

REACTIVATEUR 60

**AUTOMATIC REACTIVATION AND
ACCLIMATISATION SYSTEM FOR YEASTS**



REACTIVATEUR 60/300



REACTIVATEUR 60/1500

BENEFITS

REDUCTION
OF YEAST
LAG PHASE

REGULAR
ALCOHOLIC
FERMENTATION

GUARANTEE OF
PREVALENCE IN
FERMENTATION

IMPROVEMENT OF
FERMENTATION
KINETICS, EVEN IN NON
IDEAL CONDITIONS

GUARANTEE
OF A PROPER
REACTIVATION

REACTIVATION
OF STUCK
FERMENTATION

PRODUCTION OF PIED
DE CUVE FOR SECOND
FERMENTATION IN
TANK OR IN BOTTLE

Reactiveur 60 automatically executes all the procedures required to prepare yeast for inoculation and ensures extremely consistent alcohol fermentation.



BENEFITS

Multiple advantages:

- Reduction in yeast latency times.
- Extremely consistent alcohol fermentation.
- Guarantee of dominance in fermentation.
- Enhanced fermentation kinetics even in microbiologically contaminated musts.
- Guarantee that reactivation is always carried out correctly and that the inoculated mass is active and at the highest multiplication rate.
- Ideal for reactivating interrupted fermentation and for the production of yeast must to be used in Charmat or Traditional re-fermentation.

FOCUS ON DOMINANCE

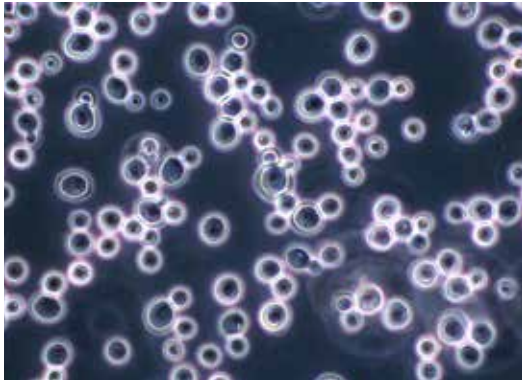
The improvement of the fermentation process of musts, wine refermentation and malolactic fermentation is mainly linked to the achievement of the **prevalence of selected yeasts**, since it is superfluous to choose strains with improved characteristics if there is no certainty that they have the supremacy over indigenous microorganisms.

AEB has focused its research in the field of biotechnology on the concept of prevalence.

ALCOHOL FERMENTATION USING SELECTED YEASTS

Indigenous and inoculated yeast competition depends on their quantitative ratio.

The indigenous microflora of the must consists almost entirely of yeasts unsuitable for proper fermentation. These are present in quantities that vary from a few tens of thousands to a few millions of cells per millilitre, which depending on the picking and crushing times of the grapes, the general conditions of hygiene and the temperatures during the pre-fermentation phases.



To be sure to achieve the prevalence of selected yeast, it is necessary to inoculate a concentration that is at least 20 times higher than that of indigenous yeast. Therefore 20 g/hL of active dry yeast, if properly hydrated and reactivated, can provide enough selected yeast to ensure prevalence in musts with a high microbial load, rendering the effects of indigenous microorganisms negligible.

In order to standardize and therefore limit human error in the preparation of the yeast to be inoculated, the **Reactiveur 60 range** was created, which over the years has adapted its characteristics more and more to the needs of customers.

YEAST BEHAVIOUR DURING REACTIVATION

The selected yeast that are introduced into the reactivation solution rapidly absorb water and, just as rapidly, reactivate their vital functions. After 5-10 minutes, the yeasts are already capable of multiplying and require glucose and fructose for their survival (photo 1).

To prevent interruption of the yeast life cycle, the preparation of a sugar solution at 5-8% concentration is always recommended. The sugars in the hydration solution are quickly consumed by the actively multiplying yeasts and after 20-25 minutes (photo 2) the addition of a grape must, preferably with a low microbial load, is essential.

The addition of the must should be carried out gradually so as to avoid temperature changes in the solution of more than 5°C. Throughout the reactivation phase, air should be blown in intermittently to stimulate cell multiplication and prevent fermentation in this early phase. All these procedures, if carried out manually, would require considerable effort and care, while are carried out automatically and in sequence by **Reactiveur 60**.



During the first 5 minutes, the multiplying yeast takes on water and produces a white foam containing large bubbles.



After 10 to 15 minutes, the yeasts begin to consume the sugars and produce a very dense foam with fine bubbles.

OPERATION

Reactivating the yeast requires just two simple steps: the quantity of yeast to be rehydrated is set and the start button needs to be pressed. The machine will then input the correct quantity of water, which is selected according to the yeast to be reactivated. It will then heat it to the set temperature (38°C). An acoustic signal will alert the operator that they can add the yeast to begin the rehydration phase. The water and yeast will then undergo alternating phases of agitation, pause and aeration. The system then slowly adds the must to the freshly prepared yeast. Must loading may be carried out in two ways: by time or by temperature difference, whichever is reached first.

RANGE

THE LINE CONSISTS OF A NUMBER OF MODELS:

MODEL	QUANTITY OF YEAST (KG)
60/300	UP TO 5
60/1000	UP TO 20
60/1500	UP TO 30

MODEL	QUANTITY OF YEAST (KG)
60/2000	UP TO 40
60/3000	UP TO 50
60 ECO	MIN. 0,5

TECHNICAL SPECIFICATIONS

Reactiveur 60 allows the machine to be customised according to customer needs thanks to the variety of programs that can be installed and the versatility of the input.

1 Multiple functionalities

- **Solution recirculation** for homogenization and dissolving purposes
- **Foam reduction**
- **Air injection**
- **Automatic filling**
- **Cooling the yeast** with must (acclimatisation)
- **Heating with stainless steel** eating element and acoustic temperature signal
- **Integrated washing**
- **Maximum level control**

2 Touch screen display

3 Stainless steel eating element and acoustic temperature signal

4 Complete draining pump with 3-way pneumatic valve

COMPONENTS

REACTIVATEUR 60 IS EQUIPPED WITH:



TOUCH SCREEN: TOTAL CONTROL AT YOUR FINGERTIPS

The touch screen is easy to use and allows management of all operations:

- Allows operating parameters to be entered and edited.
- Communicates operating status and alarms.
- If the operation is permitted, when a digit is pressed, a numeric keypad will appear allowing the operator to increase or decrease the value.

Each operation can be manual or automatic: in the first case the program will be interrupted and manual tasks can be carried out. The next time the “Back” button is pressed, the program will resume from where it was interrupted. In the second case it will be possible to reactivate the desired amount of yeast in a simple and fast way.



ENOWATER

Water filtration system to eliminate micro-organisms and reduce chlorine.



SPRINKLER SHOWER NOZZLE

Ensures homogenisation inside the tank.

COMPONENTS

REACTIVATEUR 60 IS EQUIPPED WITH:



UNIT WITH DOUBLE-ACTING PNEUMATIC VALVE, ACTUATOR, SOLENOID VALVE AND PUMP

This guarantees flows with the aid of the pump (with neoprene impeller) inside the reactivator via a pumping process to homogenise the biomass, break down the foam and promote aeration of the medium. Allows connection of the must/wine tank to the Reactivateur 60 to acclimatise the yeast to the product to be fermented.

The valve in its rest position closes the recirculation circuit in the Reactivateur 60 tank. Thus, in the event of a loss of pressure or accidental shut-down of the system, the wine/must tank can not overflow.



WATER FLOW METER

Digital flow meter for rehydration water.