Centrifugal safety for batch centrifugals



E centrifugal with failsafe control

Do you feel safe when a 40-ton lorry runs past you at 70 km/h at a short distance? Such a lorry has nearly the same energy as a filled batch centrifugal processing 1,750 kg at spinning speed. The speed at the outer basket edge is more than 300 km/h.

To make sure that you feel at ease when working with and on BMA centrifugals, safety and quality are top priorities for BMA; national and international standards, laws and regulations form the necessary basis. The regulations applied in particular are the 2006/42/EC Directive on machinery, DIN EN ISO 12100 ("Safety of machinery - General principles for design - Risk assessment and risk reduction"), and EN 12547, which is specifically for centrifugals (Centrifugals -Common safety requirements), as well as the regulations for execution of electrical equipment, such as the 2004/108/EC EMC Directive and the 2006/95/EC Low-voltage Directive.

A risk assessment analyses all possible dangers to life and limb that might be caused by a centrifugal, so they can be prevented in the design phase and risks largely minimised. For risks that cannot be prevented, suitable measures have to be found, for example, installation of protective claddings. Users are notified of any possible residual risks in the detailed operating instructions.

Examples of the numerous measures taken to ensure the high safety level of BMA centrifugals are the use of a failsafe control unit with f-CPU or the use of redundant sensors for important scans. Performance level 'd' can thus be reached for certain functions. All safety-critical components are manufactured from certified semi-finished products, quality-checked by certified expert staff during manufacture, and finally pass through quality assurance. Innovative ideas from our own research and development, such as the elliptical openings in the E centrifugal baskets, which reduce the peak stresses in the baskets considerably, or the FEM calculations of the vibration behaviour of the frame and housing, which contribute to the extremely smooth running of the centrifugal, are clear proof of BMA's efforts for safety.

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- SafetyProcess stability
- High availability