

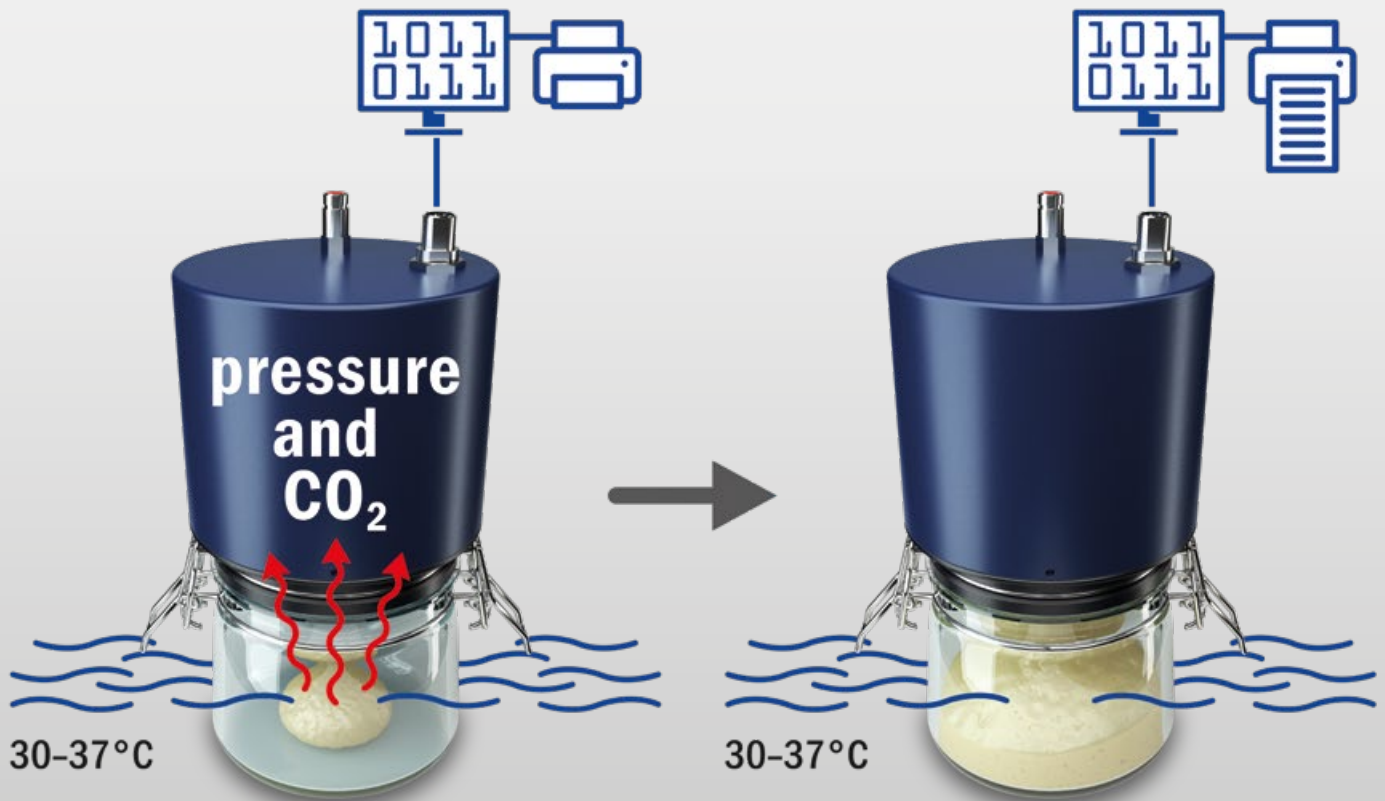


YeastForce

Simple determination of
raising power, dough maturation
and dough volumes

low priced and fast –
provides 3 measurements at once





How does YeastForce work?

YeastForce is for determination of **raising power** in dough pieces (or sugar solutions) as **CO₂ pressure** measurements [mbar] over time (usually 2 hours). This method correlates very well with the **accredited association methods** of VH Berlin – Research Institute for Baker's yeast.

Moreover YeastForce can determine the **gas holding capacity** in doughs of **proofing dough samples** (with yeast, baking soda or sour dough) as **CO₂ gas concentration** kinetics.

Dough key figures which are important for the baking result, such as:

- **proofing time** (time to max. fermentation volume of the dough sample) and
- **gas retention (coefficient [%]) gas proportion in the dough, total produced gas can be determined online at any time.**

YeastForce is used in the inspection of incoming goods to determine the quality of the yeast in an easy and quick way. This way you can avoid discarding large quantities of dough. Since the yeasts change during storage, it is recommended to carry out additional tests at appropriate intervals.

YeastForce – provides 3 measurements at once

- raising power
- gas retention coefficient
- dough maturation & complete dough volume (tearing point)

Applications

- quality control of incoming and outgoing goods
- testing additives and changes in recipes
- testing of flour quality
- efficiency of raising agents



Lallemand-DHW GmbH

(Marcus Ehrhardt, Head of Quality Control):

„We are pleased to provide you with feedback and a reference on the BlueSens Yeastforce we use. We are very satisfied with the measuring device. We particularly like the large number of useful measurable parameters such as dough volumes and gas retention capacity.

In addition, these are displayed very well and clearly, also graphically.“



Software „YeastForce Monitor“

Automatic calculation of:

- Produced volume
- Dough volume
- Gas retention capacity
- PC requirements:
8 GB Ram, Win7 64bit or better,
1 USB2 Port,
Display > 1280 x 800 px



YeastForce



Technical Short Facts

- 3 measuring channels: CO₂, pressure, temperature
- measuring principle of CO₂ sensor: infrared
- accuracy: 0.2 % MBE, ± 3 % full scale
- measurable production rate: 0-360 ml/h
- pressure range: 0.8-1.3 bar
- temperature range: 15-40 °C
- data transfer: RS232
- height: 205 mm
- diameter: 130 mm

Technical data

Measurement method CO ₂	Dual Wavelength Infrared
Pressure range	0.8-1.3 bar
Accuracy CO ₂	0.2 % MBE ± 3 % full scale
Resolution	V= 0.01 mL/C = 0.005 Vol. %
Dimensions	height 205 mm diameter 130 mm
Temperature range	15-40 °C
PC Interface	USB
Measurable gas volume	0-360 ml/h in 500 ml sample bottle
Interval of measurements	1 second (intern), Loginterval (Standard) 10 seconds, Summary Interval (Standard) 10 minutes
Electric power	12 V
Measurement channels	CO ₂ , pressure, temperature
PC requirements	8 GB RAM/Display 1280 x 800 px (minimum), 1920 x 1080 px (optimal)
Software	YeastForce Monitor
Sample weight	depends on sample bottle size, volume ratio 1:10
Sample bottle size	10 times higher than dough weight/volume