

Smith of Derby, clockmakers

Smith of Derby clockmakers are the UK's leading Church and public clock repairer and restorer, taking care of over 4,500 historical clocks in the UK and across the world.



With company heritage that dates back over 160 years, skills are retained and passed down from generation to generation blending cutting edge design with traditional values.

The company's Research and Development Manager Matt Bean began using Flowcode recently and explains more about the success their company has had in the use of Flowcode for a recent project on the Smith of Derby, patent applied PAR-100 Pendulum Regulator System (see image below), which provides automated time adjustment for weight driven tower and Church clocks.



"We used Flowcode to develop the first prototype of the PAR-100 using the [EB006 PIC E-block](#) and a sample board. This allowed us to create quick prototypes of the initial concept which we could use to apply for a patent on the invention. The quicker code development time meant we were able to focus on the user interface and control routines and get the product into testing quicker.

Flowcode gave us a stable programming environment to develop the code which enabled me to work on the design of the production PCB, actuator and enclosure.

Sometimes, it's easy to miss little bits of syntax when inputting the code, such as a semi-colon or the wrong type of bracket. Flowcode eliminates this problem by automating syntax in the background, whilst giving a flowchart user an interface that converts the black art of coding into technical diagrams. To an engineer like myself this makes so much sense.

Furthermore, it works with ANSI C, which means I can import old proven routines, from our products, directly into Flowcode, meaning I don't have to re-write every program when I update products that are already written in C."