Datalogic assists Canpar Transport in transitioning to automated data collection - Datalogic

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CANPAR Transport Ltd., headquartered in Mississauga, Ontario, is one of Canada’s leading parcel delivery companies specializing in low cost small parcel delivery. CANPAR has over 60 terminals coast to coast and provides service to virtually all points accessible by road in all 10 provinces of Canada and the continental United States. For the past 3 years CANPAR has provided their customers with a 99.5% on time delivery record, the best in the industry. CANPAR’s continued commitment to their customers, on time delivery, and investment in technology is the driving force behind CANPAR’s decision to implement a national rollout of scanning tunnels for automated data collection. In the fall of 1999, after a 45-day head to head scan off between Datalogic and two other competitors, CANPAR chose Datalogic equipment, installation, and integration services to assist CANPAR Transport Ltd. in transitioning to automated data collection. The main test criteria were cost, read rate, ease of use, and ease of installation.

CUSTOMER OBJECTIVE

In order to improve customer service and gain a competitive advantage in the highly competitive parcel delivery market, CANPAR set out to replace an existing and aging hand scanner network. Datalogic’s fixed positioned scanners were used to automate three of its hubs in Canada (Toronto, Concord, and Montreal). Due to the overwhelming success of CANPAR’s pilot rollout, as of August 2002, an additional 11 locations have installed Datalogic scanners across Canada.

APPLICATION CHALLENGES AND DATALOGIC’S SOLUTION

One of the main features and difficulties of the application is that the space available for the scanning system is very limited (see picture above). This problem was solved thanks to Datalogic’s DS8100 material-handling scanner with its mounting flexibility and small size that made the installation easier and quicker than the competitors’. The DS8100 scanner provides the most advanced modular, plug & play design available in tunnel scanning today. In addition the CANPAR labels provide some challenges in terms of reading performance. The labels are comprised of CANPAR and customer supplied labels and vary in quality from ANSI grade A (excellent quality) to D (poor quality) dependent on the source and method of printing. On all labels Datalogic consistently outperformed the

competitions' read rate by an average of 3%. The challenge for the scanning system, other than reading the bar codes, is to organize the data in such a way to have value for the customer. To facilitate this Datalogic developed a custom application program for the SC8000 system controller (industrial PC) to act as an intelligent multiplexer and provide a graphical operator interface. An association utility in the SC8000 allows each scanner on the network to be IO mapped to a particular scanning array. As parcels are unloaded from the trailer, the SC8000 collects the bar code data from the scanner network, compares the data with the last 5 entries in the log file (to avoid duplicating the data since multiple scanners may read each bar code), and then stores the data associated with the trailer number and unload door according to the scanner map. Lastly, all the data is automatically transferred to the central computer at regular scheduled intervals.

RESULTS

The Queens Quay facility (Toronto) is currently utilizing 16 tunnel systems and 3 manual presentation overhead stations. Each tunnel consists of four to eight DS8100-400 material handling scanners dependent on the reading requirement for each conveyor. Three SC8000 System Controllers (Industrial PCs) are located in the Hub office for control of all scanning systems where they are linked to the central computer for data transfer. The Concord facility includes two three-sided tunnels made up of eight DS8100-4000 each and one SC8000-2100 system controller. CANPAR recently moved into a fully automated sorted facility in Montreal featuring two three-sided tunnels consisting of twelve DS8100-4000 scanners each and a SC8000-2100 controller, as well as 13 tunnels each equipped with two DX8200-3100 scanners. In total, 230 DS8100-4000 and ten SC8000-2100 are now installed at various CANPAR locations. Thanks to Datalogic's advanced tunnel scanning systems, CANPAR was able to achieve a 10% increase in read rate by transitioning from hand scanning to tunnel scanning. Datalogic scan tunnels installed at CANPAR consistently achieve very high read rates that have exceeded CANPAR's expectations.

BENEFITS

Benefits for CANPAR are increased throughput, reduced manpower, better package security, and more accurate package tracking. CANPAR's (www.canpar.com) on-line packaging tracking website and customer service centers now have access to an average of 10% greater read rate and tracking information as compared to hand scanning for the facilities that switched from hand scanning to automatic data collection (scan tunnels). The application of Datalogic products allows CANPAR to double the amount of freight being scanned into the system. This result provides major benefit for CANPAR in terms of customer service, on-time delivery,and customer confidence.