PARCEL VISION

RAF TECHNOLOGY

INTRODUCTION

Postal operators are bolstering their parcel networks as E-commerce continues its double-digit growth into the foreseeable future. According to eMarketer, worldwide digital sales exceeded $1.5 trillion in 2016 as more than one billion web-connected buyers purchased goods online. That's only the start. Experts expect e-commerce to grow 15% over the next two years. In the US, business-to-consumer parcel delivery is growing at six percent per year.

PARCEL AUTOMATION OPPORTUNITIES

Customers are ordering and expecting to receive items at an ever-increasing rate with same day deliveries now the expectation in many markets. In order to quickly and accurately move shipments in this new paradigm operators are securing the most innovative leading edge automation solutions to reduce time for processing and delivery all at lower costs to ensure competitiveness.

One major challenge to automation of parcel handling is interpreting the array of information that resides on multiple faces of these parcels. These items contain a vast amount of data which can include a package ID number, the printed weight, a customer's purchase order number, tracking number, delivery priority, electronic rate approval number, postage paid, shipping location, ship date, expected delivery date, quantity, return to sender address, and finally the actual ship to address. Of course, each carrier also has their own form style, rules, and data requirements.

In addition to all the data that is available on a parcel, there are additional challenges for reading parcel data because information can be affixed to items that vary in size and come in irregular shapes and forms like poly bags, cylindrical casings, triangular cartons, flat mail, as well as standard rectangular boxes.

Lastly as these parcels pass through a scan tunnel the information orientation can be anywhere from 0 to 360 degrees. All of these characteristics can cause tremendous challenges to the automation needed to read and sort these items. However, technology is available to turn those challenges into opportunities.

RAF TECHNOLOGY'S MARKET LEADING SOLUTION

RAF Technology, the leader in automated logistics recognition systems, has developed a solution that converts the intensive array of information that appears on parcels into actionable data. RAF's solution is a simple and methodical process using the industry's most advanced neural network algorithms that decode each piece of information to allow automation to both read and leverage this for the operator. This revolutionary process and product together is called Parcel Vision. Parcel Vision is the product customers have been searching for to address all their parcel automation requirements.

Parcel Vision was designed specifically to provide the highest assignment rates with the lowest possible errors and delivers address recognition and validation for all machine printed and handwritten information regardless of shipping label form style or country.

Fully integrated using RAF's Smart Match™ directory technology Parcel Vision can instantly access millions of address records without compromising record volume, processing speed or accuracy and can be customized for any language and market!

Our unique design allows data administrators to easily assign key data fields needed to sort parcels and provides adaptive assignment and layout data patterns which can accommodate all use cases such as alias names, street name transposition, and can even detect and correct address dwelling number, street, city, and zip code errors.

PARCEL VISION FEATURES INCLUDE:

• Omni font character set with adaptive Intelligence

• Industry's leading machine print and handwriting recognition

• Neural network design for handwriting recognition in any language or market

• Omni directional label orientation detection and automatic correction

• Supports grayscale TIFFs, JPGs, and BMPs and can be injected without binarization

• Multi-image recognition for each parcel

• Supports image scaling to improve recognition performance

• Provides customizable default configurations for unique customer labels

• The Graphical User Interface (GUI) is localized to other languages using a text resource file

• Operates on Windows 7 & 10 OS and supports both 32 & 64 bit processors

• CEN 15448 compliant & customizable to operate in any country