

Inline mixers for anti-foaming agent

A well-known manufacturer of potato-based snacks and other food and beverage products were experiencing problems with process of cooking potatoes in their factory.

Process points

The process involved the cooking of potatoes in a vat; however the fluid level experienced significant foaming from the immense quantity of starch produced by a large volume of potatoes. Traditionally, this problem was treated by including a small quantity of oil into the fluid; however this caused problems with quality and also the cleaning process.

In conjunction with a specialist food process contractor, Verder were asked to provide in-line static mixers. The inline mixers would be installed in the process line itself and mix in a special anti-foaming agent dosed by a purpose-built packaged system.

The mixer was required to produce a homogenous fluid from water at 45L/min and a dosing rate of the antifoaming agent at 12-15ml/min.

A pressure drop of just 0.31 bar was experienced.

The Verdermix static mixer was ideal for the process

- The mixing chain is built specifically for each customer's process to get the perfect degree of mixing, with the minimum amount of energy.
- The chain is installed within pipe work to obtain an excellent fit and for ease of installation at the factory premises. There is no need for any special tools or knowledge.
- A static mixer causes a very small quantity of 'drag' and loss in pressure, used and converted in mixing energy, so it is a very costeffective way to mix fluids.
- Verdermix static mixers are CIP/ SIP compatible with special flanges and SS316 RA polish finishes for hygienic processes.





The Verdermix static mixer operates by using a special helical design to provide turbulent flow, generated radial, inverting and cutting forces which rapidly homogenises the fluid.

The exact number of helical 'elements' create a mixing 'chain' depending on the properties of the fluids, solids or gases. The mixers are available in a large number of metallic and non-metallic finishes.



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