

Efficiency and safety – the new E1810 batch centrifugal

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Higher performance with a smaller footprint, improved technological values, a reduced number of components that are more easily accessible, a longer basket service life and a higher level of automation – these are essential features of BMA's new series of batch centrifugals: the E series.

The E-series centrifugals have been completely re-designed to make innovative ideas readily available to users. The most important innovations are a discharger that does without a vertical motion axis; a basket with elliptical perforations that have been calculated with the most advanced computation methods; a surprisingly simple but very effective syrup separating device; and a housing whose rigidity surpasses even that of BMA's previous centrifugal series.

The control system translates the latest safety regulations into practice and sets new trends in user-friendly menu guidance and ergonomic operation. One motion axis less makes the discharger much faster, so the machine can handle one extra batch per hour. This delivers added performance with the same motor power as before! The reduced number of components means less wear and tear and therefore lower maintenance – which, of course, automatically improves the machine's reliability.

> When taking a closer look at the basket, the elliptical perforations immediately stand out. Because of their special shape, the peak stresses occurring in the basket shell during operation can be reduced by more than 40 % in comparison with conventional baskets with cylindrical bore-

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holes! But the new basket and hub design not only increases the service life of the basket, and therefore the safety of the machine. It has also reduced the moment of inertia of the basket, which means that less energy is required for acceleration. This, in addition to improved syrup draining and a larger basket volume, significantly improves the performance of the centrifugal.

Another simple, yet highly efficient innovation is the new syrup separating device. It consists of a duct in the basket housing that is specifically designed for syrup draining requirements, and two standard flaps outside the housing. Green and wash syrups are effectively separated. The difference in purity and the ratio between green and wash syrup flow rates can be set in the centrifugal control unit, in order to adjust them to the individual needs of the factory.

The centrifugals of the E series are controlled with a terminal that is integrated into the housing. The electrical and pneumatic control elements are positioned in the terminal so that they are easily accessible from the front. The E series uses intrinsically safe control units and sensors that are selected for specific requirements according to the risk assessment and in compliance with EN ISO 13849. This ensures maximum safety of the centrifugal control system.

The enhanced efficiency and safety of the new E-series machines are the result of a combination of a host of intelligent and new developments. With needs-based, pre-purchase consulting, training for operating staff, and regular service by BMA's experts, they will develop their full potential. *Hans-Heinrich Westendarp*



Prototype during fabrication



New basket shell with elliptical openings

Benefits

- Higher performance
- More efficient operation
- Compact design
- Optimum safety
- Very smooth operation