

# Clean up your act

Glass Times editor, Luke Wood, talks to Flat Glass Solutions managing director, Dave Cahill, about how glass processors can save time and money, improve product quality – and operate more sustainably – with a Dieffe Macchine centrifuge.

**R**ising costs have increased the pressure on all businesses in the glazing industry and with continuing forecasts of rising inflation, the challenge is on for glass processors to operate as efficiently as possible.

One of the driest summers in history has also highlighted a growing problem of high water consumption. Going forward, water usage will need to be more carefully managed.

Dave Cahill, managing director of Flat Glass Solutions, says that one of the most cost-effective ways for glass companies to achieve this is to introduce a centrifuge to their production line.

"Our Dieffe Macchine centrifuges remove the small particles of glass and contaminants that are produced during glass processing and are designed for the recycling and treatment of water from cutting, grinding and edging machinery," he says. "Dieffe Macchine centrifuges not only help to ensure a greater level of efficiency but greater consistency of quality as well."

"In addition to that, they also help to increase productivity by reducing down time for cleaning and by eliminating the need to dispose of contaminated wastewater – the system requires no additional flocculants or chemicals – they can help glass processors to operate in a much more environmentally friendly way," he adds.

"That's hugely beneficial when you take into account that it's becoming increasingly important for companies to operate more sustainably and to demonstrate genuine 'green' credentials as part of the supply chain."

## How do they work?

By introducing a Dieffe Macchine centrifuge into your production line, glass particles as small as 10 microns as well as silica and cutting wheel components are separated



by continuously pumping water into a rotating drum, which creates the centrifugal force. As reference, a human hair is around 70 microns, so if the suspended solids are greater than 10 microns and their specific weight is similar to glass, then they will be removed in the centrifuge process. Due to the centrifugal force, waste material is forced to the sidewalls of the drum, where it collects as a thickening and compacted sludge with clean water then forced out through the upper section of the drum and back into the system.

The sludge can periodically be disposed of which can be manual or automatic, depending on the centrifuge model.

Dieffe Macchine centrifuges are available in a range of sizes, from the semi-automatic DFL100M (manually discharged) model that will process 100 litres of water a minute, the automatic mid-range DFL150A (automatic discharge) that will process 150 litres of water a minute and the top of the range DFL250A that is capable of processing 250 litres a minute or 15,000 litres per hour.

## Case Study

To prove the benefits of a Dieffe Macchine centrifuge, Flat Glass installed a DFL50M2 Duplex Centrifuge to two vertical straight line edgers in a factory where wastewater was being harvested to IBC container storage tanks, that were then transported to a wet waste hydro disposal facility.

"This was time consuming, took up a lot of factory space, and was expensive," says Dave.

"We installed a Duplex system, which allowed water from two vertical straight line edgers to be processed and clarified through the same centrifuge water treatment system at the same time."

"A single Dieffe Macchine DFL50M2 centrifuge capable of processing 3,000 litres per hour was installed between the machines, combined with a small clean water holding tank."

"In the first week alone, we collected around 500kgs of waste material from the edgers," continues Dave. "From an environmental perspective, that's a huge bonus. The waste can easily be recycled, we've eliminated messy and wet

areas from the production floor, the water usage and costs have been reduced and there's no longer a requirement to manage the disposal of thousands of gallons of contaminated water."

"That's in addition to extending the life of the machinery as it has cleaner water in the system and the associated reduction in running costs."

Dave explains that Flat Glass Solutions has also recently worked with one of the UK's largest glass processors, Glasgow based Independent Glass, to integrate a Dieffe DFL250A at one of their four sites, an investment that will return similarly impressive efficiencies. They have also opted to install a stand-alone DFL100M at their Mansfield site, integrated to a vertical CNC machining centre.

He also highlights that while Flat Glass Solutions can supply the complete line-up of Dieffe Macchine centrifuges, it also the capacity and expertise to service and repair existing set-ups, including the range of Forza G / G Tech centrifuges and systems – in addition to a comprehensive portfolio of



"In the first week alone, we collected around 500kgs of waste material from the edgers"



world class solutions for glass manufacturers.

This includes handling equipment; glass cutting tables and lines; automatic arissing machines; horizontal and vertical washers;

IGU lines; CNC stations; edging machinery; ovens and tempering furnaces.

"Dieffe centrifuges are just one element of our offer, but they represent one of the most important and above all cost effective solutions for glass processors," says Dave. "After all, you can have a factory full of the best machinery in the world, but if you're not looking after it properly, if you're not operating as efficiently as possible then you will be losing time and money."

"That's not a good way to run a business at the best of times, but in the current climate of spiralling costs it could be absolutely critical," he concludes.

"For anyone that's interested in learning more about the benefits of Dieffe Macchine centrifuges, please get in touch. Or alternatively, come and see for yourself at this year's Glasstec exhibition where we will have a working demonstration of the DFL100M in Hall 16 on Stand A06."

**To contact Dave Cahill at Flat Glass Solutions or to arrange a meeting at the 2022 Glasstec expo, email; [david@flatglasssolutions.com](mailto:david@flatglasssolutions.com) or call: 07887 837508**

"you can have a factory full of the best machinery in the world, but if you're not looking after it properly, if you're not operating as efficiently as possible then you will be losing time and money"



FLAT GLASS  
SOLUTIONS

## CENTRIFUGE - WATER CLARIFICATION SYSTEM



[www.flatglasssolutions.com](http://www.flatglasssolutions.com)



01359 256143

