Affordable Compliance
Entry-level Metal Detection

M31R StandardLine – Versatile, Reliable Inspection

The entry level M31R StandardLine metal detector delivers versatile, reliable inspection to help you meet global food safety standards. With advanced-level innovations in an entry-level package and the opportunity to upgrade it in the future, it is the perfect choice for your cost-sensitive applications.

You get smart, digital technology packed into a rugged, industrial design at an attractive price. This next generation model gives you market-leading innovation, and can deliver affordable compliance combined with future-proof flexibility.

With three detection frequencies as standard, the M31R delivers high sensitivity to all metal contaminant types in a wide range of dry and wet product applications.
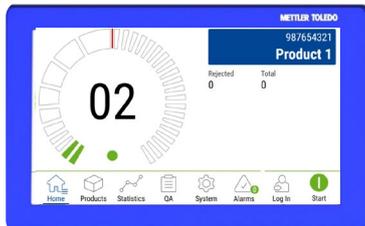
This model can be integrated with an extensive range of conveyors including our latest GC Series systems. This combination can give you an upgradable solution at an affordable price, and help to protect your brand, processes and profits.

METTLER TOLEDO

High Performance
Versatile, Reliable Inspection

- **Smart, digital technology for enhanced process control**
- **Easy to use, set up and maintain**
- **High sensitivity to all metal types in wet and dry applications, powered by patented eDrive™ technology to detect smaller metal contaminants**
- **Affordable compliance**

M31R is the right choice for inspecting a wide range of products when your priority is achieving affordable compliance. Integrate it with a wide range of conveyor systems for a fully-integrated solution that can reliably inspect and effectively detect and reject metal-contaminated products, enabling them to be removed from the production line.
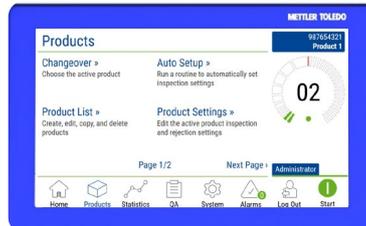
Smart, Digital Technology	**Easy Setup and Operation**	**Built to Last**

Powerful digital technology powered by innovative SENSE™ software, combined with advanced algorithms delivers better quality control:

- High detection capability for all metal types
- Excellent on-line stability
- Enhanced reject confirmation assurance

The M31R is designed for simple operation to deliver consistent, high-performance results for the life of the system.

- Icon-driven menus in local language simplify operation and greatly reduce error risk
- The full-color touchscreen makes it easy to review essential data quickly

Dynamic Stability Control (DSC) creates a stable, reliable, platform capable of delivering long-term performance when supported with appropriate maintenance:

- Advanced detection coil stabilisation technique
- Enhanced Automatic Balance Control (ABC)
- Noise filtering
- Vibration immunity

Powered By
SENSE™
Software

System Integration

Global Service and Support

METTLER TOLEDO Service with global reach and tailored care solutions.

Software-Centric Control
For Enhanced Performance

As the design authority for both the metal detector and the product handling solution, we can maximize the potential for trouble-free, long-term system performance. With our next generation systems, the metal detector is in control of the integrated system, to support greater process control.
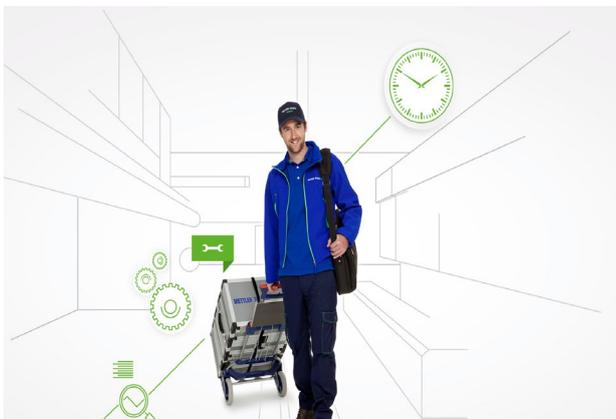
The M31R is compatible with an extensive range of conveyor systems to provide a fully-integrated metal detection solution.

- Choose from basic stop alarm systems or a range of fully automated reject devices
- Customize your system with a suite of failsafe devices, warnings and alarms
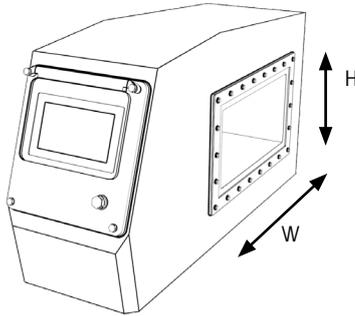- Zero Metal Free Zone (ZMFZ) option available for restricted space applications

A global service network delivers local support, covering professional installation and service plans through to spare parts delivery. This helps the M31R to deliver maximum performance and results throughout the system's lifecycle.

Various flexible solutions
- Care Contracts
- IPac and Performance Verification
- Preventive Maintenance
- Certified Test Samples
- Recommended Spare Parts
- Modular Operator, Quality Assurance and Maintenance Training

M31R StandardLine
Versatile, Reliable Inspection

M31R StandardLine metal detector head

Fully Integrated Conveyorized System Options

For information about conveyor system compatibility and system-specific technical specifications please refer to the applicable **conveyor systems brochures**. These are available on the documentation tab of our website.

▸ www.mt.com/md-M31R

	Technical Details	M31R StandardLine
Sensitivity Features	Operating frequency	High, tuned, single frequency operation with 3 user-selectable frequencies
	Standard aperture widths (W)	100 mm - 1900 mm*
	Standard aperture heights (H)	75 mm - 1000 mm*
	Mounting methods	Base, oversquare
Productivity Features	Human-machine interface (HMI)	7" WVGA touchscreen
	Languages (menus, prompts)	33
	Product memories	100
	Setup	Simple set-up with manual product clustering
Environment Features	Zero Metal Free Zone	Option (to reduce overall system length)
	Ingress protection rating	Light duty IP65; Medium duty IP66; Heavy duty IP69k
	Surface material and finish	Stainless steel SS304, SS316; bead-blast or brushed
	Operating temperature	-10 to 45 °C
	Electrical (metal detection head)	100 to 240 VAC (+10% / -15%), 50 to 60 Hz, max 220 W
Compliance Features	Routine Alarm with "Due" notification	Performance Monitoring Alarm
	Performance Indicator	Color-coded bar graph and digital display; pack count; reject count
	USB Port	Yes - facilitates system upgrades and software updates
	Due Diligence Capability	Base Pack**
	Inputs and outputs	10 programmable inputs; 6 programmable outputs
	Performance Verification	Option - annual PV Service
Service Features	Spare Parts	Modular spare parts and kits available
	Start-up Support	IPac option
	In-life support	Preventative Maintenance, Care Contracts Operator / Quality / Maintenance Training

*Please contact your local METTLER TOLEDO Product Inspection sales representative for full specification details.

**Base Pack capability includes: infeed pack sensor monitoring, air failure warning, bin full warning, rejected product confirmation / reject operation failure, head fault warning, belt stops on all warnings/faults (hardware required - refer to conveyor system brochure for full details)

www.mt.com/metaldetection

For more information