A wide range for any need

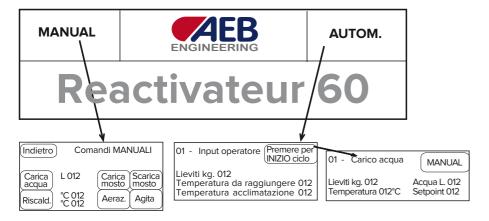
| Models | Quantity of yeast (kg) | Tank volume (L) |
|---------|------------------------|-----------------|
| 60/300 | Up to 6 | 300 |
| 60/800 | Up to 12 | 800 |
| 60/1200 | Up to 25 | 1200 |
| 60/2000 | Up to 35 | 2000 |
| 60/3000 | Up to 50 | 3000 |
| 60 Eco | Min. 0,5 | |

Touch screen: total control on hand

The touch screen is easy to use and allows managing any operation by simulating the buttons, switches and indicator lights:

- allows to enter and modify the operating parameters;
- communicates operating status and alarms;
- if the operation is allowed, by pressing on any figure, a numeric keypad will appear that will increase or decrease it.

The management can be manual or automatic: in the first case, the program will be interrupted and it will be possible to carry out manual operations. The next time the "Back" button is pressed, the program will restart from where it was left. In the second case, it will be possible to reactivate the desired quantity of yeast in a simple and fast way.



The reactivation of yeasts

To reactivate the yeasts, just 2 simple touches are enough: press the start button and the equipment will start to inject the right amount of water, selected according to the yeast to be reactivated. Then it will heat it up to the set temperature (38°C). An acoustic signal will alert the operator, who will add the yeasts to begin the rehydration stage. The water and the yeasts will then be subject to alternating stages of mixing, pause and ventilation. Later the system will slowly add some must into the freshly prepared yeasts. The loading of the must can be carried out in two ways: timed or by temperature difference, according to which of the two values is reached first.



AEB BIOCHEMICAL USA

111 N Cluff Avenue – Lodi, CA 95240 (USA) Tel: +1 2096258139 Fax: +1 2092248953 info@aebusa.com Reference: REACTIVATEUR_60_DEP_EN_0141216_USA





Linea Reactivateur 60

Focus on the prevalence



In order to improve the fermentative process of musts, as well as the refermentation and malolactic fermentation of wines, **selected yeasts and bacteria** must promptly prevail over the indigenous microorganisms, lest the selection of strains with improved characteristics is rendered totally futile.

AEB has made of the concept of prevalence the focal point of its research for biotechnologies.

The alcoholic fermentation with selected yeasts

The competition that takes place between natural and inoculated yeasts, hinges on their quantitative ratio. The must's indigenous microflora consists mainly of yeasts unsuitable for a good fermentation and varying in quantity from a few tens of thousands to millions of cells per millilitre, depending on the time needed for bringing in and crushing the grapes, on the general sanitary-hygienic conditions and on pre-fermentation temperatures. To ensure that the selected yeasts will prevail, it is necessary to inoculate yeasts at a concentration at least 20 times higher than that of indigenous yeasts.

Therefore, 20 grams per hectolitre of active dry yeast, if correctly hydrated and reactivated, will supply an adequate yeast charge, ensure prevalence in musts containing a high microbial charge and finally

In order to standardize procedures and limit human error during the preparation of the yeast inoculum, the **Reactivateur 60 range** has been designed, equipment that during years changed its characteristics in order to satisfy more and more customers' needs.

Yeast behaviour during reactivation

render the effect of indigenous yeasts irrelevant.

The selected yeast, after its introduction into the reactivation solution, rapidly absorbs water and quickly reacquires its vital functions. After 5-10 minutes, the yeast is already capable to multiply and cannot do without glucose and fructose, if it is to survive (photo 1). To prevent interruption of the yeast's vital cycle, it is always advisable to prepare a sugary solution at 5-8% concentration.

The sugars found in the hydration solution are rapidly consumed by the actively multiplying yeasts and, after 10-15 minutes (photo 2), it becomes necessary to add grape must, preferably containing a low microbial charge. The must needs to be added gradually, in order to avoid temperature changes in excess of 5° C.

During the entire reactivation stage, it is necessary to allow an intermittent intake of air, in order to stimulate cell multiplication and prevent fermentation during this initial stage.

These operations which, if carried out manually would require considerable labour and attention, are carried out automatically and in perfect sequence by **Reactivateur 60**.



Photo 1 - In the first 5 minutes, the multiplying yeasts inglobe water and produce a white foam with large bubbles.



Photo 2 - After 10-15 minutes, the yeasts begin to consume sugars and produce a very thick foam with fine bubbles.

Advantages

- ✓ It reduces yeast latency;
- ✓ Extremely regular alcoholic fermentations:
- ✓ It guarantees the fermentation prevalence;
- ✓ Improves the fermentation run even when the microbiological conditions of musts and cellar hygiene are not ideal;
- ✓ Ensures that the reactivation is always correctly carried out and that the inoculated mass is active and at the highest possible multiplication level;
- ✓ It is ideal to reactivate stuck fermentations and to produce the yeast starter for Charmat or Champenois refermentation methods.

Technical characteristics

- ✓ Multiple functionalities:
 - Solution recycle system to homogenize and solubilize
 - Foam abatement system
 - Air inlet system
 - Automatic filling system
 - Must-based yeast cooling system (acclimatization)
 - Warming up system with stainless steel element and acoustic signal when required temperature is reached
 - Integrated washing system
 - Maximum level control system
- √ Touch screen display
- √ Stainless steel electronic board
- Emptying pump with 10 bar, pneumatic 3-way sealing valve

Reactivateur 60 enables, thanks to many installable programs and their immission facility, to personalize the equipment according to the customers' needs.

Malolactic fermentation carried out with selected bacteria

Similarly to alcoholic fermentation, it is of the utmost importance that the selected malolactic bacteria immediately prevail over polluting indigenous bacteria. The main aim of this reactivation is to protect the bacteria from being simultaneously attacked by unfavourable pH conditions, sulphur dioxide, alcohol, temperature and lack of nutritional factors.

The pH and temperature conditions ideal for their multiplication allow the selected bacterial cultures of **Malolact Acclimatée** to multiply.

Reactivation procedure of Malolact Acclimatée

To reactivate, whilst simultaneously promoting the growth of selected malolactic bacteria, it is necessary to take a part of the wine which needs to be inoculated (250 liters

for the treatment of 250 hectoliters), disacidify it down to a pH of 3,5-4, add 5 g/L of Fermoplus®

Malolactique (i.e. 1250 g) and, after having introduced the most suitable Malolact culture, maintain a temperature of 24°C for 24 hours. Reactivateur 60 assists the acclimatization process, making it more effective, and increases the malolactic bacteria population.

