delivery. According to the manufacturer, comprehensive German instructions will be available as of November 2004. Due to many special functions beyond pregnancy diagnosis, the instructions are very extensive.

## Handling

### Set-up time

Set-up requires very little time (1 to 2 minutes). After the sonic transmitter has been attached, the implement must only be turned on. Afterwards, „booting time“ is 45 seconds. If the bag included in the delivery is used, set-up time is slightly longer.

### Ergonomics / Ease of operating during pregnancy examination

The VetScan TFT from Unitron is a low-weight implement (1.7 kg). Thanks to the bag equipped with a neck- and a hip belt, which are included in the delivery, the device can easily be fixed to the body and can thus also be used in pens with exercise areas. The scanner is almost too small to be fixed in the bend of the arm. If used properly,

the handy sonic transmitter has a normal gel consumption. The length of the connecting cable is sufficient, and the cable is reinforced at the end of the probe.

### Operation / Display

Resolution and contrast of the display are not satisfactory. Brightness can be adjusted individually.

According to the manufacturer, VetScan will be delivered with new software as of October 2004 which is expected to provide better resolution. In light barns or outdoors, the image is becoming weaker, in particular at the early stages of pregnancy. For simple pregnancy diagnosis, menu prompting is very comprehensive because the device offers many additional functions (which were not tested).

### Handling during cleaning

Delivery does not include a special disposable cover which sufficiently protects the Unitron scanner from dust and germs in the barn. The bag included in the delivery provides protection against coarse dirt and can be thoroughly cleaned only in the washing machine. Hygienically sound cleaning of the implement (for cooperative machinery use) is not possible to a sufficient degree. Particles may collect at edges, in slits on the surface and in the vents and implement plug connections (not covered). The sonic transmitter and the connecting cable are easy to clean / to disinfect using a damp cloth.

## Accumulator management

The tested VetScan TFT is equipped with internal energy supply. The charging time of the accumulator is normal (ca. 4.5 hours). Charging status display could be even clearer. Action time is short (ca. 1 hour). An energy-conservation mode is available. The accumulator status is permanently shown on the display.

## Summary

The operation of the VetScan TFT from Unitron for simple pregnancy diagnosis is easy to learn for laypersons and professionals.

Extended menu functions can only be learned after a sufficient familiarization phase.

Thanks to the integrated accumulator and the low weight, handling during diagnosis is good.

Due to the numerous additional functions, menu prompting is very comprehensive.

Openings and interfaces make hygienically sound cleaning and disinfection of the device impossible.

The internal accumulator only provides a relatively short action time, which, however, can be extended with the aid of the installed energy conservation mode.

## Overview 1: EVALUATION (short version)

|                               | Description   | Evaluation |
|-------------------------------|---|------------|
| <b>Instructions of use</b>    | in English, complete with illustrations / German brief instructions for the most important functions* | ○ / +      |
| <b>Handling</b>               | satisfactory  | ○          |
| <b>Accumulator management</b> | Integrated accumulator with normal charging- and short action time                                    | –          |

\* according to the manufacturer, the German instructions of use will be available as of November

Evaluation scale: ++ / + / ○ / - / -- (○ = standard)

The handling of the VetScan TFT was tested in practical use by two farmers and two professional scanner service providers.

The specifications and the accumulator management were tested in the laboratory.

Other criteria were not tested.

## Test persons

Andreas Kopf, farmer  
in D-35410 Hungen-Bellersheim

Susanne Ries, farmer  
in D-64839 Münster

Markus Deupmann, producer ring  
Münsterland

Dr. Werner Mösch, Team East  
in the VzF Uelzen

## Responsible for the technical content

*Project leader*

Dipl.-Ing. agr. Sven Häuser

*Head of the Livestock Farming Department*

Dr. Hans-Joachim Herrmann

## Realization

DLG Test Center  
Max-Eyth-Weg 1  
D-64823 Groß-Umstadt



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Deutsche Landwirtschafts-  
Gesellschaft e.V.  
Prüfstelle für Landmaschinen  
Max-Eyth-Weg 1, D-64823 Groß-Umstadt  
Telefon: 0 6078/96 35-0, Fax: 0 6078/96 35-90  
E-Mail: Tech@DLG-Frankfurt.de  
Internet: www.dlg-test.de

Deutsche Landwirtschafts-  
Gesellschaft e.V.  
Prüfstelle für Landmaschinen  
Lerchensteig 42, D-14469 Potsdam  
Telefon: 03 31/5 67 02-0, Fax: 03 31/5 67 02-90  
E-Mail: Tech@DLG-Frankfurt.de  
Internet: www.dlg-test.de

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