

FOCUSING ON ROTOR-STATOR MIXERS

Join our DOMINO industrial research consortium as we tackle the challenge of effective rotor-stator scale-up from trial to continuous production



Scaling up rotor-stator mixers effectively from laboratory scale to commercial production scale is an ongoing challenge for many organisations. In many cases it can take more than a year to find large scale design and process conditions that will produce the same results as those used in process development.

Getting the correct, informed design and operating conditions right first time can therefore significantly reduce time and cost of achieving efficient production at commercial scale.

There is an obvious need for more detailed investigation into the effect of parameters and the scale-up ability of this important part of many industrial processes.

Through over a decade's extensive experimentation and numerical modelling, Framatome BHR has investigated the influence of many different variables on the effectiveness of rotor-stator mixers for the incorporation and breakup of agglomerated and other types of solid particles, and has more recently been working with immiscible liquid dispersions.

Having listened to our clients we now propose to further focus the work of our DOMINO industrial consortium, which has previously studied a broad range of high intensity devices, on rotor-stator devices to tackle this challenge directly.

The work programme will focus on the use of real industrial mixer designs with the aim of developing practical equipment selection guidelines and process optimisation procedures. Measurable benefits will include faster, more efficient scale-up; significantly reducing costs and dynamically improving the route to full production.

The key areas of investigation planned for the coming year will be:

Powder incorporation | Emulsification | Crystal milling.

The Opportunity

Join us in this innovative programme to influence our approach and ensure your key objectives are met. With such a wide range of equipment available, our members will be asked to identify specifically those types that will be most useful to them as a priority. Together we will develop exploitable results that make a real difference to your business.

Members also benefit from access to over 10 years' market-leading research undertaken by the consortium into the dispersion of micro and nanoparticles in liquids, along with direct access to our world-leading experts on a one-to-one and confidential basis.



Why work with us?

Framatome BHR has led the field of fluid engineering and mixing for over 70 years. We unlock complex problems for our clients using our specialist knowhow and extensive experience. Our market-leading Fluid Mixing Processes Consortium has been successfully supporting industrial mixing for over 35 years and we're adept at transferring technology and learnings across the core sectors we operate in, including the pharmaceutical, food & drink, paints & coatings and personal & household care industries.

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