

The solution proposed involves robots supplied by Parmley Graham, or to be precise, collaborative robots (cobots); so named because they interact alongside humans.

Manufactured by our partner Rethink Robotics, cobot Sawyer, with its friendly face, is quickly accepted by the human workforce thanks to its design. Sawyer is delivered as an out-of-the-box cobot solution, equipped with powerful software and integrated camera systems. The Intera software platform has a graphical user interface that lets users train the robot, even if they have never written a line of code or programmed a robot before. Using the industry-leading train-by-demonstration capabilities of Intera, anyone can interact directly with the robot's arm to easily train new tasks.

Yorkshire-based CBM Logix engineered an integration system that uses the cobot arm to lift prints from the in-tray, place them on the scanners, and operate the scanners before carefully placing the scanned prints in the out tray.

Parmley Graham worked closely with CBM Logix to help deploy the five Sawyers and other automation requirements including the installation and testing of the PLC controller.

A team of eight humans and 5 cobots are currently preserving and digitising imagery of the commonwealth countries in a new, purpose-built facility in Edinburgh. Each of the five cobots has its own scanning cell housed within a dedicated cleanroom from where over 5000 prints a day are being scanned ? far more than five humans could achieve.

From the initial concept, this project has grown into a fully functional, fully automated, and well-engineered solution. Impressively, the operation is geared for a 24/7, true ?lights-out? operation. A whole work cell, including the Sawyer cobot, two scanners, two PCs, the PLC control cabinet and the silent compressor consumes an economical 2.4kwh ? less than your average kettle!