



Inventors
Pioneers
Specialists

Aero-mechanical
conveying solutions.

Setting the industry
benchmark for speed,
adaptability
and reliability.





Aero-mechanical conveying pioneers

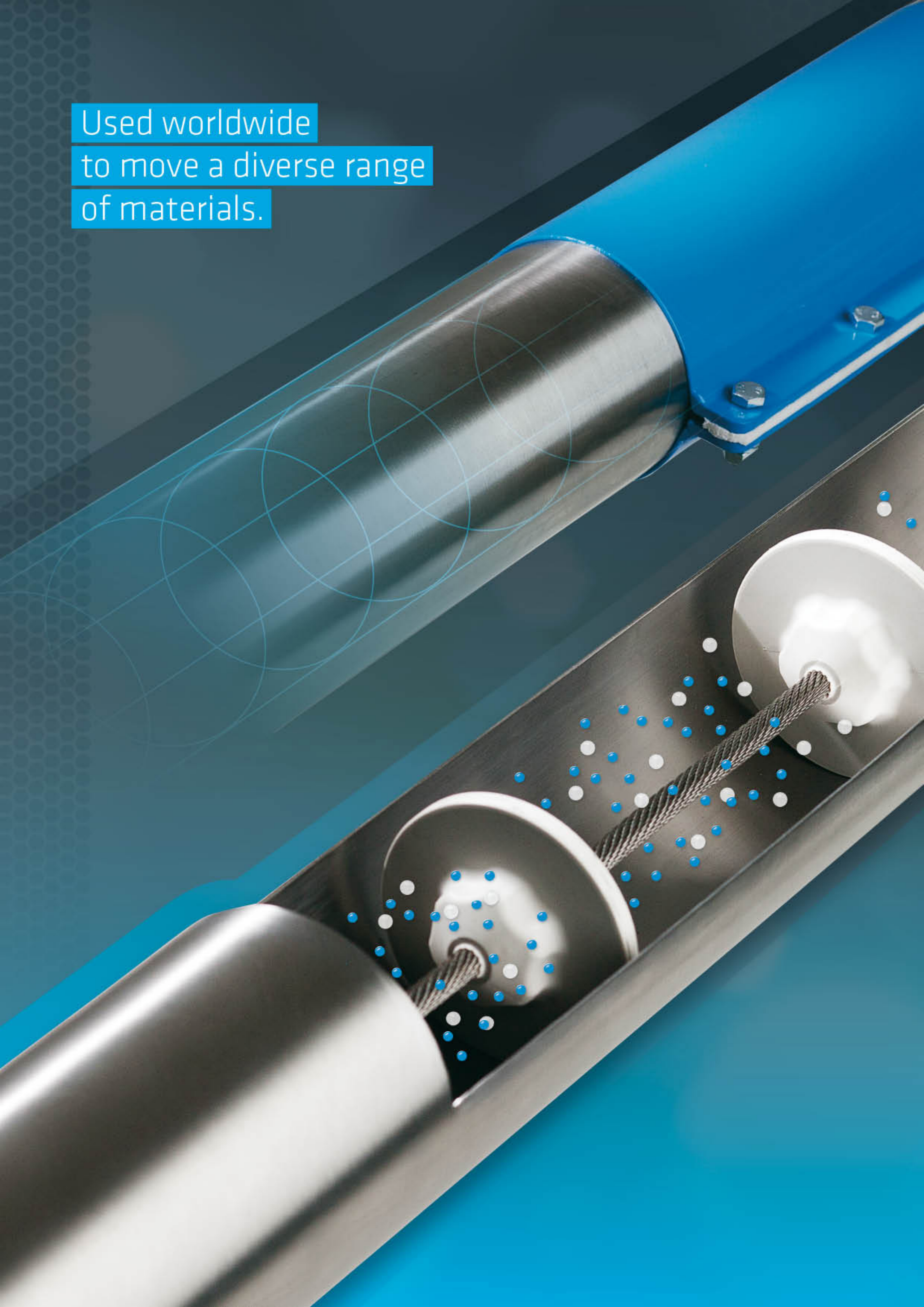
The Floveyor is the original aero-mechanical conveyor, invented by the founder of our family-owned business Robert Walker in 1960.

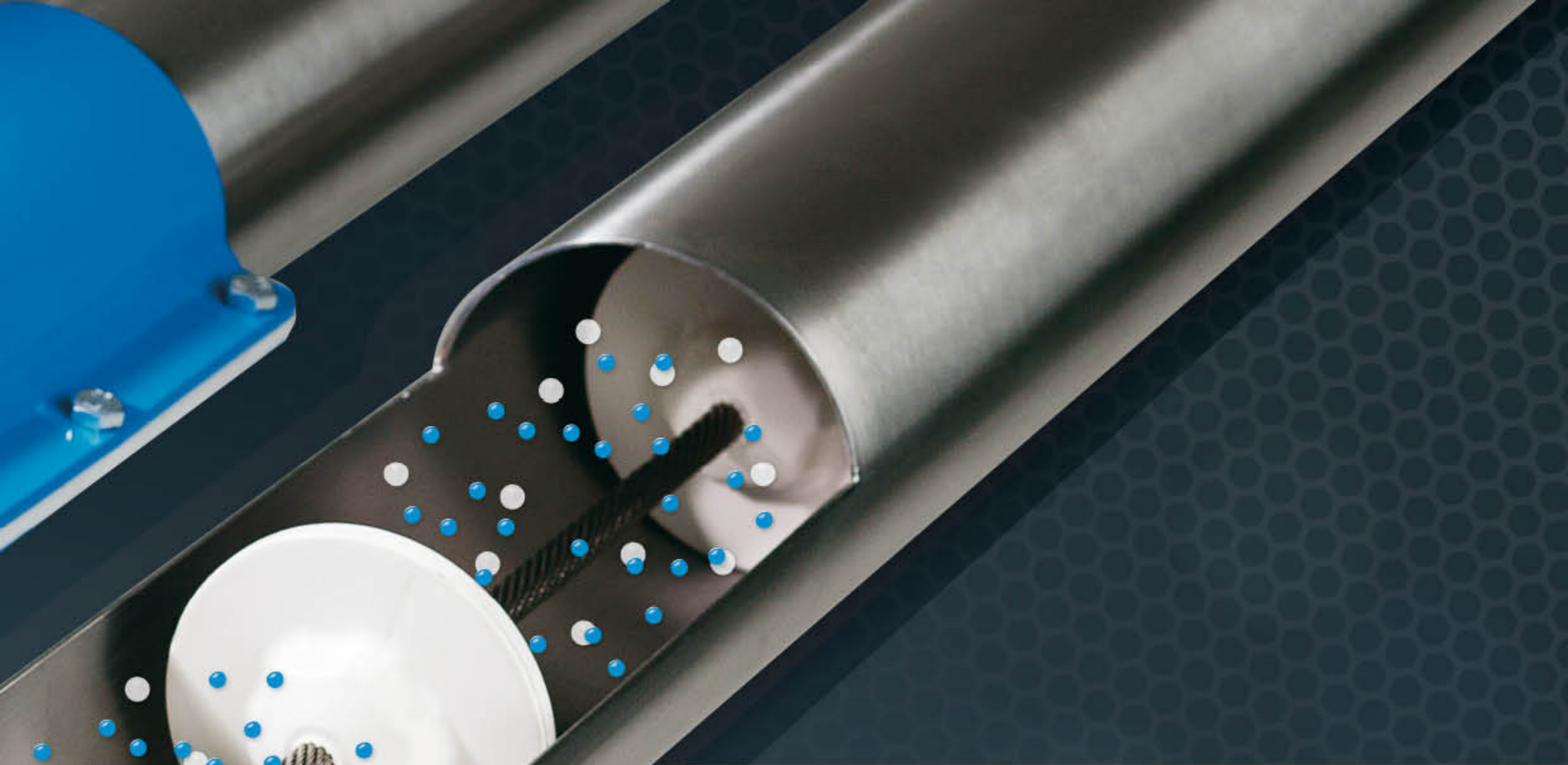
Since then, we have developed and refined the principles of aero-mechanical conveying to create a suite of modular products that are used by companies around the world to fulfil a host of materials handling requirements.

Today, our team of aero-mechanical engineers is renowned as the leading authority on aero-mechanical conveying systems. From consulting, design and testing to fabrication, installation and servicing, our aero-mechanical specialists develop custom products, components and cost-effective solutions that set the industry benchmark for speed, adaptability and reliability.



Used worldwide
to move a diverse range
of materials.





Moving myriad materials, quickly and efficiently

Our Floveyor solutions are applied in industries the world over, from food processing, where hygiene is the number one priority, to bulk handling, where speed is of the essence.

Our systems are used to move a diverse range of materials; on the one hand, delicate products like tea leaves that demand a gentle touch; on the other, silica and salt that call for durability.

Floveyors are used to move: flour, sugar, rice, coffee, cocoa, milk powder, lime, salt, detergent powder, urea, melamine, citric acid, PVC, carbon, silica, aluminium pellets, titanium dioxide, wood flour, bentonite, cement, ammonium nitrate, sodium sulphate, hydrated alumina and much more.



The material is fluidized
in the airstream.





How our unique systems work

As the inventors of aero-mechanical conveying, our team has an unrivalled knowledge and mastery of its principles. It's a complex science, but the basic theory is relatively simple.

- > A rope assembly comprising a steel wire rope fitted with equally spaced polymer discs is circulated through tubing at high speed.
- > This motion displaces air, creating a recirculating airstream.
- > Material is control fed into the feed housing, where it is captured by centrifugal force and fluidized in the airstream, suspended between the travelling discs.
- > The fluidized material is propelled to the discharge housing of the conveyor where it is deposited into the receival vessel.

Our custom engineered solutions are built to your exact specifications





The unique benefits of our aero-mechanical conveyors

→ **SCALABLE.**

FROM SINGLE-UNIT SYSTEMS TO PLANT ENGINEERING.

→ **MODULAR.**

MULTIPLE CONFIGURATIONS, WITH REFINED DESIGNS ALLOWING FOR FAST ASSEMBLY.

→ **ADAPTABLE.**

SEAMLESS INTEGRATION WITH EXISTING EQUIPMENT.

→ **SMALL FOOTPRINT.**

CUSTOMIZE TO SUIT YOUR SPACE REQUIREMENTS.

→ **RELIABLE.**

MARKET-LEADING DEPENDABILITY AND STRENGTH.

→ **ROBUST.**

DURABLE AND HEAT RESISTANT, RATED TO 110°C+.

→ **GENTLE.**

MINIMAL DEGRADATION AND NO PRODUCT SEPARATION.

→ **LOW MAINTENANCE.**

EASY TO CLEAN AND SERVICE.

→ **SUSTAINABLE.**

LOW POWER AND LOW NOISE POLLUTION.

→ **NO DUST.**

MINIMIZING OHS CONCERNS AND DUST-EXTRACTION COSTS.

→ **HYGIENIC.**

FDA AND CE FOOD STANDARDS COMPLIANT.

→ **IEC AND ATEX COMPLIANT.**

SAFELY HANDLING HAZARDOUS MATERIALS.

→ **COST EFFECTIVE.**

FOR THE QUICK RECOVERY OF CAPITAL COSTS.

More efficient
and cost-effective.





Global expertise and a world of applications

Our custom engineering ethos and modular design philosophy mean we are able to engineer a bespoke aero-conveying solution to suit your specific requirements. Moreover, because our solutions are tailor-made, they're more efficient and cost-effective.

We have clients in over 50 countries, all using the Floveyor to fulfil their unique material-handling needs, calling on our design-to-installation-to-support expertise to give their business a competitive commercial edge in their respective industries.

- > The food industry
- > The chemicals industry
- > The pharmaceuticals industry
- > The manufacturing industry
- > The logistics and bulk handling industry
- > The mining and resources industry

Engineering the smallest components and entire plants

Our experience and expertise extends to the custom design and installation of complete factory-wide conveying solutions. Working with your design team, we can scope, engineer, fabricate and commission every element of a holistic solution, ensuring the seamless transfer of materials, from raw material unloading to processing to loading for despatch.



BACKGROUND

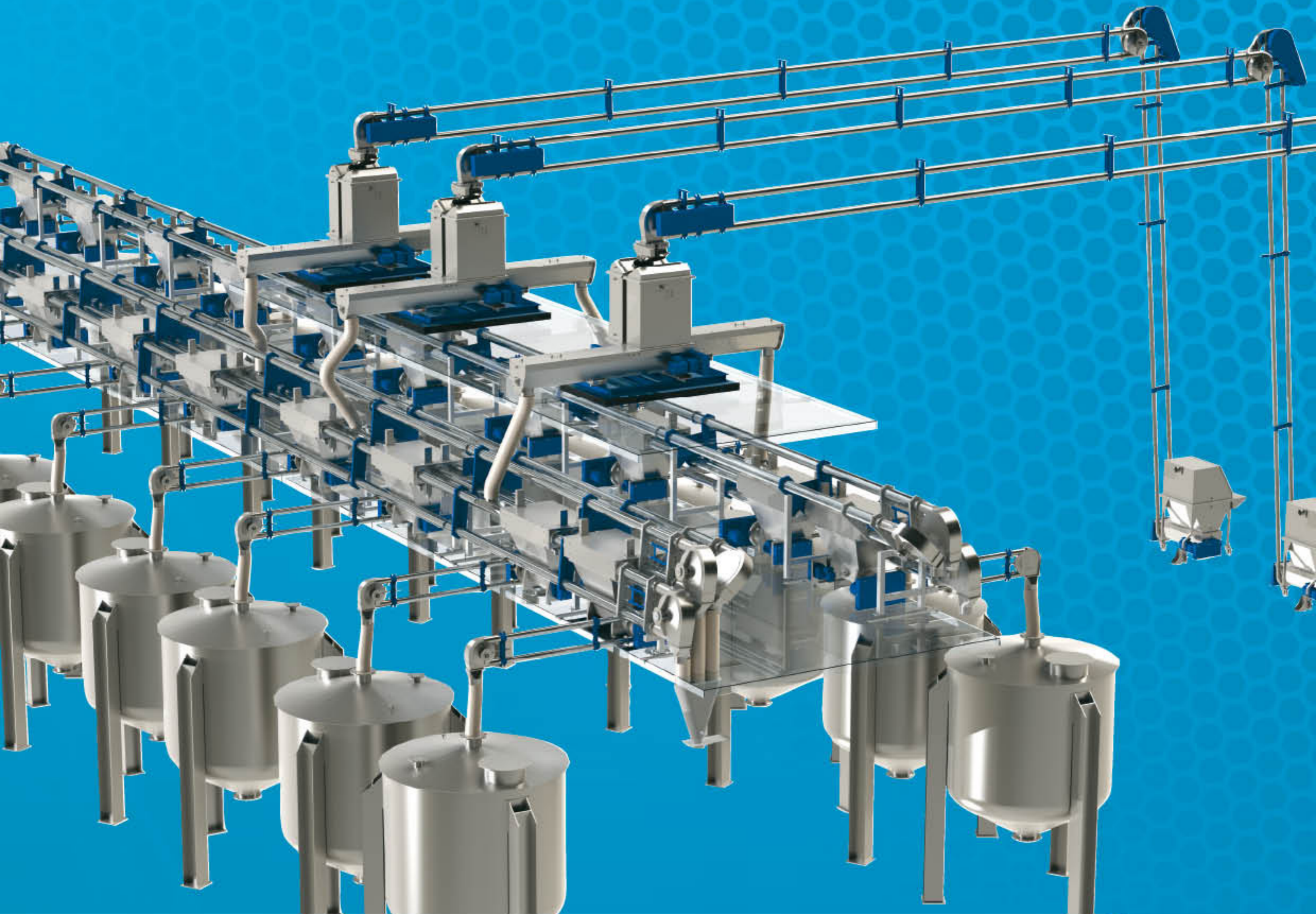
Our client initially purchased one standard Floveyor as a trial unit for handling various powders. Impressed, they asked us to develop a special mobile unit for their plant. The client purchased six of these units, designed in a unique configuration that delivered substantial efficiency improvements.

Following these successes, the client then engaged our specialists to work with their engineering team on developing and implementing a holistic aero-mechanical conveying solution for their new greenfield plant in Perth, Western Australia.

THE CHALLENGE

As a fast-track project with considerable budget constraints, it was a challenge that called for a plant-wide conveying solution to meet a number of operational requirements:

- > 3 lines to handle 3 separate products, 24x7
- > Programmable product shot sizes to be delivered to any one of 20 different mixers
- > Up to 72 shots to be delivered to each mixer over 24 hours
- > Any 1 of the 3 lines to be able to handle the full capacity of the plant
- > A fully PLC-run controllable system
- > Backup capacity required, where possible
- > Debagging to include fully automatic debagging machines, manual debagging from 25kg bags and manual debagging from 1,000kg bulk bags
- > No dust to escape from debagging area/system
- > ATEX Hazardous Zoning in some areas
- > Full functional spec and P&ID for electrical gear



THE SOLUTION

After analyzing the complete plant process, our team designed a layout to go from the debagging area to the finished mixing room.

During the design phase, we continued R&D testing. We found that Floveyors could also be used to deliver the finished product to the silo storage and packing areas, so we extended the solution to encompass these processes.

The finished configuration comprised 72 Floveyor machines, plus ancillary equipment. In total, we designed, produced, installed and commissioned over 90 machines, creating a seamlessly integrated, start-to-finish solution.

THE OUTCOMES

By managing the plant engineering process, from design, custom engineering and testing to installation, commissioning and personnel training, we were able to deliver a solution that maximizes ROI, minimizes downtime and reduces maintenance costs.

Our client launched their new world-class operation in Perth, benefiting from second-to-none manufacturing practices that provide a significant and ongoing competitive advantage.



Specialist support and solutions, worldwide

While our company is proudly Australian owned and operated, we have an international distribution and support network. These global capabilities ensure you are always able to access the products and parts you need, as well as our renowned after-sales servicing and support team.



To find your local Floveyor distributor, visit floveyor.com where you will also find a wealth of product information and support resources, including FAQs and an online support form. Alternatively, if you would like some expert advice on aero-mechanical conveying or have a question about your Floveyor, call our support team on **+61 (8) 9378 3333** or email sales@floveyor.com.



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CONVEYING

Visit www.floveyor.com for more information about us, our aero-mechanical products and accessories.