The INSIGHT PH range of pharmaceutical metal detectors represents a significant advance in metal detection technology.

Metal detection and signal processing take place in the compact INTEGRATED DIGITAL SEARCH HEAD. Sophisticated OPTIX detector management software uses Lock’s unique DDS (Direct Digital Signal) vector diagram to generate the detailed product profile needed to achieve perfect product set-ups. This guarantees detection and rejection of metal fragments at throughputs of up to 30,000 units per minute while achieving stable operation and market leading sensitivities to all metals.

Design and construction of the INSIGHT PH system is compliant with 21 CFR, Parts 210 and 211 and it is certified to Nema 4X/IP66. Lock’s signature gas strut stand is incorporated in a new stainless steel frame, which offers exceptional manoeuvrability from within the most compact footprint in class, making it convenient for use with all leading tablet presses and encapsulation machines.
**Automatic Setup**

Conductive products such as iron tablets require careful set-up if optimum sensitivity is to be achieved in conjunction with high productivity. The INSIGHT PH will automatically set-up and store 200 different presets.

**Integrated Digital Search Head**

- Metal detection, control and signal-processing all take place within the ultra compact detector head, constructed from mirror polished stainless steel and sealed to IP66/NEMA 4X.
- Throughput of up to 30,000 tablets or capsules per minute
- Automatic balance control for adjustment-free operation
- User-replaceable electronic module for minimum downtime

**Reject Systems**

- Mirror-polished stainless steel grade 316 reject that can be dismantled by hand without the use of tools
- Lift-flap, diverter, Wash-in-Place and Dust Tight rejects all fitted with a solenoid that features reject confirmation and integral cushioned end stop to prevent metal to metal contact with surrounding assembly
- Wash-In-Place and Dust Tight rejects feature watertight and dust-tight product chute
- Reject systems offer easily accessible contact points for complete cleaning to avoid cross contamination between products
- Assemblies can be supplied with single or twin universal diameter outlet pipe for systems integration
- Fail safe operating mode ensures that contaminated product is not accepted in the event of electrical or mechanical failure
- Product flow can be observed through the semi dust tight PETG cover (standard lift-flap reject)

**Mounting**

The new stainless steel frame is fully GMP compliant, offering exceptional maneuverability from the most compact footprint in its class. Lock’s signature gas strut stand provides height and angle adjustment with angle markings on the support cradle making it convenient for use with all leading tablet presses and encapsulation machines.

**OPTIX Detector Management Software**

- OPTIX is a powerful diagnostic and problem solving tool for Engineers and Operators - OPTIX data can be emailed or faxed to facilitate immediate technical support from Lock where necessary
- User friendly membrane or optional touchscreen HMI both feature unlimited language options and DDS (Direct Digital Signal) vector diagram display - a view into the metal detector
- Multiple set-up memory with the capacity for 200 presets
- Permanent memory stores up to 8000 data events, which are retained when power is interrupted or disconnected
- Automatic TEST SAMPLE prompt

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**Security codes**

Four password protected security levels are provided:

L1: Operator level to change product types.
L2: Supervisor level to change set-up mode.
L3: Engineering level to access factory set-up parameters.
L4: Administration level to enable multi-user ID/Password system

**Communications**

Every INSIGHT PH metal detector is available with wired or wireless ethernet connectivity and SCADA capability. The external USB port allows all events and product presets to be downloaded onto a standard memory stick or PC to enable secure storage and distribution of quality records in PDF or other formats.

**Validation**

The INSIGHT PH design and applicable components are compliant with current GMP requirements. Full validation documentation can be supplied with each system incorporating IQ, OQ, PQ, calibration and certification.

**Outputs**

- Voltage-free relay contacts. Rating 240V, 3A resistive

**Power Supply**

- Universal power supply 88-264V AC 47-63 Hz

**Operating Temperature/humidity**

- Temperature: -10° to 60°C/14° to 140°F
- Humidity: 0 - 95% Relative humidity (non-condensing)