

ITG 500 – Gel Analyser

GEL INSPECTION FOR RETROFITTING TO TEST AND LABORATORY EXTRUDERS



ONLINE GEL INSPECTION ON YOUR TEST OR LABORATORY EXTRUDER

The ITG 500 – Gel Analyser detects, classifies and records gels and optical defects in films – bright field for opaque and transparent films, dark field for highly transparent films. Camera, LED lighting, industrial PC and a compact control cabinet are attached to an existing test or laboratory extruder: the same technology as in the PQMex®, simply retrofitted.

Key Features

- **Retrofit instead of a new system:** Four components – line scan camera, LED lighting, industrial PC and control cabinet – are attached to an existing test or laboratory extruder or blown film test line.
- **Bright and dark field:** Transmitted light, reflected light, dark-field aperture and combined lighting – matched to transparent and opaque films.
- **Comprehensive defect detection:** Gel specks, gels, burn marks, fish-eyes, contamination, wrinkles, holes and flies are detected automatically and documented with a defect image.
- **Online evaluation:** CAMEN evaluates the defects in the running process and writes the roll reports; classifiers, warning and alarm limits as on all R.A.M. systems.
- **Data management:** Local storage in an internal SQL database; roll reports as CSV or via TCP/IP, in-depth evaluation via the vSTAT module.

TECHNICAL SPECIFICATIONS

Category	Property	Specifications
General	Machine dimensions (L × W × H)	order-specific
	Weight	order-specific
	Components	Line scan camera · LED lighting · industrial PC · control cabinet
	Installation	By the customer ("Inspection to go")
Process	Max. web width	order-specific
	Max. web speed	depends on the line rate of the camera
Software	CAMEN	Version 12
	vSTAT	Version 1 (internal SQL database)
Camera	Interface	GigE Vision
	Resolution	4K; alternatively 2K, 6K, 8K or 12K
LED	LED length	Customer-specific, matched to the film width
	Illuminance	up to 500 000 lx
IPC	Main memory (RAM)	16 GB
	SSD	1 TB
Environment & installation site	Operating temperature	0–45 °C
	Humidity	5–95 % (non-condensing)
	Site requirements	Flat, load-bearing, clean and dry; indoor installation only.
Electrical supply	Voltage & frequency	230 V · 50 Hz · 1~
	Power consumption	order-specific
	Connection type	IDC
Communication	Network	RJ45 Ethernet connection (industrial network, segregated segment recommended)
	Data storage	Stored locally in an internal SQL database; reports via the vSTAT module
	Operation	Touchscreen with on-screen keyboard; mouse and keyboard can be connected

Conformity and documentation

The system is Class A equipment in accordance with EN 55011 and EN IEC 61000-6-4. It is intended for industrial electromagnetic environments and is not intended for use in residential environments.

The system bears the CE marking and conforms to Directive 2014/30/EU (electromagnetic compatibility), Directive 2014/35/EU (low voltage), Directive 2011/65/EU (RoHS) and Directive 2012/19/EU (WEEE).

Supplied documentation: operating instructions MAN-ITG500GEL-EN-001, CAMEN user manual MAN-CAMEN-EN-001 and vSTAT user manual MAN-VSTAT-EN-001.

All data refer to the standard configuration. Values are nominal unless a tolerance is stated. Subject to technical change without notice; this datasheet is not a guarantee of properties.

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