

The Research Group of Chemical Engineering in the University of Verona - Italia acquires a BM-EVO respirometer from Surcis



SURCIS S.L.



[The University of Verona](#) has acquired a Surcis' BM-EVO2 respirometer.

This acquisition also includes the special "biomass-carrier" reactor for moving bed bioreactors (MBBR) and granular biomass

The BM-EVO2 system will be destined to the laboratory of the [Research Group of Chemical Engineering of Environment and Bioprocesses](#).

The activities carried out by this research group are developed in two different lines but, according to the needs, intersect: one aimed at the development of new plants / processes also considering basic aspects and with funding from public research organizations (EU, Ministries, Region), and the other aimed at solving application problems and generally financed by private companies

For the generation of the Order, the University required from Surcis a descriptive document on some exclusive characteristics of the system to be considered as "[Unicity system](#)"

The most important points for the decision to acquire the BM-EVO2 have been the fact that the BM-EVO2 respirometer is equipped with two reactors and the possibility of applying respirometry to moving bed processes.



University of Verona

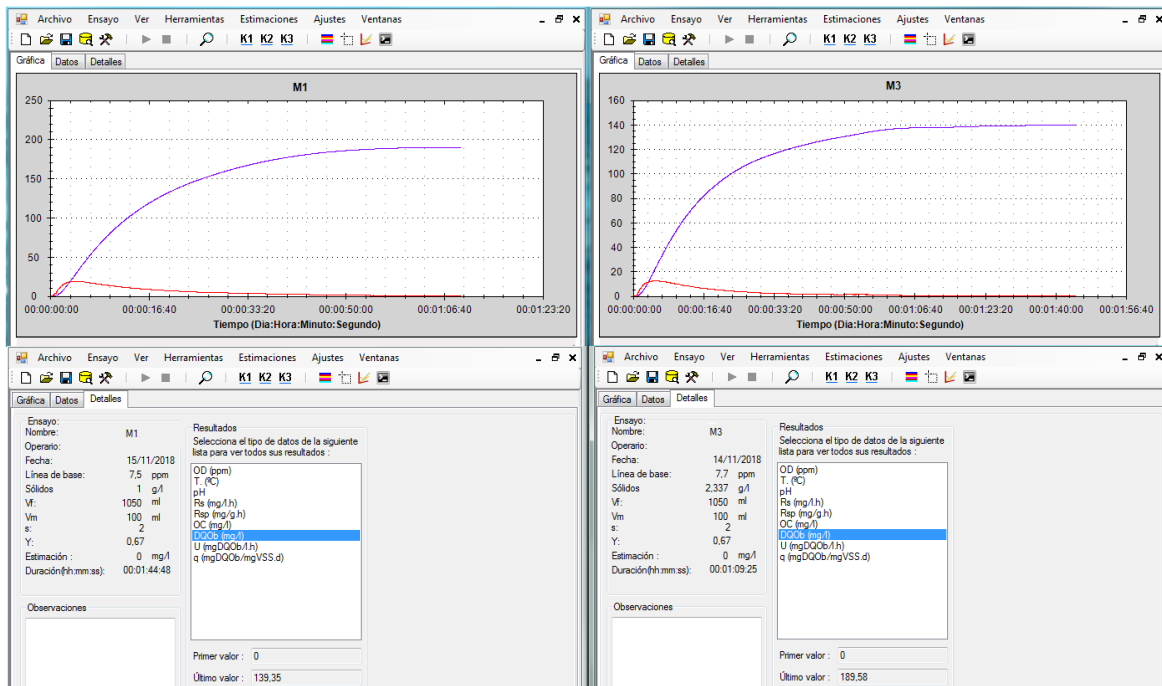
BM-EVO2

Together with the BM-Advance2 model, the BM-EVO2 is the only respirometer on the market with two isolated reactors that can operate simultaneously with three different types of working modes (OUR, Cyclic and dynamic R), with programmable automatic control of temperature, oxygen and sample volumes, and to which two reactors for biomass carriers of moving bed processes can also be adapted.

The BM-EVO2 works with two programs loaded on a single computer.

It is equipped with a specific adaptation so that the Respirograms of the different measurements that are carried out in each reactor can be generated automatically.

This software also supports the possibility of viewing respirograms and results in real time for comparison and visualization of several screens of tests executed graphically and tabularly.



Simultaneous Rs and bCOD respirograms and results from each reactor of the BM-EVO2

BIO-CARRIER

The BM respirometer, when operating with the [bio-carrier reactor](#), opens up the field of applications for moving bed bioreactor (MBBR) and granular biomass.

With the bio-carrier all the same applications can be undertaken as with the normal reactor, there is also the possibility of calculating the number of carriers per unit volume and amount of oxygen necessary to keep the biomass carriers adhered in optimal conditions.



Carriers loading in the bio-carrier reactor