

e-Motion automatic chemical mixer

The Rockwell Hitec Chemical mixers are a precision automatic mixer ideal for a lab which requires the highest possible standards of processing and reliability. In combination with CPAC's e-motion picture chemical concentrates, your chemical department becomes fully automated with no more manual mixing or handling.

HV3 - High volume mixer for motion picture labs

The model HV3 is the latest version of the Rockwell Hitec Automatic Chemical Mixers which have been in use since 1984. The new models feature many detailed improvements as a result of experience with several hundred installations around the world.

The mixers consist of a cabinet containing a control unit, a thermostatic water blender and up to 7 mixing units, one for each solution.

Each solution unit mixes or recycles small batches, normally 4.5 litres (1 1/4 US Gallons) and pumps them in to replenisher storage tanks. The cycle is repeated as often as required, to keep the processors supplied with freshly mixed chemistry.

Individual mixing units differ in the number of constituents and their capacity. Outputs can be up to 150 litres (40 US Gal)/hr. For very large labs 2 or more units per solution can be used.

The mixing sequence is entirely conventional, taking water or processor overflow and adding chemical concentrates in turn. Each stage is checked, as if by a conscientious technician and when correct, the mixer proceeds to the next step.

A very simple but safe method, not requiring conventional metering pumps, is used to measure out the correct volumes of the constituent parts of a mix.

The self-priming pumps feed the concentrates or water into a measuring chamber mounted above the mixing tanks. The measuring chamber is filled to a precise volume each time a constituent is dispensed and the time to fill is used to calculate how long the pump must run to measure out the correct quantity.

The measuring method is not only very accurate, resulting in precise process control, but provides a simple fail-safe warning system. If the time to fill the measuring chamber is outside pre-set limits, the mixer stops and gives an audible and visible warning.



The method of measuring has a number of advantages:

The mixers are very safe - they will either mix correctly or stop and give a warning. The mix data (list of constituent parts) is set by means of a keyboard or from a remote PC and requires no adjustment of metering pump bellows or cams. The quantity dispensed depends solely on the volume of the measuring chamber, which is unlikely to change, and is almost completely independent of pump characteristics.

Small batch mixing improves consistency.

Mixers are very compact and require a small fraction of the space required for manual mixing. Exposure to chemicals is minimised, reducing health hazards and simplifying compliance with legal requirements

HV3 mixers are modular and are specified individually for every installation. Each mixer contains 2-7 mixing units of the appropriate specification.

All Rockwell mixers can be custom configured to meet the needs of each individual motion picture laboratory.

A few customer comments:

“Since we switched to CPAC for our motion picture chemicals in concentrates, we saved ourselves a lot of time on manual mixing from bulk chemicals. Additionally, we get product shipped almost instantly after ordering. In combination with the Rockwell automatic mixers, our chemical department can be run with a minimal amount of staff. Our chemical processes are stable as never before due to this automation. For the areas where we still prefer to work with bulk chemicals, CPAC also there can supply us with premium quality products. All this combined with CPAC’s Silver recovery systems allows us to reduce chemical waste and optimize our silver return from both the ECN and ECP fixer.” **Tom Nicolaisen - Nordisk Film (Copenhagen, Stockholm and Oslo)**

“The Rockwell Hitec mixer revolutionised our chemical mixing and saved us many hours a day of labour.” **Dick Knapmann - Todd AO London**

“Rockwell Hitec mixers are the only way forward it’s a necessity for all labs it’s simple and cost effective, I recommend it to all my customers.” **Chris Lane - Cinetec (Motion picture consultants London)**

Total Motion picture chemical solutions, only with CPAC Imaging