



## Quantum Spray Systems

[quantumspraysystems.com](http://quantumspraysystems.com)

This article shows how a technology company improved their design production facilities while shortening the system development time using graphical programming.

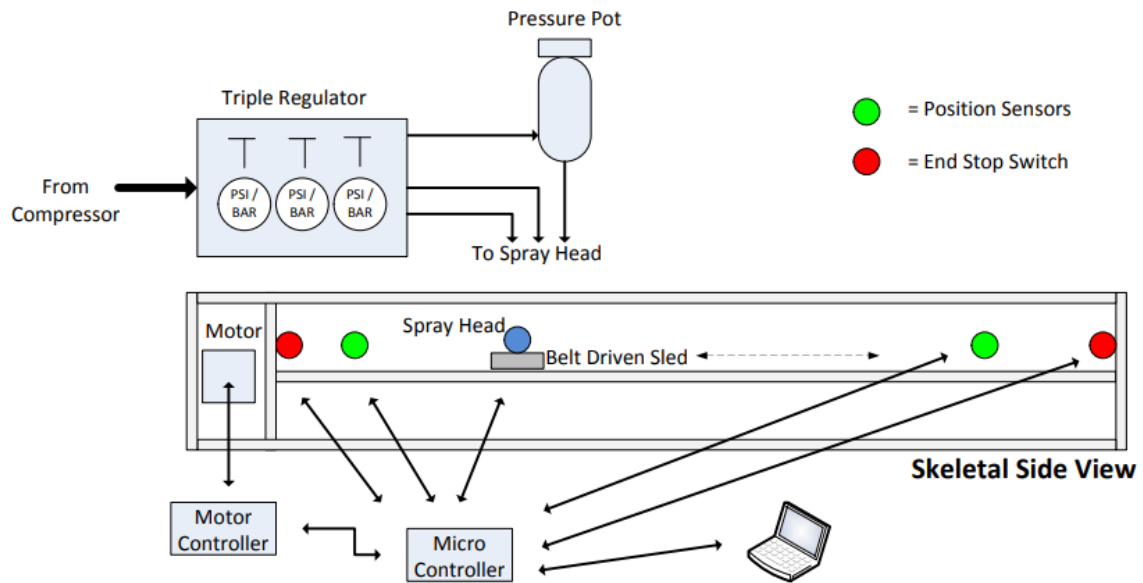
QSS Design and Manufacturer environmentally friendly spray systems. Their vision was to reduce the waste product created in the industry. By individually controlling, atomising, and fanning pressures, QSS systems reduce waste output by 80%, saving money and reducing hazardous emissions.

Their first project is to design and construct a test rig. The test rig will contain one or more of their 'automatic guns' which are cylindrical guns around an inch in diameter and a few in length, these operate under electronic control. Having a test rig enables them to control the speed of movement, allowing precise movements and detection on an applied product.

To do this they needed a reliable IDE that would allow them to create complex systems quickly. Flowcode was the choice of software to design the system, it operated the motor control, PID, accelerometers and other sensors behind the test rig.

QSS take an air supply from a compressor to their "Triple Regulator" which provides them with three independently variable air supplies. From the regulator two supplies go straight to the spray head whilst the other is used to pressurise a container. The output of the container then connects to the spray head (where further adjustment is available). These are presently all controlled manually, which they are later looking at controlling electronically.

**Rough schematic shown below.**



Flowcode was essential on this project and has been chosen as our IDE due to its powerful, intuitive capabilities that we believe will not only ease and facilitate design but significantly shorten the associated time scales when developing systems.



Article content by Iain Gillies at QSS.