

breath of expertise

REXAM

Breath of expertise

Rexam has a long history with inhalation pharmaceutical specialists.

Our solutions to your needs

Inhaling drugs directly into the lungs is a non-invasive, highly effective and painless way to treat conditions such as asthma and COPD. Drugs with systemic applications can also be delivered to the highly vascularized lungs. Our customers rely on us for speed to market, high volume industrialization and fast track development of devices that meet their needs.

Rexam has a recognized expertise in:

- Dry Powder Inhalers (DPI)
- Pressurized Metered Dose Inhalers (pMDI) and dose counters
- Breath Activated Inhalers (BAI)

Contract manufacturing: high performance industrialization capabilities

Key players in the pharmaceutical industry have trusted Rexam to industrialize pulmonary devices for strategic products.

Rexam brings global injection capabilities, automation/assembly performance, inline quality control, cGMP and FDA compliant process validation.



Fully automated assembly line for a Dry Powder Inhaler

Co-design: specific solutions for customers

We guarantee cost-effectiveness and on-time delivery through our project management for quality and we offer total project visibility.

Rexam's powerful Innovation and Development capabilities and first-class quality system are key assets on the road to success.



Customer specific pMDI with a dose counter for 120 or 60 doses

Innovation at Rexam

Standard proprietary valve platform for pMDI: Inhalia™ technology portfolio.

Rexam has 25 µl, 50 µl and 63 µl valves available with a dose tuning capability up to 140 µl.



Inhalia™ valves for pMDI available in acetal (POM) or PBT with different gasket materials

Precision metering valves



Inhalia™

Rexam offers a platform of proprietary metering valves for inhalation treatments combining different gasket materials and plastic resin choices. The Inhalia™ valves have been developed to operate with HFA gas and optimized for better formulation restitution.

How to choose from our solutions?

Rexam internal laboratory team can conduct spray tests with your formulation to help you choose from our range of valves.

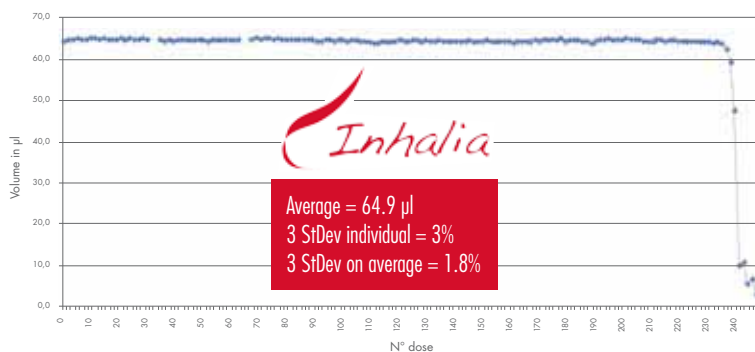


Inhalia™ platform: select your best combination					
Dose range*	Gasket materials	Core component material	Canister ring fitment FEA 20	Ring material	Ferrule material
25 µl	nitrile	acetal	cut edge	polyethylene (PE)	anodised
50 µl	chlorobutyl	PBT	rolled edge	polyamide (PA nylon)	varnished
63 µl	EPDM				

* Dose tuning capability from 25 µl to 140 µl

Inhalia™ valves present excellent shot weight regularity and sharp tail-off up to 15% alcohol formulation. Datapack with different drug formulations, including aging tests, is available upon request. Prime retention guarantees dose consistency and ensures patients' best compliance with treatments. The valve was specifically designed to optimise drug path flow for better formulation restitution. Current design is compatible with existing industrial lines.

Shot weight – 100% HFA Average measures at initial – dose 63 µl Inhalia™ valve acetal (POM) with nitrile gasket



Dedicated applicators

Two standard applicators, 6868 and 6870, are compatible with Inhalia™ valves.

Rexam 6868 standard applicator



Share your specific projects with Rexam

Rexam will help you turn your concept into a fully compliant inhaler.

From concept development to industrialization, Rexam guarantees the validation of your pulmonary device at every step.



Industrialized and manufactured by Rexam, this customer specific DPI is a 200-dose disposable unit with dose counter, built from 14 components

The Innovation and Development team follows a standardized product innovation process to support your own innovative concept development or customize for you Rexam concepts available in-house (dose counters for pMDI, new generation valves, breath-activated pressurized BAI or DPIs, pre-metered type or reservoir type).

- risk analysis and mitigation
- design for manufacturing and verification
- detailed design with professional tools
- design verification/prototyping
- pilot process qualification



Customer specific reservoir type injection molded DPI with 200 doses, built from 8 components

The Industrialization team implements high performance capabilities for injection molding processes, automation/assembly performance and inline quality control.

- efficient injection/assembly manufacturing concepts
- strong performance in sophisticated high speed assembly
- supplier management with mold makers and automation manufacturers
- risk analysis and mitigation
- cGMP and FDA compliant process validation