FOR IMMEDIATE RELEASE 23/01/2020

**Mitutoyo Microscope Monitors Merxin’s Measurements**

King’s Lynn based Merxin is a supplier of both generic and customised inhaler devices and has manufacturing capacity across the globe. Given the important tasks that Merxin’s products perform, quality permeates all aspects of the company’s activities. To enable its pharmaceutical clients to save both time and money in developing, filing and marketing inhaler devices, Merxin works closely with them to develop and supply high quality device platforms.

Merxin has been assessed and are compliant with the requirements of ISO 13485:2016 for the Design, Development and Supply of inhalers. Therefore, as an essential aspect of both the company’s engineering and regulatory activities, Merxin’s staff perform extensive testing of its devices. Engineering evaluation of designs from concept through to commercial market form is critical to confirm that all products meet design intent and that they meet performance requirements. Assessing this formally under Design Controls provides the evidence for regulators that a design is fit for purpose. In addition, the company’s manufactured products are regularly inspected to certify that premium quality standards are maintained.

To help ensure high levels of precision and the efficient generation and archiving of records when evaluating designs and inspecting manufactured products, Merxin’s Principle Engineer, Adam Stuart recently searched for an advanced measuring microscope.

Before the search took place, given the nature of Merxin’s clients and the critical functions its inhalers perform, a long list of required microscope features was compiled. Although several of the considered options met certain aspects of the company’s requirements, no instruments were found that met all of the company’s demanding criteria. Although, the microscope that came closest to satisfying Merxin’s challenging brief was the MF-U measuring microscope from Mitutoyo. Therefore, as other elements of Mitutoyo’s range are compatible with the company’s microscopes, the staff of Mitutoyo UK where able to create an innovative hybrid system that exactly matched the specific needs of Merxin.

To satisfy Merxin’s wish-list, the MF-U microscope was combined with a Mitutoyo Vision Unit that features a high visibility screen and QSPak Vue vision software. The resulting system delivered the excellent optical quality and functionality of the microscope with the added benefit of powerful vision software that provided enhanced repeatability of measurements and the elimination of operator variability. In addition, a long list of features such automatic edge detection and light tools were also made available. In short, the advanced Mitutoyo hybrid arrangement represented Merxin’s ideal vision measuring system.

To ensure that maximum benefit was gained from its new measuring system, the company inquired about the availability of suitable training courses. Although Mitutoyo offers a wide range of measuring courses, including modules relating to the use of microscopes, the bespoke nature of Merxin’s hybrid system meant that a tailor-made course was soon designed and delivered.

Adam Stuart explained. “Just as Merxin prides itself in our ability to design and deliver bespoke products, we were very impressed with Mitutoyo’s willingness to go the extra mile and to combine various standard elements to create our ideal microscope measuring system. Also, it was really helpful that Mitutoyo devised a bespoke training course related to our new measuring system. The ‘hands-on’ course specifically targeted our practical needs and I was able to take away copies of the files and data that was generated for future reference.

“Now installed and in regular use, our cutting-edge microscope system is fulfilling all of the promises made by Mitutoyo UK’s staff. In addition to delivering outstanding levels of accuracy and repeatability it is proving extremely fast and easy to use. As I attended the Mitutoyo training course, once installed, I was quickly able to understand the system’s controls and software and then to pass-on my knowledge to other colleagues.

“As our new Mitutoyo microscope system was designed to be specific to our needs, it is now proving invaluable in the testing of our devices as part of our regulatory activities and also for inspecting our manufactured products. In addition to being both fast and easy to use, the system is delivering outstanding levels of precision.”

The Mitutoyo’s MF-U high-power measuring microscope, that is at the core of Merxin’s new measuring system, provides excellent precision and detailed observations. The multi-function microscope also delivers clear and flare-less erect image and a wide field of view.

Boasting a measuring accuracy specification that is one of the highest in its class, the MF-U integrates metallurgical and measurement microscope functions and provides the option of halogen bulb or high-intensity LED illumination. A high-magnification eyepiece allow observation up to 2000X, whilst the MF-U’s variable aperture diaphragm allows observation measurement while suppressing light diffraction.

A variety of MF-U stages, of up to 400 × 200 mm, are available. Each has a quick-release mechanism enabling the stage to move quickly when measuring a single larger part or when performing quality checks on numerous smaller workpieces. To help satisfy Merxin’s requirements the MF-U microscope was combined with a Mitutoyo vision measuring unit that delivers the benefit of QSPAK, a unique, Windows® based vision measuring software.

The easy to use software offers a wide variety of measuring capabilities, including comprehensive measurement analysis and on-screen dialog. For maximum efficiency all operations, including drive, zoom control, illumination, data processing and printing can be performed on-screen. Also, a wide choice of macros are available, including circle measurement and one-click edge detection for fast distance and angular calculations.