

The client

We are working with a manufacturing company that produces a range of food products and food ingredients. They are developing a new food product and are interested in identifying mixing equipment that can mix powders with liquids to make highly viscous, smooth pastes / doughs prior to further processing (e.g. moulding). They would like to find partners who can run pilot scale trials of mixing equipment with the aim of identifying a suitable process for the intermediate mixture that has the potential to be scaled-up.

The search

Our client is actively searching for partners with expertise in food processing technologies that can mix highly viscous pastes, using 40% powder and 60% water (inputs by weight). We are interested in connecting with manufacturers of suitable food mixing equipment and organisations capable of running pilot scale trials for new food products. These organisations could include equipment manufacturers, food contract research organisations and food contract manufacturers.

Food processing equipment that can handle the following requirements would be of interest:

- Combine powders and liquids, where the powder may be a protein ingredient and the liquid contains water
- Ideally, continuous mixing is possible (compatible with an in-line feeder), though batch mixing would also be considered
- The equipment can operate at shear rates of 200-700 s⁻¹
- It can produce a smooth paste / dough that is highly viscous, more viscous than peanut butter ($\geq 250,000$ cP)
- The process operating temperature is controllable and no more than 100°C
- The equipment is approved for food use and is commercially available in Europe
- Pilot scale trials of our client's food product can be conducted using the equipment
- Improvements in mixing times, reduction in energy use and improvements in the final smooth texture of the product are of interest to the client

Equipment that could present an alternative to current twin-screw extrusion would be of interest

What the client can offer

Our client has an established customer base and global processing operations. The company can provide significant resources to scale up potential processes. The client is interested in working with potential partners and would consider a variety of ways of working from research collaboration to contract research, to equipment purchase. Please provide details of any potential technology partner or service provider to Diane Kolonko via diane@strategicallies.co.uk