

SeQual Technologies



All-in-One Oxygen Concentrator.

SeQual Technologies, a leading manufacturer of medical and industrial oxygen concentrators and other air separation equipment, recently released an all-in-one oxygen concentrator that provides both home and ambulatory oxygen therapy for chronic obstructive pulmonary disease (COPD) patients. To extend its battery life when the patient is mobile, this concentrator delivers an oxygen pulse at the beginning of each breath instead of the continuous oxygen flow it delivers when plugged into a power source.

SeQual Technologies chose Embed SE (formerly called VisSim) to develop the oxygen delivery algorithms because it allowed the mechanical engineers and clinicians to rapidly model the control strategy, test the results, and immediately incorporate necessary changes back into the algorithm.

SeQual Technologies used Embed SE to collect patient breath waveforms from COPD patients at rest and while exercising. Using Embed SE along with a number of valves and sensors, the patient waveforms are played back with astounding accuracy for testing of the finished oxygen concentrator. The same Embed SE routine is now used for quality testing of production units.

SeQual Technologies engineers are using Embed SE in numerous additional production tests because of the speed that new test routines can be implemented.



INDUSTRY

Medical Devices

CHALLENGE

Develop oxygen delivery algorithms that can be easily tested and fine-tuned

SOLUTION

Use Embed SE to collect COPD patients's breath waveforms and test against finished oxygen concentrator.

BENEFITS

- Rapidly model control strategies and immediately incorporate changes in the control algorithms
- Re-use diagrams in new test routines

The VisSim™ product line has been renamed to Embed™ and Embed SE™



For more information

Authorized Distributors



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