Datalogic's DS8100 super scanner shows dpd the right direction

DPD, the first parcel distributor in Germany, has chosen Datalogic's top-performing laser scanner DS8100 to automate its distribution centre in Hamburg, Germany.

By implementing Datalogic's DS8100 super scanner when restructuring its sortation centre in Hamburg, DPD managed to more than double the throughput of its existing baggage sorting system. Moreover, in a situation of increasing volumes of packets to be sorted, DPD managed to save over one hour every day and is now in a position to offset the disadvantages due to the geographical position of its customers through faster transportation, i.e. in southern Germany or to major European resorts. The project was started with two objectives: first of all to improve overall performance and secondly to save time. In particular, DPD was looking for an innovative modular omni-directional bar code reading system which could fully support the increased performance of the whole system and, moreover, leave room for upgrades to be carried out in the next few years. After a series of competitive trials, Datalogic's state-of-the-art DS8100 was selected to fulfil DPD's demanding requirements:

1. INCREASED READ RATE AND THEREFORE HIGHER THROUGHPUT
An omni-directional reading station consisting of two or more DS8100 scanners combined with an SC8000 system controller can easily meet this requirement thanks to the DS8100′s innovative technological solutions. In particular, the DS8100 features: 2nd generation ACR™ technology (ACR stands for Advanced Code Reconstruction) performing bar code image reconstruction; multi-laser architecture ASTRA™ (Automatically SwiTched Reading Area) allowing the largest depth of field market with no mechanical autofocus; and PackTrack™ reducing up to only 50 mm the minimum required parcel gap in omni-directional reading applications.

2. READING CODES UNDER PLASTIC FILM, ALSO CONSIDERING AN INCREASED READING RATE
This is possible thanks to ACR™ in combination with the DS8100′s optics and digital signal processing.

3. HIGH AVAILABILITY OF THE WHOLE SYSTEM
The DS8100 solution is highly reliable thanks to the modular structure of the omni-reading station (a complex system consisting of standard scanners and connecting cables) and easy-to-use interchanging cables, which make it easier to both install and maintain the whole system.

4. TOTAL PROTECTION AGAINST DAMAGE THANKS TO A MULTIHEAD READING SYSTEM
With each reading station consisting of several independent scanners, the sorting system is characterised by a high level of redundancy, which is aimed at guaranteeing total reliability and safety. In fact, should several scanners fail, the system would still work without errors.

5. EASY MAINTENANCE AND TECHNICAL ASSISTANCE BY INTERNAL STAFF
The reading technology of the scanners can be easily and completely mastered by DPD's highly qualified staff, without the need for external expertise.

6. POSSIBILITY OF EXPANDING THE MODULAR SYSTEM TO A MULTI-SIDE READING STATION
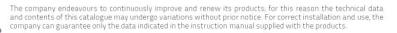This is possible by means of Datalogic's SC8000 system controller. In fact, the computing and the

LON WORKS architecture allows this extension to a high number of scanners.

7. A SCANNING SYSTEM WHICH ALREADY CONTAINS DPD'S EVOLUTION

A resolution of X= 0.30 mm with a reading field of 1000 mm by 1000 mm already meets DPD's future needs. Changing the resolution from the current X = 0.50 mm to X = 0.30 mm would make it possible to include two further digits referring to route code and packet number in a code of the same length.

8. OMNI-READING STATION WITH INTEGRATED VOLUME ESTIMATION

Datalogic's VS8000 laser dimensioning system features the same case, hardware and communication as the DS8100 and can therefore be fully integrated into an omni-station. The sorting system now consists of four omni-directional reading stations, each containing four DS8100s. Installation, however, took place step-by-step, as the implementation of the new system had to fit in with the already existing structure, without slowing down or disturbing the activity of the centre. The integration of the new system proved to be seamless and, in fact, Mr. Beckmann, DPD's legal representative and Warehouse Manager, and Mr. Mohr, DPD's General Manager in Hamburg, stated: "We made the right decision, as our expectations from the reading system were fully met. In this way, Datalogic has created a new standard in omni-directional bar code reading".