Since 1983, Flexcrete have been setting industry standards for high performance coatings and technical mortar solutions worldwide. Flexcrete offer a wide range of coatings solutions for small cosmetic repairs right through to major construction and infrastructure projects. Due to global expansion, customer demand increased in their liquid emulsions business, which prompted Flexcrete to invest in a filtration solution that would not only help to increase production rates but also to enhance product quality.

At Flexcrete’s factory in Leyland, new developments in hygienic liquid emulsions required a more stringent filtration process to ensure the highest product quality. While attending an exhibition in search of filtration equipment, Flexcrete approached Russell Finex to see if they could offer a solution. After an initial consultation, Flexcrete were confident that the Self-Cleaning Russell Eco Filter® could meet their filtration requirements and a trial was arranged.

John Morphet, Senior Materials Engineer comments, “The trial was arranged at our manufacturing facilities very quickly which enabled us to test it with our whole process line for proof of concept”.

The process begins with pigments and thickening solutions being added to raw materials, which are then thoroughly mixed. The liquid emulsion is then pumped through the Self-Cleaning Russell Eco Filter® to remove all foreign impurities, such as dried pieces of coagulated or unmixed membrane. After the membrane has been filtered the emulsion is filled into containers. “Due to our short lead times, it was important the filtration process did not slow down manufacture of the membrane. The Russell Eco Filter will achieve this and even allow us to increase production rates as we expand,” comments Morphet.

With the filter meeting the throughput rates of the process, Flexcrete recognized they would easily meet the requirements of their production process, and therefore purchased a Self-Cleaning Russell Eco Filter®. “We chose the EF603 model from Russell Finex due to its straight through design allowing the unit to be easily installed without disrupting any existing pipe work. It is also extremely easy for operators to strip down and clean the filter between color batches, minimizing production downtime,” explains Morphet.

Compared to other industrial filters which use consumable filter bags or cartridges, the Self-Cleaning Russell Eco Filter®...
utilizes a unique self-cleaning system along with a stainless steel mesh screen, offering significantly enhanced throughput rates whilst reducing blockages and waste.

“The Russell in-line filter fulfils the need of our liquid emulsions business, and offers a very high throughput rate which helps us maintain our short lead time and quick delivery of our product” concludes Morphet.

For over 79 years Russell Finex have been manufacturing and supplying sieves, filters and separators to improve product quality, enhance productivity, safeguard worker health, and ensure liquids and powders are contamination-free. Throughout the world, Russell Finex serve a variety of industries with applications including food pharmaceuticals, chemicals, adhesives, plastisols, paint, coatings, metal powders and ceramics.