LM3 Technologies

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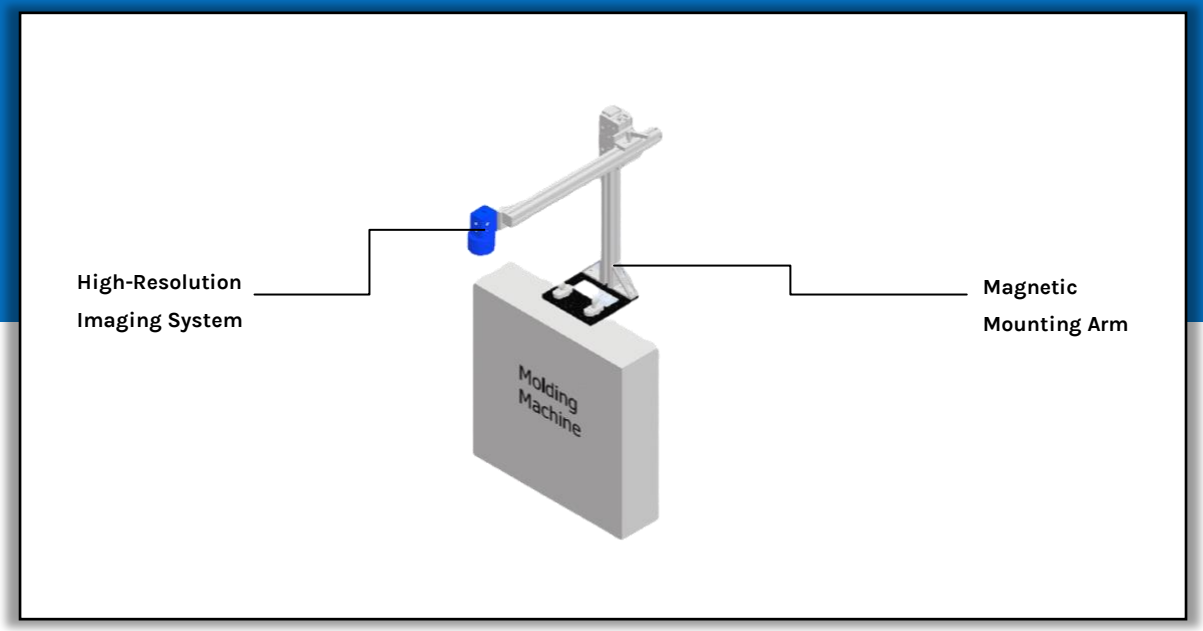

TECHNICAL DATA SHEET

MoldView

MoldView from LM3 Technologies is a rapid-deployment vision system designed specifically for injection molding, blow molding, insert molding, and thermoforming applications. It delivers real-time defect detection and ejection verification directly at the press, minimizing downtime and maximizing part quality.

Using high-resolution standard, spectral, or thermal imaging cameras, MoldView identifies defects such as voids, burns, and dimensional errors immediately after part formation. Its modular arm-mounted design ensures flexible installation across various molding machine types within minutes.

PRODUCT INFO

PRODUCT NAME:
MoldView

CATEGORY:
Molding Machine Vision Inspection System

Budget Range:
$20,000 - $40,000
Dependent on scope and hardware configuration

SYSTEM SUPPORT
Remote software support, on-site validation, hardware warranty options, and optional ongoing service contracts

SYSTEM APPLICATIONS

MoldView is engineered for real-time inspection and cycle confirmation in molding operations where scrap reduction, quality assurance, and machine uptime are critical. It enables immediate detection of defects and ensures that parts are successfully ejected before mold closure.

Common applications include void detection in molded parts, burn mark identification, warping analysis, short shot detection, and live ejection verification to prevent costly tool crashes or missed parts.

SYSTEM CAPABILITIES

- **Cycle Time**: Sub-second inspection synchronized to molding machine cycle
- **Flexible Integration**: Magnetic mounting arm adapts to most molding machine layouts
- **Part Types**: Injection molded parts, thermoformed panels, blow molded containers, insert molded assemblies
- **Traceability**: Logs part cycle data, defect detections, and ejection confirmation results

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INSPECTION METRICS

Metric	Range	Notes
Camera Resolution	5 MP – 42 MP	Higher resolution for detailed feature inspection
Inspection Cycle Time	< 1 second	Synced with mold open cycle
Detection Accuracy	≥ 95% F1 Score	Based on trained AI and rule-based algorithms
Lighting Requirements	Integrated / Mold Mounted	Optimized for glossy, matte, or textured surfaces
Part Handling	In-mold / Robot	Captures image at point of ejection or mold open
Trigger Method	Molding Machine Signal / PLC	Tied to mold open/close cycle
Output Format	Pass/Fail + Defect Class	Optional image capture per shot for defect traceability
Data Logging	Enabled	Cycle data and defect records for reporting and analysis

SYSTEM KEY FEATURES

Multi-Mode Imaging Capabilities

Utilizes standard, spectral, and thermal cameras depending on defect type and material characteristics.

Magnetic Quick-Mount Arm

Flexible mounting arm with magnetic base enables rapid, tool-free deployment and repositioning.

Advanced AI-Driven Defect Detection

Trained models rapidly identify voids, burns, deformation, short shots, and surface flaws with minimal latency.

Real-Time Ejection Verification and Traceability

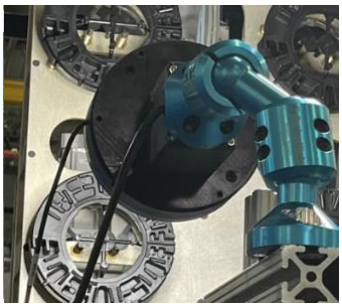
Automatically confirms part ejection each cycle while logging defect data for QA records and process improvement.

Setup

1. Hardware Mounting
2. Camera Alignment
3. Lighting Adjustment
4. Software Configuration
5. Trigger Setup
6. Defect Model Training
7. Data Logging Activation
8. Production Start

Integration Points

Integration Point	Connection Type	Function
Vision Trigger	PLC / Dry Contact	Image Capture
Ejection Verification	Digital Input	Ejection Confirm
Result Output	Digital Output / PLC	Pass/Fail Signal
Operator Interface	Touchscreen / HDMI	Status Display
MES Output	REST API / SQL	Cycle Data Logging
Lighting Control	Digital Output / PWM	Illumination Control
Recipe Selection	Barcode / Operator UI	Model Switching
Maintenance Access	USB / Ethernet	System Configuration



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