



4B Components Limited  
729 Sabrina Drive  
East Peoria, IL 61611  
USA

CELEBRATING 120 Years

1888 1909 1971 1984 1991 2001 2003 2005 2008

TECHNOLOGY • INNOVATION • QUALITY • VALUE



4B Components Limited - Newsletter

ISSUE 17 ♦ SPRING/SUMMER 2008

## 4B'S INDUSTRIAL BUCKETS TAKE THE HEAT!

SJ and SPS are two of the "heaviest hitters" in industrial duty elevator buckets, and can take whatever you throw at them! The Starco Jumbo (SJ) and Super Starco (SPS) pressed seamless steel elevator buckets are built to carry, built to perform and built to last. Industrial elevator legs built to deliver large capacities with either of these buckets operate with high efficiency, low maintenance costs and longevity. These extremely strong, heavy gauge buckets, coupled with industrial duty steel web belting provide users with a high capacity efficient system outperforming traditional, fabricated, expensive and high maintenance chain elevators. Some benefits to using these systems are:

- Lower capital investment – 33% savings over traditional systems
- Smaller elevator casings allow reduced machine costs
- Steel web belt wear significantly less than the chain alternative
- Extremely high and efficient capacities up to 1400 TPH
- Used in high temperature applications up to 300°F



Illustration: Steel Web Belt with BC Clamp & SJ Bucket

The SJ and SPS systems handle some of the heaviest and toughest applications, such as, cement, aggregates, sand, and coal. The integrated system of steel web belting, BC belt clamps and industrial buckets is backed by 4B's years of expertise. Our creative engineering designs will offer you both time and cost savings. Move your material with the "heavy hitters" and let them put money back into your pocket!



www.go4b.com

**"Heard about that Thingamajig called the Whirligig?"**

No, it's not the latest hair curling gadget. The Whirligig is the new standard for shaft speed monitoring. It is a three-in-one universal shaft sensor mount that makes installation simple and more reliable for all inductive shaft speed sensors. Your sensor mounts to the Whirligig and the complete assembly bolts to the machine's shaft. Machine and shaft vibration does not affect the performance of the sensor, as the whole assembly moves with the shaft. Personal safety is also improved since the rotating target is completely enclosed behind a tough plastic cover. *All in all, it's quite the Doohickey.*

**Now available with Mag-Con magnetic connector!**

U.S. Pat. 6,109,120  
U.S. Pat. 6,094,200

Get complete information by visiting our website at [go4b.com](http://go4b.com).

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729 Sabrina Drive East Peoria, Illinois 61611 309.698.5611 Fax 309.698.5615

Stop by our booth at the following shows:

- **PTXi International (Powder & Bulk Solids)**  
May 6-8: Rosemont, IL  
Booth #2549
- **IEEE-IAS/PCA Cement Industry Technical Conference**  
May 18-22: Miami, FL  
Booth #605
- **International Fuel Ethanol Workshop & Expo (FEW)**  
June 16-19: Nashville, TN  
Booth #8

## EMPLOYEE PROFILE

**Hector Martinez**

### North & Latin American Sales



I'm back! Some of you may recall that I am the former Latin America Sales and Marketing Manager for 4B, but left about 9 years ago when I was recruited to work for a non-profit organization. I am excited to return as the newest North and Latin America Sales Representative. I'm originally from south of Chicago, but have lived in Peoria since graduating from Bradley University in 1987. Outside of work, I am involved with several non-profits including: American Red Cross Blood Services, American Cancer Society Relay for Life, Big Brothers/Big Sisters, and Make-A-Wish. I look forward to working with you again!



## CUSTOMER SPOTLIGHT

**Ducasse**



EXPOMIN Exposition - Santiago, Chile

Ducasse Comercial Ltda was founded in 1966 in Santiago, Chile primarily as a bearing distributor. Since then, Ducasse has significantly expanded and currently serves the industry with 14 branches throughout Chile, becoming the top choice in sales and technical support for power transmission, pneumatic and hydraulic components.

Ducasse's relationship with 4B began in 2004 when they became our exclusive product distributor in Chile.

In 2006, 4B visited beautiful Santiago, joining Ducasse at the most popular mining tradeshow in the country, the EXPOMIN. The show was a great success and meeting Ducasse's dynamic employees certainly confirmed 4B's first great impression about the company.

Currently, Ducasse stocks 4B's material handling and electronic product lines.

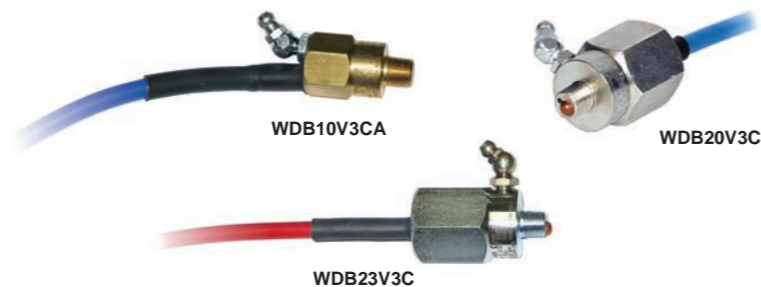
For more information, please visit: [www.ducasse.cl](http://www.ducasse.cl)

## 4B BEARING TEMPERATURE SENSORS

4B has developed a wide range of hot bearing sensors to meet our customer's needs. Whether you are looking for a sensor with a specified trip point or need continuous temperature monitoring, 4B has the right bearing sensor for your application.

### WDB 1 & 2 Series

The WDB 1 & 2 series are grease-through type bearing temperature sensors that are positively mounted to the bearing by using the existing grease zerk. They are also available with 1/2" conduit entry. Two sensor types are available, the NTC thermistor for continuous temperature monitoring or the PTC model with specific trip points. Approved for Class II, Div 1 Groups E, F, and G (CE and ATEX approved versions for Europe are also available).



### WDB3 Series

The WDB30V3A insertable style bearing temperature sensor incorporates an NTC thermistor for continuous bearing temperature monitoring. The sensor is designed to be adjustable and a quick fit bayonet adapter is supplied with every sensor. It can be installed in a drilled and tapped 1/8" BSP threaded hole. A flexible cable allows for easy installation. They are ATEX approved (other approvals pending).



### WDB7 Series

The WDB70V3C series is a lug style sensor with an NTC thermistor for continuous temperature monitoring and has been designed to bolt directly onto a bearing housing, motor, or gearbox. They are approved for Class II, Div 1 Groups E, F, G, and incorporate a 1/2" NPT conduit entry.



### WDB6 Series

The WDB62TAI series are grease-through type bearing temperature sensors with 1/4" BSPP threading (can be installed in 1/8" NPTF grease zerk fitting with an adapter). Designed with a quick disconnect cable for easy installation and/or replacement. Normally closed internal contact rated up to 1.5A opens when temperature rises above the trip point. They are ATEX approved (other approvals pending).



All of our bearing temperature sensors can be connected directly to a PLC or used with one of our hazard monitors (T500 Hotbus Elite, Watchdog Elite, and T400 Elite). If you have questions regarding your specific application, we have a dedicated staff of in-house technical representatives ready to help.



Example of bearing failure

## ROGER'S REVIEW

**Boost Productivity**



**Roger Bruère**  
Technical Sales Engineer

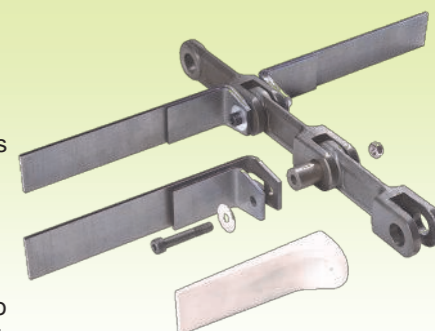
Boost productivity with Bolt 'N' Go chain! The increase in demand for greater throughput results in quicker production speeds, increased chain wear, shorter chain service life, more maintenance and downtime. All mechanical equipment will eventually wear out. Welded flights may bend or break and the chain may need to be replaced. Whether this process takes hours or days, the bottom line is that downtime will always exist and cannot be avoided. So, any reduction in downtime is a boost to your productivity.

Bolt 'N' Go  
Hollow Pin



4B recently developed a revolutionary flight assembly method that boosts productivity. When flights need to be replaced, there is no longer a need to slacken the chain. Simply bolt on the new flights and you're done! The secret to this assembly method is a high strength hollow pin that connects the links together.

Boosting productivity has never been so simple and easy!



Bolt 'N' Go System  
Nylon and Steel Flight Options  
U.S. Patent # 7,080,728

## SPARKY'S SHOCKERS

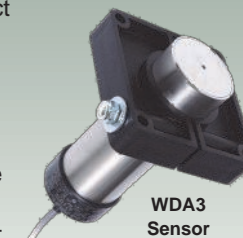
**Slack/Broken Chain Detection**



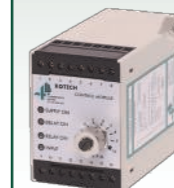
**Keith Bohnker**  
Electronics Sales Manager

Chain conveyors are used in many operations to efficiently move material through out the processing facility. In an effort to reduce down time and damage to equipment many customers want to keep a closer tab on chain conveyors. Shearing pins, chain pulsation and premature wearing of conveyor chain are just a few of the common problems.

The WDA3 High Power Sensor will detect a moving ferrous object. It is not affected by dust or material build-up. It can be used as a slack/broken chain detector when installed as shown in our whitepaper, which can be downloaded at [www.go4b.com/usa/slackchain.asp](http://www.go4b.com/usa/slackchain.asp). The sensor has an adjustable sensing range (1-4") and an LED helps with field adjustment. Approved for Class 2, Div. 1 Groups E, F & G (grain dust) applications.



WDA3  
Sensor



Speed Relay

Our DIN Rail mounted Speed Relay is used to provide the 24 VDC power for the WDA3 High Power Sensor and detect if the speed falls below a preset level. The front mounted control allows easy setting of the required trip/alarm directly in R.P.M. In normal operation the relay is energized if the chain is tight and the speed is above the set level.