

NEXT GENERATION YEAST MONITORS

ABER
TRUSTED TECHNOLOGY



REMARKABLE...

The ABER Yeast Monitors are recognised today as the most accurate and reliable Instruments for measuring the LIVE cell concentration on-line.

ABER Instruments has now introduced the next generation of single channel 'COMPACT' Yeast Monitors designed for breweries that require a low cost, compact, easy to use instrument for pitching and cropping applications.

RECOGNISABLE...

The ABER Yeast Monitors are recognised today as the most accurate and reliable instruments for measuring the LIVE cell concentration on-line and this technology enables brewing groups such as AB InBev, SAB Miller, Heineken, Suntory and Diageo to have more consistent fermentation processes. Some breweries have also benefited from improvements in the quality of the pitching yeast or from reducing fermentation times.

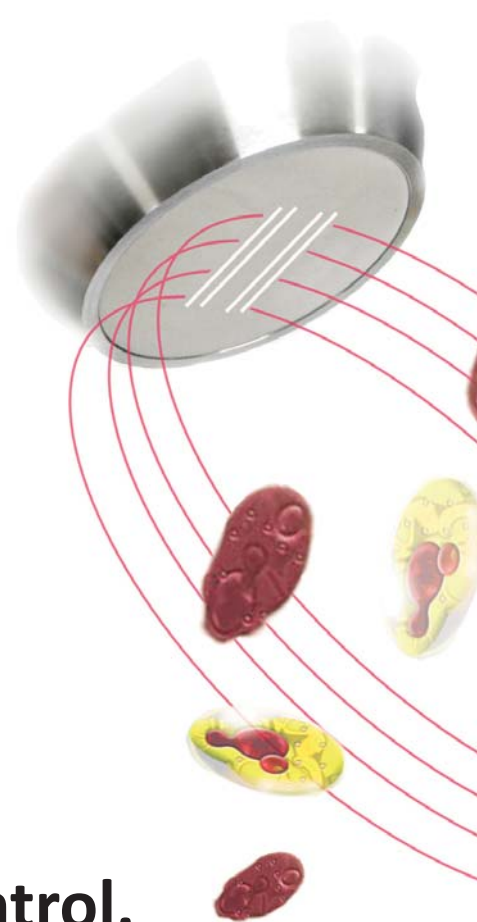
The new "Compact" Yeast Monitor can communicate directly to a dedicated display transmitter with a colour touchscreen for calibration and set-up and the yeast concentration and conductivity are provided as 4-20mA outputs.

The "Compact" series can now handle up to 20 different yeast strains and it simpler procedure for calibration compared to previous models.

The "Compact" Yeast Monitors are designed to be used in real time with live yeast concentrations up to 70% viable spun solids. The system is virtually maintenance free and has a replaceable probe with "flush" platinum electrodes that can be routinely cleaned in place (CIP) or steam sterilized.



NEXT GENERATION...
COMPACT Yeast Monitor
for pitching rate and cropping control.



Brewers can choose from two unique options with the COMPACT range:

COMPACT YEAST MONITOR Model 410P

The Compact 410P is designed to be fitted on standard instrument housings such as the Tuchenhagen Varivent. This robust instrument is completely contained within an IP65 stainless steel housing. The Model 410P can still be used on fermenters/propagators if installed within a recirculation loop.

Ideal for any size brewery with a requirement for in-line yeast measurement in real time.



Image showing the Compact 410P with YM V350 Touch Screen.

Compact "Adapt" shown with 25mm Ingold style port for welding into fermenters or propagators.



COMPACT "ADAPT" YEAST MONITOR Model 410PV

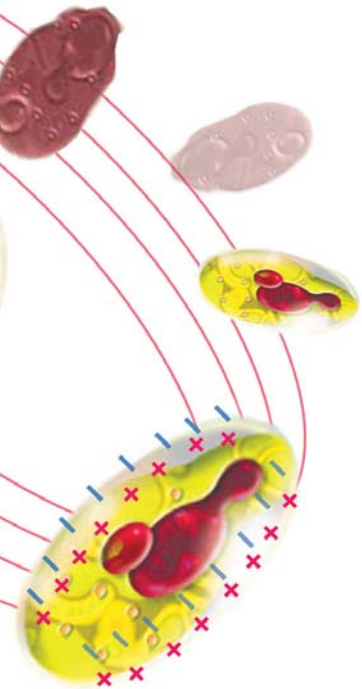
The Compact "Adapt" can either be mounted on to a Varivent instrument housing or the probe can be inserted into a range of ports commonly used on Fermenters or Propagators. Although not as robust as the Model 410P the housing is still rated at IP65 and will accommodate a variety of 12mm and 25mm diameter probe types.

Ideal solution for small breweries, fermenters in development laboratories as well as larger brewing vessels.

HOW THE YEAST MONITOR WORKS

Live yeast cells will have intact plasma membranes and these act as tiny capacitors under the influence of an electric field. The non-conducting nature of the plasma membrane allows a build up of charge. The resulting capacitance can be measured; it is dependent upon the cell type and is proportional to the concentration of these viable cells.

The four "flush" electrodes in the probe of the Compact Yeast Monitor apply a radio frequency field to the yeast within 25mm of the electrodes. Electronic processing of the resulting signal produces an output which is a highly accurate measurement of the concentration of viable cells. The system is insensitive to non-viable cells, the wort trub and the yeast flow rate.



Automatic yeast pitching rate control

The Yeast Monitor allows brewers to automatically dose the correct amount of LIVE yeast into each fermenter.

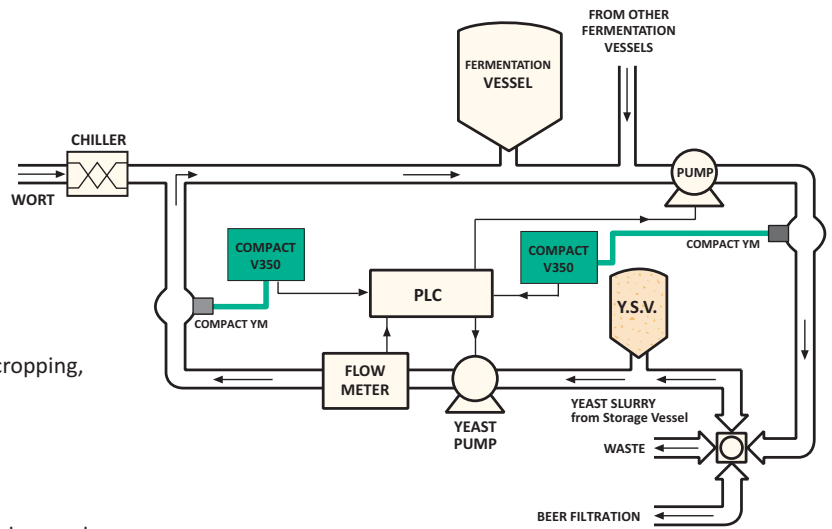
Major benefits include:

- More consistent and shorter fermentations
- Reduced dependency on lab for sampling/analysis
- Improvement in consistency of beer quality

Automatic control of yeast cropping

The Yeast Monitor is commonly used to control yeast cropping, breweries benefit in the following ways:

- Poor quality yeast can be directed to a waste tank
- The ‘cream of the yeast’ with a high viable cell concentration can be selectively recovered
- The interface between yeast and beer can be clearly detected: ideal for poorly flocculent yeasts
- The system can detect and alarm when beer is being pulled through the cone.



Compact & Compact Adapt Specifications

	Compact 410P System	Compact Adapt 410PV System
General	Measures concentrations of live yeast during Pitching, Cropping, pipeline monitoring of Propagations, Fermentations, Krausening	Live yeast during monitoring in vessel during Propagations and Fermentations. Recommended for ports used on fermenters and propagators
Equipment	Port Plate instrument, Connecting cable V350 Display Transmitter in enclosure or panel mount	Flush Probe, Adapt Instrument, Connecting cable, V350 Display Transmitter in enclosure or panel mount
Operating Range	0.5 to 70% Viable Yeast Spun Solids 25 to 5x10 ⁹ Cells/ml Conductivity range of 0.75 to 3.0mS/cm. 20 yeast strain storage.	0.5 to 70% Viable Yeast Spun Solids 25 to 5x10 ⁹ Cells/ml Conductivity range of 0.75 to 3.0mS/cm. 20 yeast strain storage.
Display Transmitter	YM V350 with 3.5" touch screen	YM V350 with 3.5" touch screen
Communications	Remote control PLC I/O, 4-20mA, Alarm outputs	Remote control PLC I/O, 4-20mA, Alarm outputs
Power Supply	+24V DC, 15W max	+24V DC, 15W max
Transmitter Enclosure	Stainless steel IP65, h 200mm x 163 mm x 135 mm	Stainless steel IP65, h 200mm x 163 mm x 135 mm
Instrument Housing	Stainless steel IP65 to fit Varivent Instrument Housing	Plated high grade PEI polymer resin
Probe	Integral to compact housing	Flush electrode, 25x75 Fortron/Stainless Steel

RELIABLE...

Aber brewery products are distributed world-wide and details of the local supplier are provided at www.aberinstrument.com

For more information please call now on +44 (0) 1970 636300 or call your local Aber Instruments Distributor.

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