



CASE STUDY

HOW TO MAXIMIZE THE PRODUCTION LINE EFFICIENCY with the right powder handling system



"We've been using the Matcon system for over a year now and it's been the perfect fit for our production strategy. We knew it would deliver a sound return on investment, but we're really impressed with how well it's performed."

Mr H.P RATH - Operations Vice President

THE POWDER HANDLING EXPERTS

www.matconibc.com

Discover how Macleods were able to eliminate the IBC rat-holing issue, improve product yield and eradicate manual intervention to stimulate powder flow.



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The Need

A powder handling system that promotes flow, prevents segregation, contains dust for operator safety, and delivers excellent product quality



Macleods Pharmaceuticals is a leading developer and manufacturer of pharmaceutical products. The company is based in India and has a presence across the globe, especially in regulated markets like the USA and Europe.

Established in 1989, the company focuses on a wide range of therapeutic areas, including anti-infectives, cardiovascular drugs, anti-diabetics, dermatology products, and hormone treatments.

Their vision is to be a leading global pharmaceutical company that provides high quality, innovative and affordable therapeutic solutions for those in need.

Macleods were initially using locally made butterfly valve IBCs to collect material from the octagonal blender and take it to the compression feed area, wherein it fed the tablet press on the floor below.

The powders were regularly ratholing in the container, resulting in operators having to hammer or open the butterfly valve IBCs and insert a rod in the bins to stimulate the powders and promote discharge.

This not only decreased the operational efficiency but it led to poor dust containment, cross-contamination and raised concerns regarding operator safety.



The right solution

By working closely with the manufacturer, Matcon has eliminated the powder flow issues when feeding the blended granules into the compression machine. The manufacturer can now deliver its products on time and with effective quality control.

After conducting a comprehensive evaluation of the customer's requirements and objectives, Matcon delivered a Cone Valve IBC integrated solution. The system is designed to promote powder flow, prevent segregation and deliver excellent product quality. Furthermore, the system also offers a dust-free environment, which leads to safer working conditions for operators.

The installation provided to Macleods includes:

- 10 x 1250L IBC Stainless Steel Cone Valve IBCs
- 10 x 2500L IBC Stainless Steel Cone Valve IBCs
- Manual Filling Unit
- 8x Powder Discharge Stations (pillar lift mounted feeding to Tablet Compression)

The entire process is monitored by a team of highly trained operators, who are responsible for ensuring that each batch meets the company's high standards for quality and consistency.

The benefits

IMPROVED PRODUCT YIELD

Since installing the Matcon system, the compression machine efficiency has increased by 15% – as a result of powder flowing consistently from the IBC thanks to the cone valve. This directly leads to an improved product yield and increased profitability.

CONSISTENT TABLET QUALITY

The Cone Valve technology within each of the IBCs enables a reliable feed to tablet compression or roller without the risk of powder segregation. This creates a high quality product every time, even for difficult cohesive powders.

AUTOMATED DISCHARGE & MATERIAL FLOW CONTROL

The Matcon Discharge Stations deliver a consistent feed of powder blend which is of a high quality and blend homogeneity. Flow can be shut off during discharge, meaning that the process is both controlled and automated. This system offers an excellent way to improve efficiency and maintain a high standard of finished product.

IMPROVED OPERATOR SAFETY

Blended powders can be discharged automatically without blockages. The system is designed with safety in mind, eliminating the need for risky manual intervention and preventing any prolonged contact with harsh chemicals.

DUST-FREE CONTAINED PROCESSING

Because the Matcon system is always closed, no dust is released in the production area even while discharging. This not only guarantees that cross-contamination and operator exposure to harmful chemicals isn't an issue, but it also saves time on housekeeping.

FLEXIBLE AND FUTURE-PROOFED

The Matcon system offers a high level of flexibility. If the manufacturing changes in the future, the system can be easily adjusted to suit new requirements and integrate with third-party production technology.

Furthermore, the addition of more IBCs or discharge stations can be easily integrated, meaning that it can grow alongside the company. This level of future-proofing is essential for a rapidly growing company such as Macleods.

THE RESULTS
at a glance

Consistent Tablet Quality

Improved operator safety

Reduced cleaning times

Improved product yield

Dust-free contained processing

Safer workplace

Lean Manufacturing

The results - maximising the production line potential

Thanks to its new Cone Valve IBC System, Macleods are now able to produce more product in less time, and with greater precision than ever before.

Matcon has delivered a bespoke manufacturing solution to Macleods which is designed specifically for their products, processes, and objectives.

The system ensures that each batch of tablets is of the highest quality and consistency thanks to the elimination of powder segregation.

The improved efficiency of the tablet compression machine has led to increased productivity, which resulted in a considerable increase in profitability.

Operator safety has also been improved thanks to the dust-free environment and the elimination of manual intervention.

The contained processing also means that cross-contamination is no longer an issue.

Thanks to its new Matcon system, Macleods is now well-positioned to meet future challenges and continue growing its business.





“Since installing the Matcon system, we’ve seen a 15% increase in compression machine efficiency. The benefits have been clear from the start - our tablet quality is consistently good, our operators are safe, and our product yield has improved.

We’re now able to produce more product in less time and with greater precision than ever before. I’m delighted with the investment we’ve made, and I know that it will continue to deliver a solid ROI in the years to come.”

**Mr. H P Rath, Operations
Vice President**



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WHY CHOOSE MATCON

Macleods chose Matcon because of our reputation for providing high-quality, bespoke powder handling solutions that are designed to meet the specific needs of each customer.

YOUR CHALLENGES

Poor powder flow is a critical issue in the pharmaceutical industry.

Flow challenges on the tablet press can cause an array of tablet quality problems.

As a result of these issues, productivity is decreased and waste increases.

HOW WE CAN HELP

The Matcon Cone Valve is at the heart of the IBC system and is designed to discharge efficiently and overcome traditional powder handling problems.

Thanks to its modular design, the Matcon system offers a high level of flexibility that can be tailored to meet the specific needs of each customer.

