CDRBeerLab®

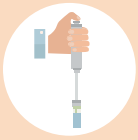
Analysis system
for beer quality
control

CDR BeerLab® system

CDR BeerLab® consists of a thermostatically controlled analyser with photometric technology using LED emitters and kits of reagents that are pre-filled into vials and ready to use.

1

Take the sample
to be analysed using the pipettes supplied with the system.



2

Place the sample
in the test tube containing the pre-filled reagent.

3

Insert the test tube
into the reading cell to obtain the analysis result.

Reduced analysis times

With **CDR BeerLab®** you are finally free to carry out the analyses independently, in your own brewery, quickly and easily, without having to rely on an external laboratory. In fact, it is possible to analyse **16 samples simultaneously** and constantly monitor the production process, obtaining specific and precise answers in a few minutes.

Easy to use

The system has been designed so that it can be used not only in the laboratory, but also on the production line for real-time results, by personnel without specific technical training.
The analysis methods, shown on the display, are simpler than traditional methods and can be performed in just a few steps.
If required, the HELP function will guide the operator step by step through the procedure. The result is automatically calculated, displayed and printed out.

Reliable

CDR BeerLab® guarantees high sensitivity, a wide measuring range and excellent repeatability of the results thanks to the innovative photometric technology using LED light sources and fixed wavelengths ranging from the ultraviolet to the visible spectrum (with a range of 0 to 6 optical density). **The analysis results are correlated with those of the reference methods.**

Pre-filled and disposable reagents are packaged in bags of 10 tests, developed and produced by the CDR research laboratories.

CDRBeerLab®

Beer

TEST	Measuring range	Resolution	Repeatability	Test time
Sugars Fermentable sugars in wort (glucose, fructose, maltose, sucrose, maltotriose)	15.0-200.0 g/L	0.1 g/L	1.6 g/L	13 mins
Sugars Fermentable sugars in beer (glucose, fructose, maltose, maltotriose)	0.1-18.0 g/L	0.1 g/L	0.2 g/L	6 mins
	15-200 g/L	1 g/L	2 g/L	6 mins
Lactic acid D+L	150-3500 ppm	1 ppm	73 ppm	10 mins
Bitterness	5.0-80.0 IBU	0.1 IBU	1.5 IBU	11 mins
Colour	EBC 1-100 SRM 0.5-50.0	EBC 1 SRM 0.1	EBC 1 SRM 0.3	1 min
Alcohol content	0.002-0.200% vol	0.001% vol	0.002% vol	11 mins
Alcohol content	0.10-1.00% vol	0.01% vol	0.01% vol	11 mins
Alcohol content	1.0-17.0% vol	0.1% vol	0.2% vol	11 mins
VDKs	0.05 - 2.00 mg/L	0.01 mg/L	0.06 mg/L	5 mins + distillation time
Yeast Vitality	0.5 – 2.6 AP	0.1 AP	0.1 AP	25 mins
Acetic acid	20 - 220 mg/L	1 mg/L	11 mg/L	6 mins
pH	3.60-6.00	0.01	0.02	1 min
Calcium	20-150 ppm	1 ppm	5 ppm	8 mins
Starch	0.10-5.00 g/L	0.01 g/L	0.07 g/L	1 min
Carbohydrates	2.0 – 80.0 g/L	0.1 g/L	0.6 g/L	13 mins
FAN Free Amino Nitrogen by OPA	30 - 300 mg/L	1 mg/L	15 mg/L	4 mins
Total SO_2	1.0-30.0 ppm	0.1 ppm	0.7 ppm	2 mins
Polyphenols	5-550 mg/L	1 mg/L	5 mg/L	10 mins

In just 15 minutes, up to 16 samples can be analysed with CDR BeerLab® and up to 3 samples with the Junior model.

Water

TEST	Measuring range	Resolution	Repeatability	Test time
Calcium	20.0-250.0 ppm	0.1 ppm	4 ppm	1 min
Magnesium	2.0 - 50.0 ppm	0.1 ppm	1 ppm	1 min
Bicarbonates	1 - 300 ppm	1 ppm	3 ppm	10 mins
Chlorides	15 - 500 ppm	1 ppm	21 ppm	1 min
Potassium	5 - 500 ppm	1 ppm	6 ppm	1 min
Sulfates	10 - 250 ppm	1 ppm	7 ppm	1 min
Zinc	0.05 - 1.00 ppm	0.01 ppm	0.03 ppm	2 mins
Alkalinity	5 - 600 mg/L	1 mg/L	12 mg/L	10 mins

CDRBeerLab®

CDRBeerLab® Jr

	CDRBeerLab®	CDRBeerLab® Jr
Analyses	Complete analysis panel	Customisable configuration
Samples that can be analysed simultaneously	16	3
Multitasking Mode	Yes	No
Calibration	Pre-calibrated No periodic calibration is necessary	Pre-calibrated No periodic calibration is necessary
Maintenance costs	No	No
Storage of results	Sufficient internal memory for storing thousands of analysis results in CVS and XML files compatible with all database formats (e.g., XLS, SQL)	Sufficient internal memory for storing thousands of analysis results in CVS and XML files compatible with all database formats (e.g., XLS, SQL)
Photometric module	Up to 6 wavelengths in 4 reading cells	Up to 6 wavelengths in 4 reading cells
Incubation module	37 ° C thermostated block with 16 positions	37°C thermostated reading block with 3 positions with incubation function
Connection with barcode and QR code scanners	Yes, via Bluetooth	No
Display	5.7" TFT colour LCD with touch screen	4.3" TFT colour LCD with touch screen
Connectivity	1 USB port type B for transferring the performed analysis database, configuration and software update, PC connection 1 USB port type A for technical service and computer connection 1 Ethernet port (LAN) for connection to intranet Bluetooth 4.0	1 USB port type B for transferring the performed analysis database, configuration and software update, PC connection Bluetooth 2.1
Printer	80 mm wide printer with integrated graphics	Wireless connection for external printer
Dimensions and weight	32 x 29.5 x 13 cm (W x D x H) 2.80 kg	15 x 22 x 8,3 cm (W x D x H) 0,80 Kg
Power supply	24 V	24 V or optional lithium-ion battery

rev 7.0

CDRBeerLab®

CDR BeerLab®, system of FOODLAB® line, is a trademark of CDR S.r.l. Phone. +39.055.871431 • Fax +39.055.8714322
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