SOBRIETY

Developed in the Czech Republic

(m)EVIX

PRECISION IN ONE PACKAGE

VIDEOEXTENSOMETER

Powered by

MERCURY RT DIC software

- ▶ Neatly designed for industrial usage
- ▶ Can be mounted on a testing machine frame or on its own stand
- ▶ Accuracy up to 0.5 microns.
- ▶ EN ISO 9513 and ASTM E83-10a standards
- ▶ Measurement of cylindrical samples and sheets according to EN ISO 8592 standard, method A and B
- ▶ Measuring wires in concrete, steel ropes, rubber, polymers and more

PRODUCTSHEET

MEVIX is a device used for a broad range of measurements in industrial, research and development applications.

MEVIX – Camera Module

A digital camera with a lens are placed inside the camera module protected from mechanical damage, dust environment and unauthorized manipulation. Field of view with desired working distance are adjusted according to your needs prior to delivery. No need for additional set up of the lens.

▶ Camera resolution: 2590 x 2048
▶ Camera interface: USB 3.0
▶ Camera frame rate: 50 Hz (in full resolution)
▶ Quality prime lens
▶ Back panel connectors enable Master/Slave or External trigger synchronization

MEVIX – Light Box

▶ LED light source
▶ High brightnes LED power source
▶ Antiglare blinder
▶ Diffusor

MEVIX – Power Box

MEVIX Power Box is a power switch for the connected lights, which can be switched on only for the very necessary moments such as measuring and pre-setup.

▶ Light power source
▶ 4 light power outputs
▶ USB relay for intelligent lightning

MEVIX complies with EN ISO 9513 and ASTM E83-10a standards. The chosen configuration of the system can be certified by calibration laboratory on demand.

MEVIX System Includes

▶ Camera Box
▶ Power Box
▶ Light Box
▶ Grid
▶ Cable
▶ Hardware licence dongle with software MERCURY RT

Options

▶ PC
▶ A/D / D/A Convertor
▶ Stand or holder

MEVIX – Applications

▶ Rebar specimens
▶ Metal sheets
▶ Rubber
▶ Plastics
▶ Concrete
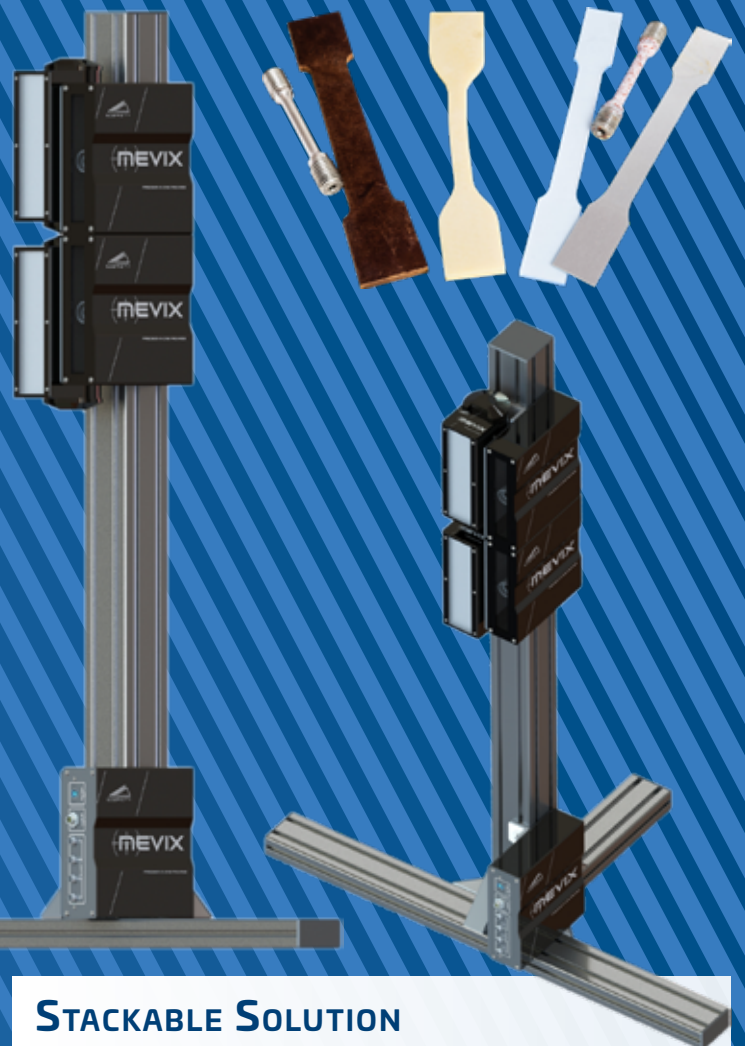▶ Heat and pressure chamber testing

MEVIX – Software

MEVIX system is powered by DIC software MERCURY RT. Features were carefully chosen to meet the highest standard of material testing as well as users' ergonomics and comfort.

▶ Remote control from the software of testing machine possible
▶ Stitched mode (extension of field of view by using multiple cameras)
▶ Longitudinal markers detection
▶ Width detection and measurements
▶ Unlimited virtual measurement tools (points, lines...)
▶ Intelligent tools for finding the necking or the shortest/longest length in transverse or longitudinal
▶ Coordinate system created from grid automatically
▶ Correction of camera lens distortions
▶ Extensometer calibration according to glass ruler
▶ Recorded data browsing (various systems in parallel - MEVIX 100, 200)
▶ External synchronization and snap mode
▶ ROI/AOI (High FPS at smaller width)
▶ Focus and targeting tool for easy start
▶ LiteView graphical user interface for operators
▶ Image viewing functions (invert, zoom, over/under exposed indication, flip, rotate)

Advanced functionality like Engineering stress – Engineering strain evaluation and True stress – True strain evaluation

Stackable Solution

The MEVIX camera modules can be stacked up to **extend the Field of View** without losing the **desired resolution**. This option brings ability to measure long or high elastic samples with high accuracy.

Field of View [mm]	Class 0.5	Ord. nr.	Class 1	Ord. nr.
100	MEVIX 100-0.5	112	-	-
200	MEVIX 200-0.5*	113	MEVIX 200	109
400	-	-	MEVIX 400*	110
600	-	-	MEVIX 600**	111

* - 2 camera modules; ** - 3 camera modules

MEVIX 100-0.5

FOV - 100x80mm/ISO 9513 CLASS-0,5/ASTM E83-10a CLASS B-1
for L0 > 8mm/Working distance: 200, 280, 400 or 600mm/External trigger, 60-600Hz

MEVIX 200

FOV - 200x155mm/ISO 9513 CLASS - 1/ASTM E83-10a CLASS B-1
for L0 > 15mm/Working distance: 260, 400, 560 or 800mm/External trigger, 60-600Hz

MEVIX 3D - New

Possibility to use two camera boxes as 3D DIC system.
- ▶ Out-of-plane measurement
- ▶ More accurate for samples with big contraction in out-of-plane direction
- ▶ No need for coordinate system calibration
- ▶ Measurement of samples with various thickness without changing settings

Input/Output Hardware

- ▶ INPUT – Analog ±10V*, strain amplifier gauge (bridge, ½ bridge, ¼ bridge) or digital input using COM port or TCP/IP
- ▶ OUTPUT – Analog ±10V* or strain gauge (emulation channel), DOLI binary protocol, HP video protocol, self-defined format
- ▶ REMOTE CONTROL API – MERCURY RT can be remotely controlled by a set of commands for synchronous measurement start, stop and more

* AD/DA convertor is not included in the package

Headquarters

Sobriety s.r.o.
Blanenská 1288/27,
664 34 Kuřim, Czech Republic

Sales:

Tel.:   +420 541 231 698
E-mail: sales@sobriety.cz

Development Center

Sobriety s.r.o.
Náměstí 1.května 63/20
664 34 Kuřim, Czech Republic

Support:

Tel.:   +420 734 393 553
E-mail: tecs@sobriety.cz

LIMIT   MERCURY RT REAL-TIME TRACKING SYSTEM   MEVIX   MONET