Optimal's iPass for MDI wins 2022 Pharma Innovation Award

25 January 2023

Optimal Industrial Automation's flagship automated system, iPass™, has received a 2022 Pharma Innovation Award from Pharma Manufacturing. Winning the Quality Control category, the solution boosts the speed and accuracy of leak testing for pressurised metered dose inhalers (pMDIs or MDIs) and was recognised as "a clear step forward in QA (quality assurance)" by the judging panel.

The Pharma Innovation Awards celebrate the advances in pharmaceutical manufacturing that meaningfully contribute to patient wellness. The awards highlight new technologies and services that help bring forward product quality, risk reduction and manufacturing efficiency.

Pharma Manufacturing's editorial team and its advisory board, consisting of leading industry experts, selected Optimal's iPass for MDI Aerosol Microleak Detection System for its ability to address one of the most pressing issues in the efficient production of quality-assured drug delivery systems to treat chronic respiratory diseases. This winning solution is a robotized system that automates the leak detection of pMDIs and supports the inspection of every individual canister. The setup reduces waste and test times while greatly enhancing accuracy and reliability.

The machine works by placing pMDI canisters on an upstream external conveyor, then moving them onto an infeed constant speed carousel conveyor that features

individual spaces for products that can retain any gas leakage. The belt moves the products through a gas-analysing system tunnel that purges the air around the canisters, leaving each puck (product carrier) individually sealed to help identify even minor leaks. Any faulty item is then automatically disposed of, while on-spec products can advance to the next manufacturing and packing steps.

Traditional leak testing involves the time-consuming task of evaluating the overall weight change of a complete batch of canisters that has occurred over nominally 2 weeks. This methodology could mean that a small number of high leaking cans are missed, or result in the rejection of whole batch of cans due to only a modest number of high leaking cans. Even if this technique is required for regulatory reasons, using the 100% leak testing technique in addition to it greatly minimises the chances of either of these events occurring.

Martin Gadsby, VP at Optimal Industrial Automation, comments: “We are thrilled to be named as one of the receivers of the 2022 Pharma Innovation Awards. iPass for MDI has been helping a number of companies to improve their quality control strategies while driving efficiencies. As a result, they have reduced their testing costs, for both labour and waste materials. Companies are also able to deliver key treatments with 100% quality assurance for each individual MDI, satisfying patient needs and diminishing the chances of them finding an empty can due to canister leakage. We are always invested in offering state-of-the-art automated solutions that give a competitive edge, and are continuously adding to our portfolio with the goal of improving access to high-quality treatments and medicaments.”

Image captions:

Image 1: Optimal Industrial Automation's flagship automated system, iPass™, has received a 2022 Pharma Innovation Award from Pharma Manufacturing

Image 2: Optimal's iPass for MDI Aerosol Microleak Detection System is a robotized system that automates the leak detection of pMDIs and supports the inspection of every individual canister.

About Optimal Industrial Automation (OIA)

Optimal Industrial Automation has more than 30 years' experience building, integrating and optimising manufacturing automation systems for challenging and highly regulated industries. Projects are typically for the pharmaceutical, life science, chemical, aerospace, green energy, food & beverage and other high-value process sectors. The company's primary aim is to deliver measurable reductions in production costs, while finding substantial improvements in productivity, product quality and business sustainability. Part of its capability in achieving this aim is experience in the implementation of Optimal's print and inspect system product – synTI®, plus sister company Optimal Industrial Technologies' leading PAT based process management software platform synTQ.

The company employs a large technical team qualified in software, electrical, electronic, vision and control hardware disciplines. The team has built and developed individual machines and process skids to meet regulations such as FDA 21 CFR Part 210/211 – Pharmaceutical Industry GMPs, and FDA 21 CFR Part 11 – Electronic Records and Signatures. It is also ISO accredited and has years of experience working within GAMP guidelines.

Press contact:
Optimal Industrial Automation
Alan Messenger
Tel.: +44 (0) 1454 333 222
amessenger@optimal-ltd.co.uk

PR agency:
DMA Europa
Chiara Civardi
Progress House, Great Western Avenue, Worcester,
WR5 1AQ, UK
Tel.: +44 (0) 1905 917477
chiara.civardi@dmaeuropa.com
www.dmaeuropa.com