

## **Keeping It Real**

authenticity in the aero-mechanical market



FLOVEYOR

'Simplicity in conveying Integrity in everything'

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#### Introduction

# By 2020, the global market for materials handling equipment is projected to reach US\$134.8 billion.<sup>1</sup>

Although Europe continues to hold the largest share, the Asia-Pacific region led by China and India is the fastest growing market.<sup>2</sup> This unprecedented expansion is fueled by infrastructure development underpinning rapid growth in automotive, construction, energy, electronics, food and beverage, retail, and logistics and warehousing industries.

While the materials handling equipment market is growing exponentially, manufacturers' approach to current opportunities is shaped by a number of interlocking factors.<sup>3</sup>

#### These include:

- the sobering impacts of the Global Financial Crisis (GFC)
- rapid advances in technologies and process automation
- a growing global focus on reducing and reshaping energy consumption



Materials handling equipment companies must position themselves to respond effectively to massive industry expansion in a time of transformational change.

In material handing applications involving powders and granules, Floveyor's aero-mechanical conveyers are an ideal solution. Their simple modular design, matchless efficiency and automation and process monitoring capacities are the perfect fit for hundreds of integrated applications globally.

This paper discusses how Floveyor has evolved a business model and product range designed to exceed industry demands for technically sophisticated, optimally supported materials handling equipment.

- 1. 'Materials Handling Equipment Market Trends', Global Industry Analysts Inc., May 2015, retrieved 24 April from <a href="http://www.strategyr.com/MarketResearch/Material\_Handling\_Equipment\_Market\_Trends.asp">http://www.strategyr.com/MarketResearch/Material\_Handling\_Equipment\_Market\_Trends.asp</a>
- 2. ibid
- 3. 'Ten Mega-Trends of The U.S. Roadmap for Material Handling & Logistics and Why 2025 Matters Today,' March 2014, retrieved 24 April from <a href="http://www.supplychain247.com/article/ten\_megatrends\_of\_the\_u.s.\_roadmap\_for\_material\_handling\_logistics">http://www.supplychain247.com/article/ten\_megatrends\_of\_the\_u.s.\_roadmap\_for\_material\_handling\_logistics</a>



### Market forces – where competition and capacity collide

Healthy levels of innovation, diversity, price competition and service excellence are essential in a thriving B2B environment. However, an historical split in the materials handling equipment market has not always fostered the positive market forces. Traditionally, the market has been served by a small number of large multinationals catering to the high end users and a large number of small and medium sized enterprises (SMEs).

Regionally based SMEs are overwhelmingly generalist companies supplying their local customers. SMEs have a substantial portfolio of equipment and technologies enabling them to design and manufacture materials handling solutions in house. Maintaining a varied and complex portfolio can be a challenge and there is the risk of some SMEs diversifying beyond their capacity to deliver optimal service and support.

This capacity can also be impacted by regulatory, logistical and human resource imitations. Regional SMEs often contend with high transport costs, import restrictions and limited access to supporting product information and skilled technical staff.

As Floveyor expands its global network of partner organisations and distributors, we're careful to select and support regional companies who have demonstrated their capacity to meet our exacting standards for installing and maintaining our conveyors.



### The downside of aero-mechanical imitations - challenges for generalist manufacturers

Despite its innate simplicity and the apparent ease with which it can be replicated, the aero - mechanical conveyor is a sophisticated machine.

As inventors and manufacturers, the Floveyor team has dedicated nearly 60 years to innovating and refining aero-mechanical design and manufacture. We produce a range of conveyors and complementary equipment adapted for specific industry applications. This is our core business and the complete focus for our research and development energies.

Generalist 'one stop shop' companies who build or offer alternative aero-mechanical conveyors simply cannot replicate our resources or experience in designing installing and servicing this distinctive technology. When something goes wrong they struggle to fix it.

As aero-mechanical specialists we're frequently asked to remedy the results of incorrect installation and maintenance of conveying systems that customers believed to be of comparable quality to Floveyor.

All too often however, we're not asked or not able to fix the problem

and we can incur reputational damage by association. While Floveyor's brand integrity is sufficiently robust to withstand these cases of mistaken identity, the fallout can be severe for customers and suppliers alike. Customers may abandon an essentially ideal technology for a less suitable one, individual companies lose business and the broader material handling market suffers a dip in credibility and momentum.

## The downside of aero-mechanical imitations - challenges for customers

Based on our experience to date, here is an overview of the issues customers encounter with alternative aero-mechanical systems.



#### Broken rope assemblies - the high price of failure

A high integrity rope assembly runs flawlessly for thousands of hours. Conversely, an assembly constructed from cheaply sourced, untested materials can break in an instant.

Replacing failed rope assemblies with top quality Floveyor products is our most common intervention on behalf of customers with alternative aero-mechanical conveying systems

We replace failed products with technically advanced rope assemblies made from top quality materials chosen for durability and performance rather than price.

Because we understand that 'one size fits all' will never work for this crucial component of conveying technology we've developed a range of rigorously tested rope assemblies to suit specific application needs and budgets.

### Contaminated product – the hazards of poor design, installation and maintenance

A product stream contaminated by polyurethane chips or other foreign matter can be catastrophic for food manufacturers and processors.

When we're asked for advice and support in the aftermath of a contamination incident our team assesses every aspect of the equipment installation, set up and maintenance routine. Most often we find an inexpertly engineered and under maintained system with a cheaply made, poorly tensioned rope assembly. We frequently find systems that are totally unsuited to the target materials. No consideration has been given to material flow properties, eliminating internal resistance or ensuring the rope assembly runs clear of other conveyor components.

Over 70% of all Floveyor installations are in high end food industry applications. We commit significant industry specific research and development resource to meeting the safety and efficiency needs of this vital sector.

As a result of this intensive industry focus we offer highly innovative solutions. These include highly sophisticated dairy suitable hygienic metal detectable polymer ropes and GMP designed systems. We're also the sole global supplier of polymer coated rope assemblies that offer the ultimate peace of mind for food applications by removing wire contamination risks and bacterial susceptible surfaces.

Our equipment is designed around fluid and powder dynamic modelling to ensure smooth contamination- free transport of even the most challenging materials. These design principles also apply to our less technically sophisticated but equally reliable conveying options for more basic food applications.

#### Rope tensioning - essential and often neglected

Historically this crucial task proved a challenge for operators who have not received thorough initial training and support from a skilled technician.

We understand that this critical task takes time and expertise. As a result, we've designed our new hygienic Floveyors with GMP tool-less access and remote tension actuators that drastically reduce labour time to only minutes per month.

For applications not requiring this level of investment, we can train your operators to use more manual systems efficiently.

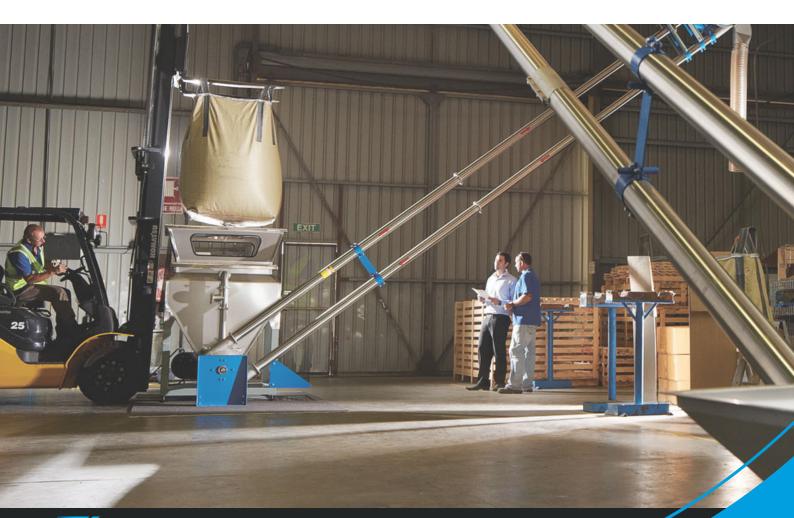
#### Access for cleaning and inspection

We've designed the Floveyor's three key access points to ensure safe, fast cleaning and maintenance.

While Industrial Floveyors have secure but easily accessed bolted entry points, our new hygienic conveyors have quick access hatches sealed by magnetic interlocks. This design innovation allows operators to complete maintenance and cleaning without tools and in minimum time.

Floveyors distinctive aero-mechanical technology and streamlined modular construction promote clean, low maintenance operation. That said, we are constantly refining our design to simplify and automate these crucial processes.

We also tailor wet or dry cleaning regimes to fit your application and budget.



### Conclusion – not all aero-mechanical conveyors are created equal

Floveyor's lead role in the international market place is underpinned by more than 60 years of intensive research and development. As a result, our matchlessly reliable and efficient conveyors and complementary equipment set the industry benchmark for innovative aero-mechanical technologies. We've also built a global business culture centred on long-term relationships with loyal customers and like-minded partner organisations. Our customers constantly challenge us to engineer the materials handling efficiencies and refinements they need to keep their competitive edge.

In essence, we've built our strong global presence based on:

- finding technically advanced, high integrity materials handling solutions for transporting granules and powders
- exceeding industry demands for increasing automation, energy efficiency and technically sophisticated process integration and monitoring <sup>4</sup>
- partnering with SMEs and large corporations whose business cultures and practices reflect our core values of 'simplicity in conveying and integrity in everything'
- providing intensive training and ongoing support to foster aeromechanical sales and technical expertise in the under resourced materials handling workforce in developing markets<sup>5</sup>

4. ibid

5. 'Seven Major Material Handling Developments Emerging In 2015', retrieved 24 April from http:// www.plantservices.com/blogs/ material-handling-insights/7major-material-handlingdevelopments-emergingin-2015-/

As world leaders in the technically advanced, energy conscious materials handling market place, we're working to increase your access to top quality aero-mechanical conveying equipment.









If you've experienced unreliable or poor quality aero-mechanical conveying systems, we'll do our utmost to help you fix the problems. Alternatively, if you would prefer to minimise the possibility of facing the costly, inconvenient issues outlined in this paper contact us directly or visit our website to find your nearest authorised Floveyor agent.