



# THE SCOOP

VOLUME 1 ISSUE 3 SPRING 2003

## "Agricultural Steel Elevator Buckets - Not Dinosaurs Yet!"

Comments by Rick Fifer VP Sales

4B is often asked, "Are steel elevator buckets still manufactured?" The answer is, yes they are, as not all applications are suitable for more commonly used polymer buckets. "But which bucket should I choose," asks the customer? The selection comes from knowing what bucket is best suited to a particular application. While steel buckets are "not" the most commonly selected today, they are not the "dinosaurs" one might believe they are!

The "Big J" style pressed seamless steel "CC" buckets are well known in the grain industry for their inherent strength and cleaner discharge characteristics. These are found in various grain and feed processing plants and in applications where severe wear and abrasion are key factors in bucket longevity. Yet, we still find that there are given companies who chose to utilize the stronger seamless steel buckets rather than the fabricated style in their main receiving legs and sometimes throughout their entire operation. With today's sophisticated monitoring equipment, the fears of steel buckets becoming a potential problem is significantly reduced. With proper leg and belting maintenance, steel buckets are much less of a threat and will provide many years of quality performance. The relative cost for steel buckets is very low when consideration is given to bucket life. Overall, steel can be much less expensive when compared to frequently replaced polymer buckets. Where a leg may utilize a steel bucket for ten years, or even longer, a leg fitted with a polymer style bucket may require replacements every three to six years, in a given application.

For highly abrasive use, where the front lip of a bucket encounters extreme wear, a front wear strip can be attached for increased bucket life. A hard weld bead may be applied to slow the progression of such wear. Applications where buckets would utilize this feature might be soybean processing, or any main receiving leg handling granular materials where front lip abrasion may be a



problem due to frequent operational exposure. Consideration should also be given to the style of fasteners used to mount steel buckets, which will also help protect the investment. Fanged or Norway bolts would be recommended with the use of a flat washer and nylon insert locknut, or the selected style elevator bolt with a large flanged wizz locknut. Both scenarios will provide the most secure holding power.

The "Big J" style bucket is also available in all the common sizes of the "CC" fabricated style. Fabricated buckets are normally produced with spot welded flanges, which can require additional reinforcement, dependent upon size, for greater stability and endurance.

So, as one can see, there are still many applications where steel buckets are required today. So call 4B for assistance in steel bucket selection - we still manufacture them.

**They have not gone by the way of the great "Tyrannosaurus!"** ↗

729 Sabrina Drive  
East Peoria, Illinois 61611 USA

Telephone 309-698-5611  
Facsimile 309-698-5615  
Email 4B@go4B.com

Please call for in-depth product information, or visit our website at:

# www.go4b.com

# Employee Profile



**Jim Mawson P.E.**

Jim Mawson, Chief Corporate Engineer was educated at Prince Henry's Grammar School and Leeds College of Technology in England. Jim has experience in material handling and vehicle engineering with 2 years in the British Army's Royal Electrical and Mechanical Corp. of Engineering.

Jim spent a long period in Rhodesia Africa working for the countries Forrestry Dept. designing sawmills, and associated equipment.

Jim has also worked with a large company designing and installing complete grain cleaning, storage, drying, and malting plants in the U.K. and the Far East.

He is also the founder engineer of 4B, designing bulk material plants from chemical to cement to grain the world over.

In Jim's leisure time he enjoys watching Rugby Union Football and History programs. ↕

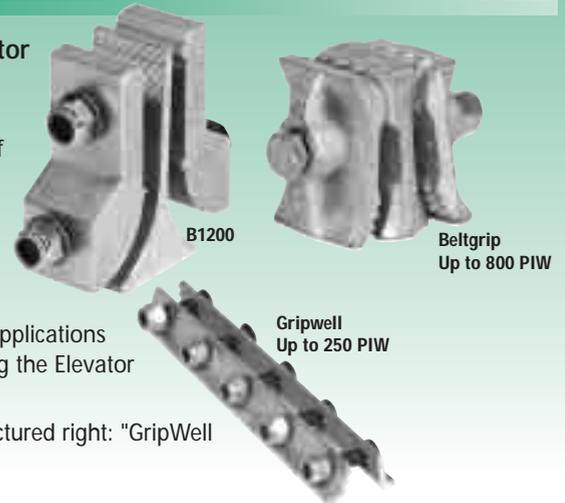
# Elevator Belt Splices

For 2003 4B introduces the "B1200" Elevator Belt Splice.

The "B1200" is designed for heavy duty, high tensile applications and is suitable for ratings of over 750PIW(Pounds/inch width). It's construction is Aircraft Grade Extruded Aluminum with high tensile steel bolts and the length is made to order.

This splice is particularly suitable for Industrial, Commercial Grain, Cement, Coal & Aggregate applications due to the large 2" radius curve for transitioning the Elevator Belt.

Our other "In-Stock" Elevator Belt Splices are pictured right: "GripWell" and "BeltGrip" ↕



# "Double" Forged Chain Links

Introduced last year, the new 142, 175 and 200 Series "Double" Forged Chain Links allows flights to be mechanically fixed between two chains running down the outside of a conveyor.

These Links are Forged from High Quality Chrome Manganese Steels, they are then machine to exacting tolerances and finally Carburized to RC60 case hardness. These chains are highly suitable for extreme conveying applications, which can include temperature and abrasion factors.

These are available from stock together with a comprehensive list of accessories, such as sprockets and different style connecting pins. ↕



# 4B to Exhibit at the Fuel Ethanol Workshop & Trade Show



4B Components, Ltd. will be exhibiting at the 19th Annual International Fuel Ethanol Workshop & Trade Show, it will be held June 16-19, 2003 in Sioux Falls, South Dakota.

The International Fuel Ethanol Workshop & Trade Show is designed to provide the ethanol industry with the latest information on technology and services for improving production, product yields and operations of an ethanol facility using grain, sugarcane, cellulosic materials and other biomass feedstocks. For information log on to: [www.bbiethnol.com/few](http://www.bbiethnol.com/few)

4B will be one of the 150 companies exhibiting in the 2003 Trade Show. They will be displaying the latest technology, equipment and services to the ethanol industry.

Check out booth # 310 and see what new innovative products 4B has to offer. ↕

## LATIN AMERICA DISTRIBUTORS

**MEXICO**

- 4B REPRESENTACIONES, S.A. DE C.V.  
PH: (5233) 3673-4894

**CENTRAL AMERICA:**

**COSTA RICA:**

- GLOBO INTERNACIONAL  
PH: (506) 224-1305

**DOMINICAN REPUBLIC**

- IMPORTADORA GUTIERREZ  
PH: (809) 542-5194

**SOUTH AMERICA**

**ARGENTINA**

- JUAN O. HAJNAL, S.A.  
PH: (5411) 4702-2364

**COLOMBIA**

- JORGE JARAMILLO Y CIA LTDA  
PH: (576) 886-5052

**ECUADOR**

- AGRIPELCA, S.A.  
PH: (593) 4229-1749

**BOLIVIA**

- SERVICIOS Y SUMINISTROS  
PH: (591) 3346-7338

**CHILE**

- COMERCIAL SUJIZAL Y CIA, S.A.  
PH: (562) 857-1819

**URUGUAY**

- HAJNAL Y CIA LTDA  
PH: (598) 902-0892

**4B SUDAMERICA**

- Buenos Aires, Argentina  
PH: (54) 11-4701-7557

**PERU**

- Homberger, Peru  
PH: (511) 214-2046

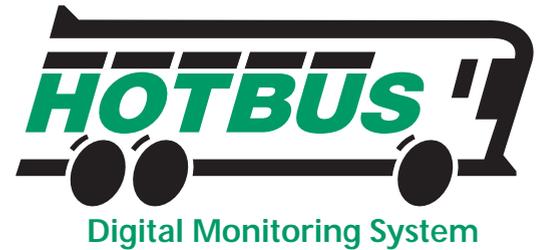
**VENEZUELA**

- DOUGLAS DE VENEZUELA, CXA  
PH: (5825) 5621-9191

## SPARKY'S SHOCKERS



**Johnny Wheat**  
Vice President  
Electronic Products

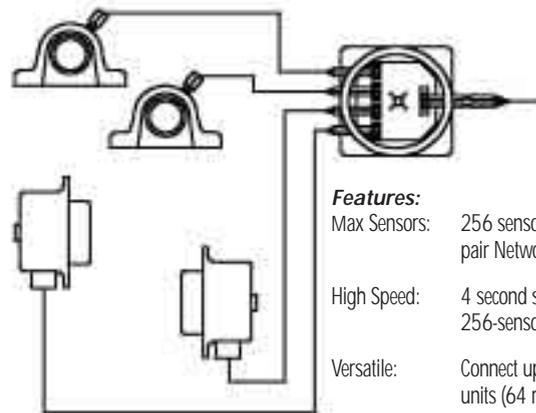


### Question:

I have many bearings, which I need to monitor. Is there a simple system available which can give me the actual bearing temperature and allow me to set individual trip points?

### Answer:

The new HotBus™ system is a Digital Serial Communication System, which offers customers a much simpler and more cost effective approach to continuous bearing temperature monitoring. With up to 256 bearing sensors on a single twisted pair cable, installation is much easier and maintenance free. HotBus Control Units can be stand alone or connected to relay control units to provide automatic machine shutdown. Ethernet, Modbus, Profibus and Device Net Gateways are also available for connection to proprietary networks. Software is provided for system test, system status and uploading of meaningful sensor names and logging / trending bearing temperatures and alarms. The HotBus system can also accept TouchSwitch and other switched contact inputs on the same network. ↕



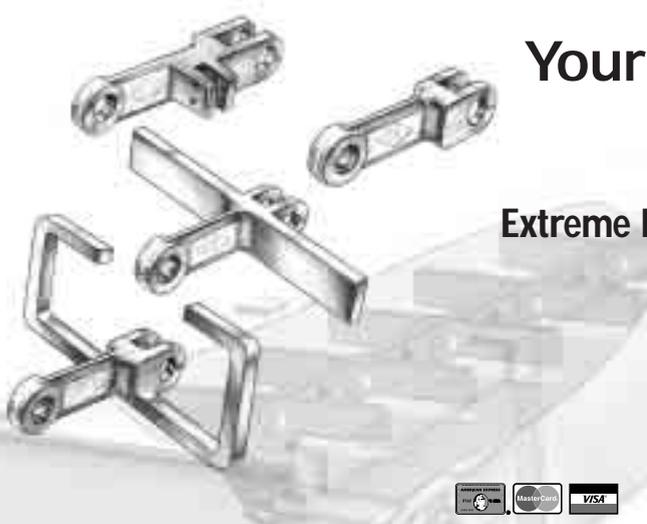
### Features:

- Max Sensors: 256 sensors on one twisted pair Network
- High Speed: 4 second scan time on 256-sensor network
- Versatile: Connect up to 8 relay control units (64 relays)
- Approvals: Class 2 Div. 1 approved for US and Canada  
ATEX and CE approved for Europe



729 Sabrina Drive East Peoria, Illinois 61611 USA  
Telephone 309-698-5611 Facsimile 309-698-5615  
Email 4B@go4B.com

THIS ISSUE OF "THE SCOOP" IS BROUGHT TO YOU BY...



# Your Link to Quality!

## Extreme Duty Forged Conveyor Chains

Free Engineering Design  
New & Existing Conveyors

- Sizes: 102, 142, 160, 175, 200, 216, 250, 260
- Free Application Engineering
- Extreme Abrasives
- High Temperature
- Ash, Cement, Lime, Coke, Coal, Grain



Technology • Innovation • Quality • Value  
729 SABRINA DRIVE EAST PEORIA, ILLINOIS 61611 USA

TELEPHONE 309.698.5611  
FACSIMILE 309.698.5615

WEBSITE [WWW.GO4B.COM](http://www.go4B.com)  
EMAIL 4B@GO4B.COM

