

*Rebuilding America
with smart automation*



...the Workhorse of Industry

Smart Automation Newsletter

May, 2011

Manufacturing Flexibility to produce the “right” product at the “lowest cost”

The ongoing challenge of business is to deliver the “right” product at the “lowest cost”. Unfortunately for manufacturing, the “right” product is not always the exact same product – with customers or systems requiring some level of customization or uniqueness. Additionally, the “right” product today may need to change to be the “right” product tomorrow. Delivering “lowest cost” is a function of an optimal design which is manufactured as efficiently as possible - often involving some level of automation.

Satisfying the need for delivering the “right” product at the “lowest cost” requires manufacturing to plan for an optimal level of flexibility. A manufacturing system that is too rigid can be costly or impossible to changeover - and a system that is too flexible can be costly to implement and operate less efficiently. The optimal solution requires a business to master plan its products and processes. A critical step in achieving this is to define a family of parts to efficiently fill the capacity of a given piece of efficient capital equipment. The family of parts provides the appropriate level of differentiation for customers, while the allowing efficient equipment to be more easily and quickly adjustable or reconfigurable to accommodate market demanded differences. Operating at this “sweet spot” of efficiency and flexibility will be the key to success for manufacturing in N. America.

A 100% flexible “robot”, either a human or electromechanical, will often be either too slow or too expensive to compete against low-cost country labor. A rigidly automated and dedicated manufacturing line will often be too expensive or under-utilized to address the customization demanded by the market. The business solution for manufacturing in N. America is applying smart automation to master planned families of products. Smart automation is achieved by providing only the absolute minimum level of flexibility and cost required to efficiently produce the master planned family of parts. As an analogy, you don’t need a nuclear weapon to kill a fly.

Feeder bowls and the associated part feeding systems represent an incredible enabler of smart automation.

Article continued on next page.

Manufacturing Flexibility to produce the “right” product at the “lowest cost” (continued)

Part feeding solutions quickly and efficiently position parts in exact and specific positions – allowing parts to be easily and consistently assembled or processed. If executed within a family of parts – and if the part feeding system is designed correctly, the part feeding system is often easily adjusted or re-configured to accommodate unique parts. Extending this principal of smart automation throughout the entire manufacturing line accomplishes the objective of efficiently producing the “right” product at the “lowest cost”.

Fortville is among the market leaders in producing innovative part feeding solutions for smart automation applications. A common challenge is to feed multiple part variations from a family of parts using a single part feeding system. Fortville accomplishes this by first understanding all the potential variations (both current and anticipated), and developing a concept that feeds and handles these parts with the minimum level of adjustability and re-configuration. Over the years, Fortville has satisfied multiple customers by producing multi-part feeding systems. Unfortunately, in some cases the feeder bowl may not be reconfigurable for a new part. In these cases it is often feasible to easily rework an existing feeder bowl to accommodate a very different part – saving capital costs for the customer. Fortville has successfully reworked both older Fortville feeder bowls, as well as, those of competitors.

Highlighted in the May Newsletter is a multi-part feeding application recently completed by Fortville. The customer’s request was to feed 15 unique parts – with the additional flexibility to easily accommodate other as yet unknown variations. The parts are cylindrical in nature with unique diameters, contours, lengths, and are end-for-end non-symmetrical. The solution was delivered using a clever combination of a feeder bowl, simple sensors, grippers, and rotary and linear actuators. Ultimately, the system has the flexibility to feed almost any cylindrical part of similar size requiring end-for-end orientation. In short, the system delivered the required level of flexibility utilizing relatively simple and low cost components...that’s smart automation.

Fortville looks forward to the opportunity to work with your team on applying clever part feeding solutions to your smart automation applications.

Product Highlight:

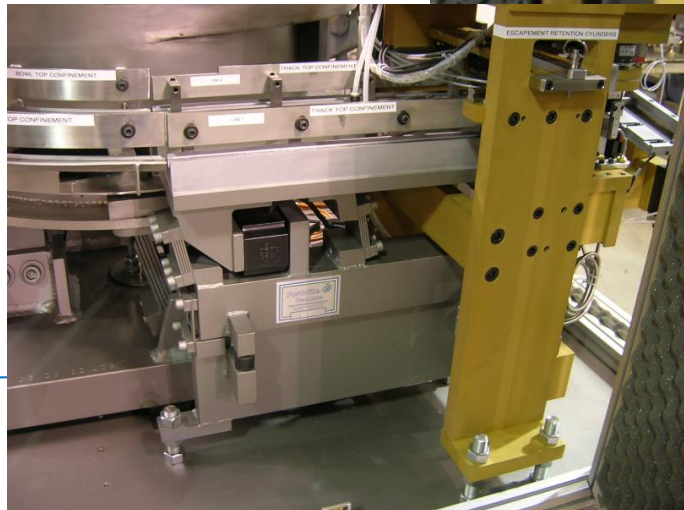
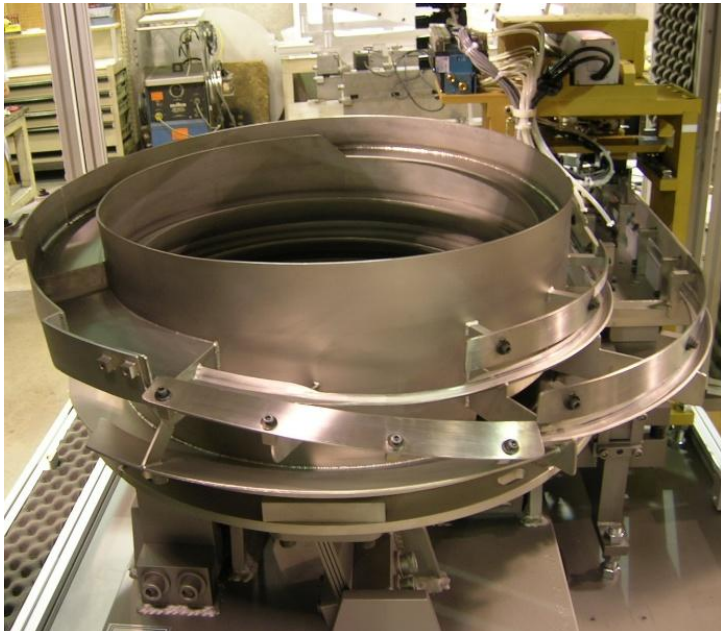
Flexible Part feeding of diverse cylindrical parts requiring end-for-end orientation

Application: Part feeding of over 15 unique cylindrical parts requiring end-for-end orientation with parts rolling down a gravity track. System required quick change-over between part runs.

Feed Rate: 60 PPM – single lane, rolling output

Fortville Products:

- 24" CCW Vibratory Bowl
- Linear Vibratory Track
- Pick, place, and rotate mechanism for final orientation
- Gravity track with escapement release mechanism



Company News

Fortville's Values

The foundation of a strong company are clearly defined values around which the company bases strategic and tactical decisions. The following are Fortville's values:

1. Develop Customer Intimacy
2. Achieve Operational Excellence
3. Lead Market Segments
4. Solve Market Needs
5. Value and Enable People
6. Maintain High Ethics

Fortville's objective is to continue to strive to live these objectives in our interactions both internally and externally. We value your support and encouragement to maintain our focus on realizing this objective.

Products and Services:

Part Feeder Systems:

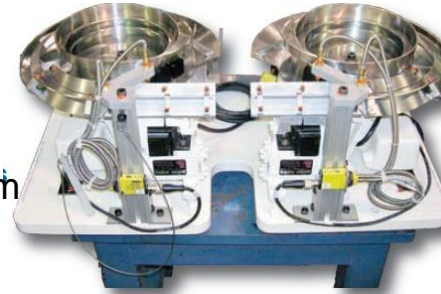


- **Vibratory Bowls:**
 - 6" to 70" in dia.
 - Feed rates to 600 pph
- **Centrifugal Bowls**

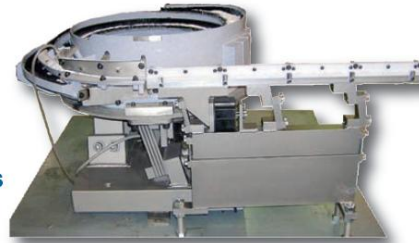
Fortville is the recognized industry leader in large, high-speed vibratory feeder bowls. Challenge us with your part.

- System design and development
- System build and validation
- System remanufacture & rework
- On-site service and support
- Service part sales

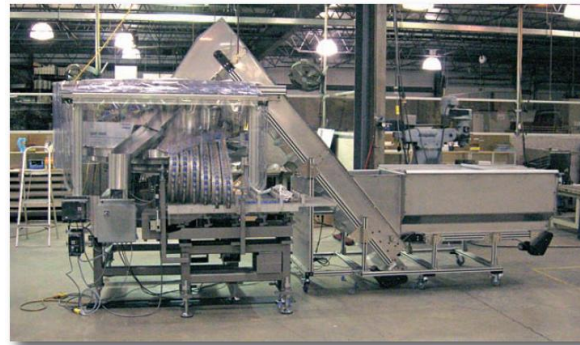
Material Handling Systems:



- **Track Feeding Systems:**
 - 6" to as long as required
 - In-line Vibratory Tracks
 - In-line Air Tracks
 - Conveyor Belt Tracks
 - Gravity Tracks



- **Automation Mechanisms:**
 - Isolation Escapements
 - Shuttle mechanisms
 - Sensor integration:
 - Vision and weight



- **Storage/ Transport Systems:**
 - Elevators and Gondolas
 - Bulk Storage Hoppers
 - Sound Enclosures

See: www.fortvillefeeders.com

Contact Information:

Fortville Feeders, Inc. information:

750 E. Broadway

Fortville, IN 46040 USA

Tel: 317-485-5195 Fax: 317-485-6182

www.fortvillefeeders.com

Key Internal Contacts:

- Michael A. Crouse – CEO/ President
- Tim Butt – Business Development/ Sales
- Jason Crouse – Service/ Operations

External Sales Representatives:

AL, TN: Chip Allen

423-265-2113 WillcoxAndAlleni@aol.com

Southern CA: MDB Precision Industries- Mark Beeman

805-402-3667 mark@mdbpi.com

CT, MA, ME, NH, VT, RI: Wayne Beavers

203-671-9314 wbeavers@snet.net

DE, MD, NJ, NYC, eastern PA: Peter Galloway, Tom Duffy,
Ed Carlson, and Miller Decou

CT office: 203-655-6466 sales@autoassoc.com

PA office: 215-855-8777 sales@autoassoc.com

GA, TN: Ken Dickey

865-977-6043 Ken.Dickey@yahoo.com

IN, KY, OH, western PA: Dempsco, Inc. - Kurt Jacoby

937-436-1000 [kjacobY@dempSCO.com](mailto:kjacoby@dempSCO.com)

IL and southern WI: Design Components, Inc. - John Dincher & Bill Huffman

847-358-4300 ktodd@dcinmotion.com

KS, MO, NE: Steve Schumacher

314-799-0060 steven-sas-co@charter.net

MI: Bailey & Associates - Elwin Bailey, Ben Bailey, & Jim Gruesbeck

517-204-3874 elwinb@frontier.com

NY: Productivity Solutions - Rick Gilbert & Mark Harrington

585-647-3181 sales@pscco.com

VA: Bill Farmer

804-798-8390 bill@hillcrestenterprises.com

NC, SC: Larry Lester

704-609-2321 Llester@disgroupnc.com

TX: B2 Automation Inc. – Jesse Butcher

281-391-8312 B2automation@consolidated.net

WI, MN, IA, ND, SD: Baillie Sales and Engineering Inc.

952-546-2960 mark@bailliesales.com

UT, CO, WY, NM: Western Components – Joe Wojciechowski

303-665-8299 jwojo@westerncomponents.com

FL, Puerto Rico, Costa Rica, Dominican Republic: Bill Becker

386-755-8899 bill@auto-motion.com

Northern Mexico: Jose Cervantes

+52 (81) 8020-8723 jc.fortvillefeeders@gmail.com

Central/ southern Mexico: Delfino Gomez

+52 (442) 312-6932 d.gomez@ghd.com.mx

Rest of N. America/ International (if not listed above): Jason Crouse

317-485-5195 jason@fortvillefeeders.com

