# Host to post control in Sanpaolo Imi Bank - Datalogic

We offer innovative solutions for many industrial sectors, from manufacturing, retail, healthcare and transportation logistics.

Datalogic and HT, Italian system and software integrator, provided the SANPAOLO IMI Banking Group with an efficient system of document tracking and tracing based on the Datalogic unattended 2D Matrix-2000â„¢ CCD readers.

With about 7.5 million customers, SANPAOLO IMI Banking Group has about 3,000 agencies in Italy and an international Branches network world wide, making it one of the most important banking groups in Italy. For accounting and reporting purposes, SANPAOLO IMI Group produces each year about 82 million documents to send to the customers. Part of them are produced in the central accounting facility in Moncalieri, Torino.
To be able to improve the organisation of the work flow, SANPAOLO IMI was looking for a reliable system to monitor and track in real time the production of printed documents, such as statements of accounts, etc. In particular, it was important to:
- quickly track all documents according to linear and/or two-dimensional codes
- identify and track all pages printed with front/back consistency check
- intercept incorrectly printed documents and duplicates
- quickly track documents on high speed inserting equipment input/output

The system which was implemented by the Italian system and software integrator HT, controls the complete production for the SAN PAOLO IMI printing centre in Moncalieri, which produces part of the documents for the entire banking group. This is done via sophisticated software and the Datalogic compact Matrix-2000™ CCD readers installed on high quality printers and inserters (envelope stuffing machines).Each document page is printed on the front and back page of each sheet with a unique ID code in the form of either a linear Code128 or 2D Data Matrix ECC200. The documents are printed on high speed continuous forms at a rate of up to 1.5 metres per second, and four A4 page sides at a time to speed up production.

These documents are decoded by Matrix-2000™ readers: four readers per duplex line and six readers per triplex line.The documents are then put into envelopes to send to the customer, with the help of inserters. Each inserter is controlled during input by two Matrix-2000™ readers placed above the cutter. At the inserter output the envelopes are controlled to intercept any errors by two Matrix-2000â„¢ readers to read the linear or 2D codes which are visible through the transparent window in the address area of the envelope.

The envelopes move at a rate of 2.5 meters per second out of the inserter, and the Matrix-2000™ readers not only are able to read the codes at such high speed, but also have no problem with the reflection created by the transparent film in the envelope window.At this central printing facility, a total of 46 Matrix-2000™ CCD readers have been installed on the printing and inserting lines to track, monitor and verify production, identifying in real time as much as 6.000 printed A4 page sides per minute and up to 110,000 envelopes per hour, or in other words as much as 130 reads per second combined!Up until now, the new system has controlled the production of four entire quarterly

statement of accounts with complete customer satisfaction. In addition, the documents for the annual reporting session were accomplished with complete satisfaction, which was an even more critical moment, since twice the amount of documents were being processed (4-8 pages instead of 2-4) as a result of the Euro currency start-up and the dual reporting, and this was accomplished in only 15 days. A large amount of real time reports and statistics on instant and average production, plus document tracking and monitoring have been heavily used by SANPAOLO IMI to optimise and schedule the production process. The system demonstrates a high level of reliability in process control and tracking without negatively affecting the production. Matrix-2000™, Compact Unattended 2D ReaderThe latest Datalogic compact 2D reader based on imaging technology for industrial applications. Developed for easy integration in production lines, automatic machinery, and data capture systems, Matrix-2000™ can be profitably used in a wide range of applications, including PCB and electronic manufacturing, packaging lines, small item tracking, analysis machines and document handling systems. Matrix-2000™ integrates all reading functions in a single compact unit. The intrinsic bi-dimensional behaviour of the imaging process can be exploited to read both standard and bi-dimensional codes in a true omni-directional manner. A valuable addition to the Matrix-2000™ software features is a new set of diagnostic tools. Specifically, they enable real time monitoring of reading quality, image exposure, code area indication and orientation. This information is available not only in calibration environment, but also each diagnostic indication can be added to the data output string during production. The perfect combination of impressive optical performance, a powerful decoding processor and highly reliable decoding software provide the best reading performance in all possible operating conditions. Matrix-2000™ is offered with many optic possibilities to guarantee high accuracy in identifying codes with different resolutions at various distances with the best reading performance in its class.