

**COMPLETE AUTONOMOUS SYSTEM  
FOR MILK COLLECTING CENTERS**

**Lactoscan MCC**

Milk Collecting Center

50 sec measurement

30 sec measurement (option)

**UNIQUE MILK ANALYSER:**

Direct measurement of cold milk samples, starting at 5°C

No need of periodical calibration

The measurement accuracy not dependant on milk's acidity

High-end ultrasonic technology for analyzing any kind of milk

**MEASURING PARAMETERS:**

**MEASUREMENTS FROM THE ULTRASONIC SYSTEM:**

- Fat
- Solids-non-fat (SNF)
- Density
- Protein
- Lactose
- Milk sample temperature
- Added water
- Salts
- Freezing point

**MEASUREMENTS FROM THE INTEGRATED SYSTEMS:**

- PH
- Conductivity
- Liters
- Kilograms
- Price
- Deliverer's ID number
- Inhibitors



**SPECIFICATIONS Lactoscan**

Parameter	Measuring range	Accuracy
Fat	from 0.01% to 45%	± 0.06%
SNF	from 3% to 40%	± 0.15 %
Density	from 1000 to 1160 kg/m <sup>3</sup>	± 0.3 kg/m <sup>3</sup>
Protein	from 2% to 15%	± 0.15%
Lactose	from 0.01 % to 20%	± 0.20%
Added Water content	from 0 % to 70 %	± 3.0%
Temperature of milk	from 5°C to 40°C	± 1°C
Freezing point	from - 0,400 to - 0,700°C	± 0.005 °C
Salts	from 0,4 to 4%	± 0.05%
pH	from 0 to 14	± 0.05%
conductivity	from 2 to 14 mS/cm	± 0.05 (mS/cm)
kg	from 0 to 150 kg	± 0.10 kg

Milk analyzer Lactoscan makes quick analyses of milk and liquid dairy products:

- |                 |                          |  |
|-----------------|--------------------------|--|
| Cow milk        | Whey                     | Concentrated milk (up to 1160kg/m <sup>3</sup> ) |
| Sheep milk      | Cream (up to 45%)        | Yoghourt   |
| Buffalo milk    | Skimmed milk (0,01% FAT) | Flavoured milk                                   |
| Camel milk etc. | Ice-cream mixtures       | Recovered milk                                   |



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# Lactoscan MCC

**Ultrasonic milk analyser**  
in laser engraved  
stainless steel box

**Embedded thermal printer**  
Prints the result of  
the current measurement

**Embedded keypad** -  
water and dust-proof

**Embedded function real date  
and time** - registers  
the exact time for delivery of  
milk in the milk collecting center

**Measurement results**

```

Results:
F= 1.37 S= 6.13
D=22.23 P= 2.35
C=11.93 W=30.76
    
```

**Integrated weight scales**

```

Net =003.98
Tare=000.00
Totl=003.98
0-Tare #=OK
    
```

**Integrated pH meter**

```

pH Measuring
6.12pH 31
    
```

**Conductivity** - built-in  
conductivity sensor gives  
high performance  
freezing point analysis -  
avoid poor quality  
milk due to added water;  
detects mastitis and  
falsifications  
with added salt

**Visualisation out of  
range measurement**

**Deliverer №** - deliverer's  
identification;  
database for up  
to 7000 records

**Knee-joint (mobile) input pipe.**  
Possibility of using  
different sample holders

**pH measuring system**  
integrated pH meter with  
temperature compensation

**Results from printer:**

```

Time: 08:15:35
Date: 06:04:2002
LACTOSCAN MCC68
Serial Number:8615
Calibr 1 Cow
Results:
Fat.....01.37%
SNF.....06.13%
Density.....22.23
Lactose.....03.23%
Solids.....00.48%
Protein.....02.35%
Added Water.....30.76%
Temp. Sample.....19.0°C
Freez. Point.....-0.368°C
pH.....6.12
Conductivity.....11.93
Deliverer №.....96
Litres.....0002.3
Kilograms.....02.44
    
```

**MILK DATA Program:**  
milk collection accounting  
and management software.

Measurment	Time	Deliverer	Weight	Fat	SNF	Density	Lactose	Protein	Added Water	Temp. Sample	Freez. Point	pH	Conductivity	Deliverer №	Litres	Kilograms
7	12:00	01	003.98	1.37	6.13	22.23	3.23	2.35	30.76	19.0	-0.368	6.12	11.93	96	2.3	2.44

**2 peristaltic pumps:**  
1 for the cleaning,  
1 for the sample (inside)  
Flow system designed for  
pumping visco us samples  
undiluted - saves operator time,  
ensures fast and accurate results.

**Integrated  
weighing  
scales**

**Remote display:**  
deliverer's number,  
kg and amount,  
FAT, SNF.  
Easy access to the  
measurement results.

**Mechanical Parameters:**  
Dimensions (W x L x H)  
290x300x330 mm  
Weight < 7 kg

**Switching Adapter**  
**Input:**  
100 - 240 V ~1.6A max  
50-60 Hz  
**Output:**  
+12 V 4.17A min.  
**Output power:**  
50 - 65 W

**Additional serial printer**  
possibility for connecting  
additional serial printer

**Input for alkaline detergent**  
for automatic cleaning  
on every hour

**Matrix printer**

**Embedded accumulator**  
with charger for up to 5 hours autonomous work.

**Report System:**  
in-built report system - generating reports  
(shift report, payment slip,  
monthly report etc) without IBM PC.  
Print on a matrix printer for  
places with heavy load.

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