

INTERNATIONAL eNEWSLETTER OF TI-RFid™ SYSTEMS

ISSUE NO. 6, MAR. 2002

In this issue:

- ➤ TI-RFid Tag-ittm Smart Labels prove their durability on the racetrack
- RFID-based b us ticketing application puts an end to free rides
- Bloomington-Normal Seating Company puts RFID on the line
- New Team Tag-it Members

TI-RFid Tag-ittm Smart Labels prove their durability - on the racetrack

When leading label manufacturer and printer, CLC (UK) Ltd (formerly Charnwood Label Craft) wanted to test the durability and stamina of its latest smart label based on TI-RFid Tag-ittm Smart Label, it chose an unusually tough environment – a motorcycle racetrack.

Tag-ittm Smart Labels were attached to the Kawasaki ZXR400 Formula 400 racing bike driven by Ian Hallam, who is sponsored by CLC (UK) in the New Era Motorsport Championship. The tags successfully survived a full year of racing despite all the rigors of driving rain, heat, water, oil, dirt & general weathering at various UK race circuits, including Pembury, Castle Donington, Mallory Park, Cadwell Park, Castle Combe, Oulten Park & Snetterton.

"We were particularly interested in testing label adhesion, print durability and resistance to the elements," said Nick Geraghty of CLC." Motorcycle racing seemed like an excellent environmental challenge. We are delighted to report that after a very tough season the tags remained 100% readable throughout," he added.



Bloomington-Normal Seating Company puts RFID on the line

Bloomington-Normal Seating Company (BSC) headquartered in Normal, IL is a just-in-time manufacturer and tier-1 supplier of seats to Mitsubishi Motors. Seat manufacturing is a multi-stage process involving numerous stations where data is collected and passed along with the product.

BSC decided to automate the collection of component and quality control data so that little or no human intervention would be required. The goal was to reduce "misloads" or assembly errors caused by missing or bad information from previous stations. Automated data collection would log all information and provide easy access to Mitsubishi upon delivery.

BSC worked with Purple Oak, Inc., located in Park Ridge, IL specialists in data collection systems, to find a solution that would meet its requirements. After reviewing BSC's manufacturing process and system requirements, Purple Oak proposed a solution that included a combination of RFID and bar coding that would interface directly to BSC's host system. Purple Oak recommended TI-RFid low-frequency RFID product line for its high-quality, reliability, and ease of integration.

At the start of the line, BSC affixes an RFID tag to the seat back and "registers" it with a tag reader. Next, the airbag serial number is recorded with the handsfree projection scanner at the airbag assembly station.

The seatback assembly is then matched with a seat bottom to form a single production unit. At each stage in the

assembly process, an RFID antenna reads the RF tag to identify the seat being built. Lot information and safety-related data, including quality checks and torque readings, are recorded. At the end of the line, the RF tags for the front left, front right and rear seats are gathered and read to associate the seats as a set.

RFID-based Bus Ticketing Application puts an end to free rides

Schindler Technology located in Rio de Janeiro, Brazil has installed access control system for 13 residential buildings (Associação Parque das Rosas) - located in the same block for 10,000 users.

The Barra-Downtown in Rio de Janeiro bus passes near universities and schools. The bus company was experiencing problems with riders who were not from the residential building but were using the bus. These riders were presenting false photo ID cards.

TI-RFid technology was introduced to enable the bus company to regulate riders. A transponder was embedded into the photo ID cards. This system has the advantage of being controlled by a computer to avoid falsification. At the same time, the bus company can get detailed information and statistics that identify peak times of bus usage. The system also tracks which residents take the bus more often. The information is used to adjust bus fare according to frequency.



New Team Tag-it Members

We would like to welcome our new Team Tag-it members: AFE Industries, Inc. (Card & Label category), DataBrokers (Software category) and Northern Apex (Handheld & System Integration category).

AFE Industries, Inc.

The corporate headquarters are located in Santa Fe Springs, CA. (Los Angles area). This card/label manufacturing company offers compatible products to TI-RFid's technology in each of its 3 locations: Santa Fe Springs, CA, Charlotte, NC, and Neenah, WI. AFE Industries, Inc. is a full service printing manufacturer of tags and labels. AFE's Flexo presses are equipped with the latest computer driven ion deposition technology for printing variable information and inlay insertion. The company has more than 1,800 dyes and tooling to produce any type of RFID tags, labels and cards. Please see AFE's website www.afeindustries.com for additional information.

DataBrokers Inc.

Based in Fairfield, OH (Cincinnati/Dayton area), this programming services company has diversified to offer software and integration services of RFID, RFDC and barcode systems. DataBrokers, Inc, specializes in RFID integration focusing on middleware and device control. The company has RFID experience (13.56MHz technology) in successfully implementing pilots in the retail supply chain sector.

The company has developed a middleware software package, PIRF (Platform Independent RF), which integrates into various platforms and enables rapid development of systems utilizing blended RFID, RFDC and barcode technologies. PIRF reduces the cost, timing and complexities of building

from the ground up, enhancing legacy systems, or evaluating alternatives. DataBrokers also offers an end-to-end supply chain application suite, SCOPE (Supply Chain Optimization Process Engineering) which includes tag initiation, packing, put-away, picking, shipping, receiving, inventory control, model stock, replenishment and point of sale. Visit DataBroker's website at www.databrokers.net for additional information.

Northern Apex

Northern Apex Corporation, based in Fort Wayne, IN, specializes in complete RFID system integration. Building upon its background in electro-mechanical assembly, Northern Apex offers a variety of standard portable and fixed RFID readers, such as the Palm-based PDA "Advantage Series" which communicates with TI-RFid Tag-it smart labels.

The company provides a large range of standard antenna and reader configurations to meet custom application needs. Northern Apex has developed both complete systems and software modules from its Windows based NACTRAC software platform. NACTRAC can quickly and efficiently be expanded for custom applications or implemented as part of existing systems. Northern Apex has successfully implemented RFID systems in attendant-less parking lots. calibration, maintenance, field service and inspection applications. Northern Apex has recently completed pilot projects with NASA, Unilever and Carrier Corporation. Please visit Northern Aptex's web site at: www.northernapex.com for additional information.



Calendar of Events

TI-RFid Systems will participate in the following upcoming shows and conferences:

Intermodal 2002

April 3-5, 2002 São Paulo, Brazil

Cards 2002

April 8-10, 2002 São Paulo, Brazil

CEMAT

April 15-20, 2002 Hannover, Germany

Agrishow 2002

April 29- May 4, 2002 Ribeirão Preto, São Paulo, Brazil

IDENT 2002

May 15- 17, 2002 Wiesbaden, Germany

Editor's Comments

eNEWS will be distributed via email on a frequent basis to keep you abreast of product and business highlights of Texas Instruments Radio Frequency Identification Systems.

I welcome your feedback to: billallen@ti.com.

Rgds, Bill Allen, Editor

Subscription Information

To unsubscribe, change an email address, or add a new subscriber, send an email to Mayako Takayama at mtakayama@ti.com



