LDA

Solutions for Life

Bulk storage and packaging technology

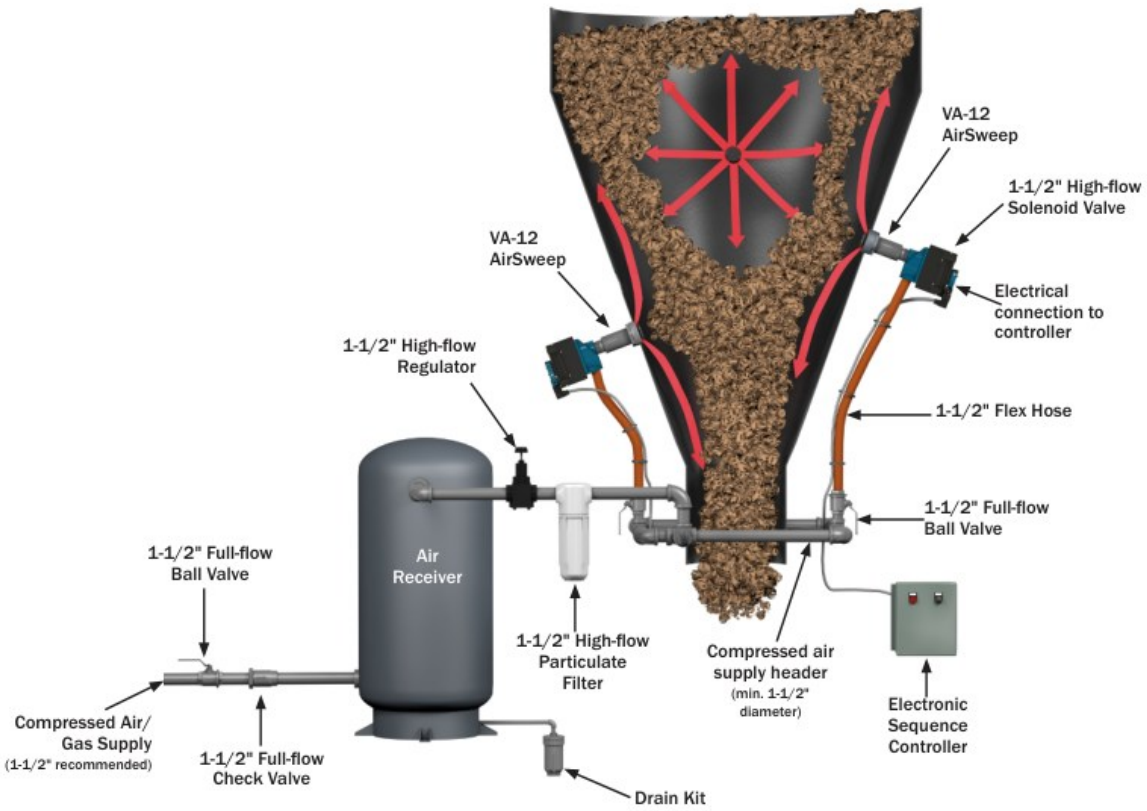
CONTROL CONCEPTS USA

AirSweep®

Solve tough flow problems by eliminating ratholes, bridging and material build up.

The **AirSweep®** material activation system delivers on-demand product flow, which eliminates hang-ups and blockages. It cleans Interior surfaces and enhances batch uniformity.

Each AirSweep® nozzle directs a **360° high-volume burst** of compressed air or inert gas along the inside walls of process equipment or vessels. This breaks friction to sweep stalled material back into the flow stream. The patented nozzle design ensures an **immediate reseal** after each pulse. Sequenced pulsing of strategically-positioned AirSweep® units activate **bulk material** to produce a first-in, first-out controlled flow.



Benefits

System is mounted on the outside of the vessel for easy cleaning and maintenance.
Energy efficient - uses plant air.
Mount to metal, concrete, fiberglass or wood vessels.
Manufactured from high grade steel for long service life.

CONTROL CONCEPTS USA

AirSweep®

Airsweep® proven success with a variety of materials!

Food/ agriculture

Animal Feeds
Cocoa
Brewers grain
Corn
Coffee
Flour
Grains
Hops
Salt
Soybeans
Spices
Starches
Sugar
And more...

Mining

Aluminum
Bentonite
Coal
Copper
Diatomaceous Earth
Gypsum
Iron ore
Limestone
Magnetite
Phosphate
Shale
Soda ash
And more...

Chemicals

Activated carbon
Adipic acid
Aluminum
Chlmoride
Boric acid
Chlorine
Herbicide
Hydrated lime
Iron oxide
Polyacrylamide
Titanium oxide
Zinc
And more...

Other

Acetate
Cement
Chalk
Cork
Detergent
Fertilizer
Fly ash
Pharmaceutical
Plastics
Polymers
Resins sludge
Wax flakes
Wood chips
And more...

Control valves for air cannons

To ensure that the inner walls of furnaces, silos, hoppers and chutes are free of obstructions, compressed air is a wise choice. When bulk materials accumulate and then obstruct passage, the use of high-pressure shock waves is the best way to keep the material moving. The main advantages of MAC Valves are their significantly **longer service life** and obvious savings on the maintenance budget.

MAC Valves for air cannon

Agrichema air cannon

Original valve

MAC Valves upgrade

- Standard Industrie
- Martin Engineering

Original Valve

MAC Valves upgrade

MAC Valves Pulse valves

MAC Valves are designed as a **reliable** replacement for traditional diaphragm technology in industrial applications. They are ideal for replacing diaphragm systems in processes such as dust filter cleaning, pneumatic conveying, and bulk material handling.

Featuring vulcanized spool technology and an internal accumulator, the valves provide superior reliability and **quick response times**, even at low air pressure. Adapter plates allow for a simple, direct replacement of existing diaphragm valves **without requiring modifications** to the piping.

In addition to the patented pulse valves, MAC Valves offers a wide range of valve series to meet various industrial needs. This includes the **newly introduced PV7, PV10, and PV12 series**, which provide even more options for optimizing your system with the latest advancements in valve technology.

PV03 series

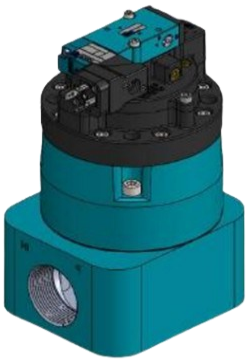
Flow: 24.000 Nl/min

Temp Viton: -20°C—100°C

PV06 series

Flow: 53.200 Nl/min

Temp Viton: -20°C—100°C



PV07 series

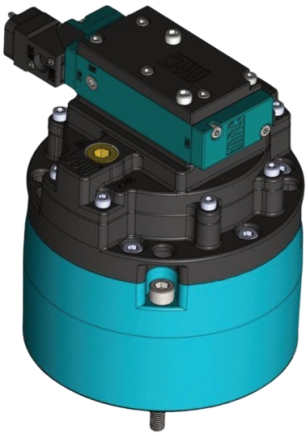
Flow: 70.000Nl/min

Temp Viton: -20°C—100°C

PV09 series

Flow: 10.000 Nl/min

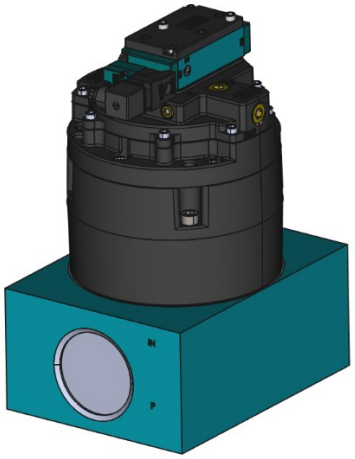
Temp Viton: -20°C—100°C



PV10 series

Flow: 140.000 Nl/min

Temp Viton: -20°C—100°C



PV12 series

Flow: 175.000 Nl/min

Temp Viton: -20°C—100°C

CONTROL CONCEPTS USA

DAZIC® speed switches

What is a zero speed switch ?

Speed switches are attached to rotating shafts to **detect** any abnormal change in rotation speed. These shafts are found in many types of material handling systems including plant machinery, from conveyor belts to rock crushers.

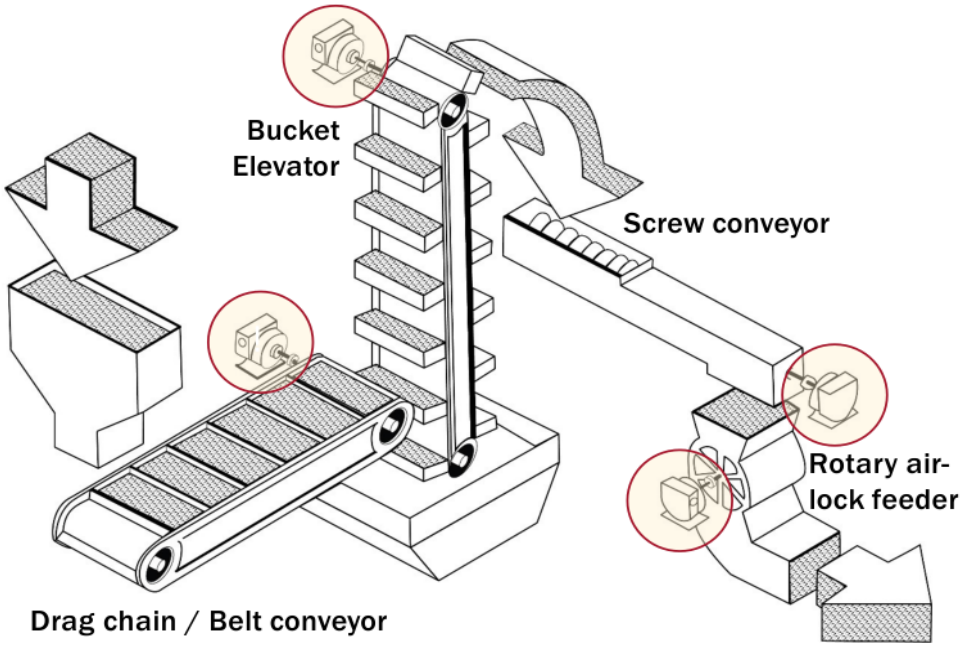
DAZIC® zero speed Switches contain small metal flags or magnets mounted on a disc or pulsar wrap, which generates pulses as it passes through the probe's electromagnetic field. These pulses are proportional to the shaft's rotations per minute.

This **simple set-up** helps detect any speed changes. If the switch detects that the RPM does not match the speed trip-points you've set, a corresponding relay de-energizes and triggers an alarm.

Choose the best zero speed switch for your process and factory conditions

The DAZIC zero speed switch models differ in terms of:

- ⇒ shaft input speeds
- ⇒ set trip-point
- ⇒ housing material
- ⇒ mounting styles
- ⇒ electrical wiring options
- ⇒ operating temperature range
- ⇒ field adjustability



CONTROL CONCEPTS USA DAZIC® interrupteurs de vitesse

A DAZIC® SPEED SWITCH FINDS THE PROBLEM... AND STOPS THE PROBLEM

Electromechanical Speed Switches

2100 Series

Operating Range: 4 to 2000 RPM

4100 series

Operating Range: 4 to 1800 RPM

8100 Series

Operating Range: 0.5 to 25 RPM

Electronic Speed Switches

RotoGuard®

Operating Range: 1 to 400 RPM

Sensing reduction/increase in rotation

Proximity switches

Prox-micro

Large sensing range:

6 – 30,000 RPM based on 1 pulse per revolution

1 – 7,500 RPM based on 4 pulses per revolution

0.1 – 3000 RPM based on 60 pulses per revolution

Polish up your rotary bag packer

Polish up your packer

Efficient and precise control is crucial for modern rotary bagging machines, where accuracy and reliability directly affect production efficiency. However, some challenges like contamination and labor-intensive downtimes can hinder performance. That's why LDA offers the perfect solution. We can improve your machine . Contact us and see how we can help!

Our previous improvements

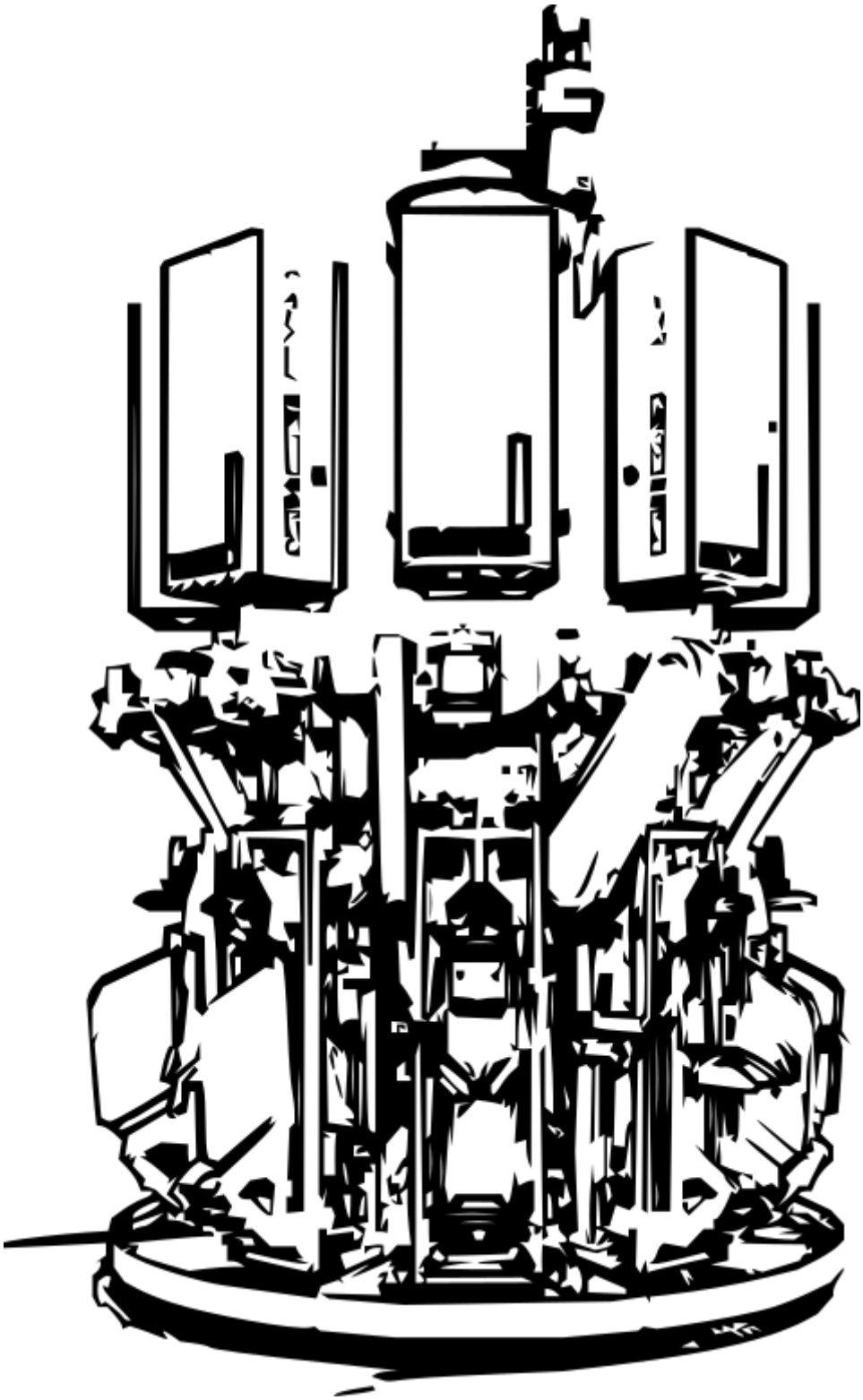
Downtime Reduction:
Minimized operational interruptions, ensuring smoother production.

Enhanced Reliability:
The MAC 800 Series provides 15% more flow compared to competing products, ensuring superior performance in filling operations.

Extended Component Lifespan:
Reducing the frequency of part replacements.

Improved Filling Accuracy:
Consistent response times lead to significantly more accurate filling levels, ensuring product consistency.

Contamination Immunity:
Designed to prevent contamination, reducing maintenance and improving machine



The Solution to vibration & shock

We are proud to be a trusted distributor of **Firestone Springs and Marsh Mellows**, offering innovative solutions **for vibration isolation and shock absorption** across various industrial applications. These cutting-edge springs are engineered with a unique combination of rubber and fabric. They deliver **exceptional performance** and durability, even in the harshest environments. Whether you're in mining, construction or manufacturing. Firestone's proven technology ensures reliable load management, extended equipment life and reduced maintenance.

Product Features and Benefits

Enhanced Vibration Control

Outstanding vibration isolation to protect your equipment from excessive wear and tear.

Superior Load Handling

With no need for regular upkeep or lubrication, **Marsh Mellow Springs** are designed for long-term performance.

Resistant to Harsh Conditions

Proven in tough environments like mines and mills, these springs withstand corrosion, impact, and wear, offering durability that outperforms traditional coil springs.

Noise Reduction

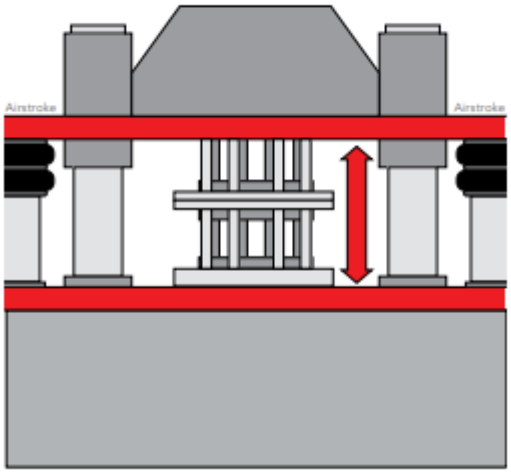
By reducing structurally transmitted noise caused by vibration, these springs improve overall working conditions, making them ideal for environments where noise control is a priority.

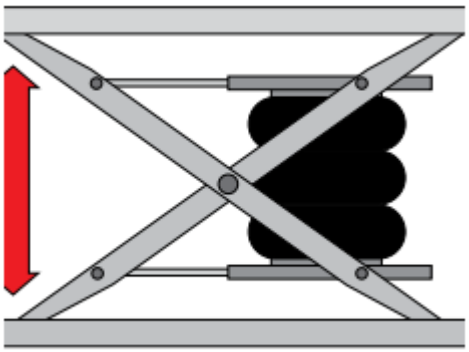
Air spring

This innovative product is designed to provide **force, motion, stability**, and **protection** across various industrial applications, including agriculture, construction, and commercial laundry. Known for its durable construction made from rubber and fabric, the Air Spring features friction-free operation with no moving parts, making it useful for **harsh environments**. Its vibration isolation capabilities **enhance operational** efficiency by minimizing wear and tear on machinery. The springs are designed with a variable spring rate, allowing them to adapt to different loads and conditions.

Can Making

Air springs provide an ideal counterbalance to support the upper plates, allowing the mechanical drive to **focus** entirely on metal forming instead of lifting the platen. With their low spring rate. Air Springs also improve energy efficiency, reducing both operational strain and power consumption.



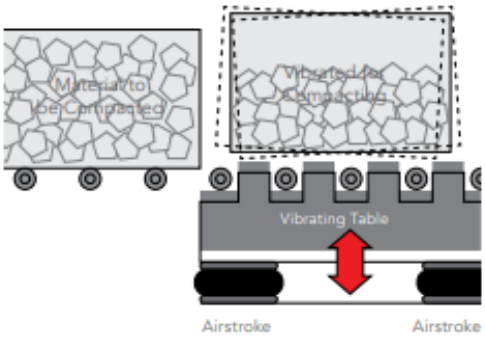


Scissor Lift

While the air spring itself has just 30 CM of stroke. The innovative scissors linkage design enables much longer travel. With **high force** capacity and lateral/angular compliance, it offers exceptional flexibility for a wide range of design applications.

Shake, Rattle & Roll

In this process, a casting flask moves down the line and stops over a vibrator. It's then lifted for tamping and lowered for continued conveying. Airstroke actuators handle the **lifting** while also **isolating** the vibrations for smoother operation.



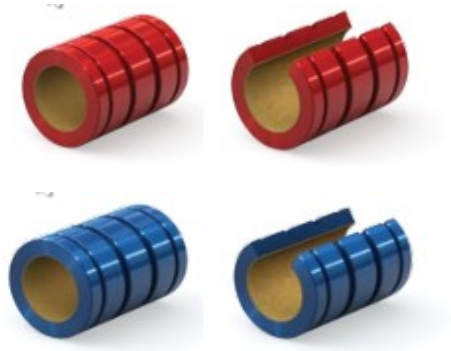
PBC Linear **Simplicity Bearings**

Plain Bearings & Ball Bearings

Good engineering principles dictate that the best bearing design be utilized for any given bearing application. Each type of bearing has advantages and disadvantages. Strengths or limitations can make it a clear choice depending on the application environment. At other times, an engineer will have a choice because multiple types of bearing can meet the need.

Plain Bearings: Built for

If your application requires reliability in tough environments, **Plain Bearings** are your answer. With a **self-lubricating** Frelon® liner, they eliminate the need for regular maintenance while under **extreme loads and temperatures**. Whether you're operating in a dusty, wet, or high-vibration environment, plain bearings offer unmatched durability.



Maintenance-Free:
Self-lubricating for longer life and fewer breakdowns.

Handles Heavier Loads:
Carries up to 20x more load than ball bearings.

Designed for Harsh Environments:
Perfect for dirt, moisture, and high heat.

Extreme Temperature Performance:
Operates from –240°C to +204°C.

Ball Bearings: Precision and

When speed and precision are essential the **ball bearings are the key**! By using rolling elements to reduce friction, they provide **smoother, faster**, and more accurate movement making them ideal for applications where performance and reliability are non-negotiable.

Smooth, Low-Friction Movement:
Perfect for high-speed applications.

Precision-Engineered:
Provides precise accurate motion.

Versatile & Reliable:
Handles loads and speeds effortlessly.

Easy Replacement:
Standardized sizes for quick swaps and minimal downtime.

Pillow blocks

The **Simplicity Pillow Blocks** from PBC Linear are specialized bearing units designed to support linear motion applications. They feature a unique design that simplifies installation and maintenance while providing excellent performance.

Modular Design:
These pillow blocks are part of a modular system that allows for easy assembly and customization based on specific application needs.

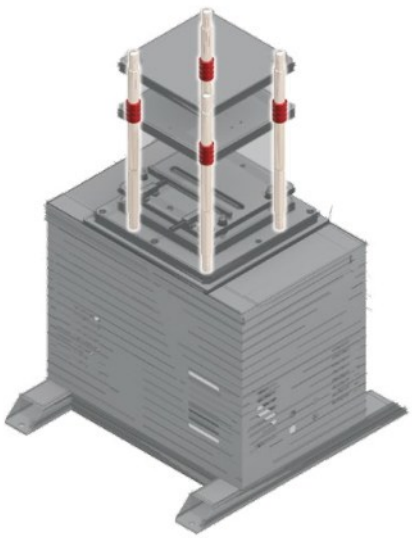
Maintenance-Free Bearings:
Many Simplicity Pillow Blocks use self-lubricating materials or sealed bearings that eliminate the need for regular maintenance, making them convenient for long-term use.

Easy Installation:
Designed for straightforward installation, these blocks often include features such as alignment guides and pre-drilled mounting holes, reducing setup time.

Versatility:
They can be used in various applications, including conveyors, automation systems, and machinery that require linear motion support.

Durability:
Constructed from robust materials, Simplicity Pillow Blocks are engineered to withstand heavy loads and provide reliable performance over time.

Customization Options:
They come in various sizes and configurations, allowing users to select the best fit for their specific application requirements.



For Packaging

THERMOFORMING: Simplicity linear plain bearings operate in a wide range of temperatures — which is required when molding heated plastic sheeting in thermoforming machines.

LDA

Solutions for Life

Connect with Us!

Website: www.LDA.be

Email: LDA@LDA.be

Phone: +32(0)2– 266 13 13

Follow us on LinkedIn: LDA Belgium

Find us

Hoge Buizen 53

1980 Eppegem

Belgium

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