

VIC-EDU DIC for the Classroom

The VIC Educational System (VIC-EDU) is a low-cost solution developed for academic institutions to assist in teaching the digital image correlation technique to undergraduate and graduate students. The VIC-EDU system utilizes the same accurate DIC algorithms found in the powerful VIC-3D software, while allowing users to acquire data quickly and easily.

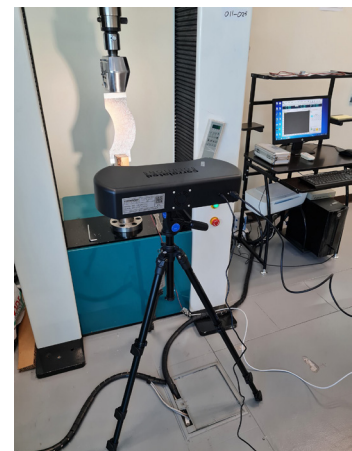
The system features a simplified setup, streamlined image acquisition, and ideal post-processing features. The stereo cameras are mounted inside a protective enclosure, which includes an integrated LED light source, a cooling fan, and an exterior USB & power connectors. The system also includes a tripod, tripod head, speckle roller, ink pad, calibration target, and a convenient carrying case.



	VIC-EDU
Camera Resolution	1920 x 1200 (2.3 MP)
Frame Rate	20 Hz live 0.5 Hz capture 100 frames max
Exposure Time	19 μ s - 1 s
Field of View	Fixed: 150 x 200 mm
Displacement Resolution	In-plane: $\pm$ 2 μ m, Out-of-plane: $\pm$ 4 μ m
Strain Resolution	50 μ ϵ
Strain Range	0.005% to > 2000%
Analysis Licenses	Unlimited
Software Features	3D displacements, strains, graphic tools, and more

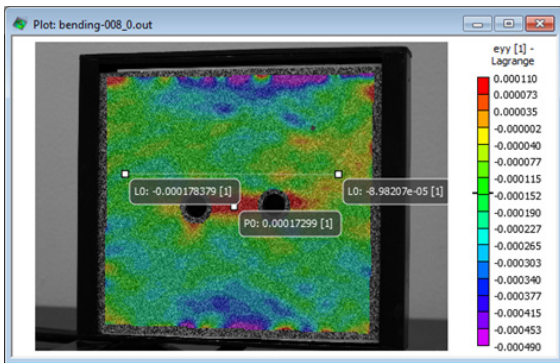


Institutions using VIC-3D



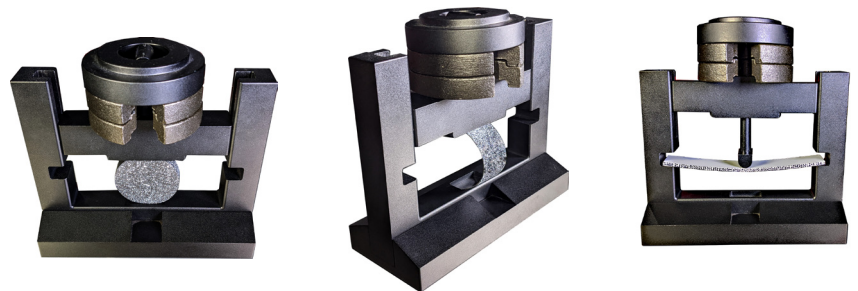
Teaching digital image correlation?

The VIC-EDU educational system from Correlated Solutions has everything you need.



This product is the perfect addition to engineering courses such as solid mechanics, measurements, structures, automotive design, aerospace, safety, FEA validation, and many others. Furthermore, the VIC-EDU software has the ability to process images acquired from any VIC-EDU system, which allows users to share images not only across campus, but also with colleagues at other universities. The system simply requires a computer with one available USB3 port and one available power source. Whether you are teaching students new measurement techniques or validating FEA models, this system will surely enhance the quality of your department's curriculum.

The VIC-EDU system comes with a set of four laboratory manuals that are designed specifically to teach the fundamentals of digital image correlation. A simple test frame is also included with every system. Contact our Sales Team for more information about how to use this turnkey system in your curriculum.



Laboratory 1

Basics: Using VIC-EDU System for Non-contacting Surface Measurements

TABLE OF CONTENTS

I. OVERVIEW	1
II. UNBOXING THE VIC-EDU SYSTEM	1
III. SETTING UP THE VIC-EDU MEASUREMENT SYSTEM HARDWARE	2
IV. INITIATING THE SOFTWARE FOR IMAGE ACQUISITION	3
V. VIC-EDU SYSTEM CALIBRATION	4
VI. EXPERIMENTAL PREPARATIONS	5
VII. PERFORMING EXPERIMENT WITH IMAGE ACQUISITION	5
VIII. IMAGE ANALYSIS FOR DEFORMATION MEASUREMENTS	5
IX. LABORATORY RESULTS TO BE PRESENTED	6
X. REFERENCES	10



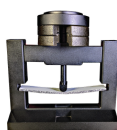
correlated

Laboratory 2

In-Plane Beam Bending with the VIC-EDU Measurement System

TABLE OF CONTENTS

I. OVERVIEW	1
II. BEAM THEORY	1
III. EXPERIMENTAL PREPARATIONS	3
IV. PERFORMING EXPERIMENT WITH IMAGE ACQUISITION	5
V. POTENTIAL SOURCES OF DIFFERENCES BETWEEN PREDICTIONS & MEASUREMENTS	6
VI. LABORATORY RESULTS TO BE PRESENTED	6
VII. REFERENCES	9



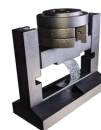
correlated

Laboratory 3

Out-of-Plane Beam-Column Bending with Stereo DIC Measurements using VIC-EDU

TABLE OF CONTENTS

I. OVERVIEW	1
II. BEAM-COLUMN THEORY	1
III. EXPERIMENTAL PREPARATIONS	4
IV. PERFORMING EXPERIMENT WITH IMAGE ACQUISITION	5
V. POTENTIAL SOURCES OF DIFFERENCES BETWEEN PREDICTIONS & MEASUREMENTS	6
VI. LABORATORY RESULTS TO BE PRESENTED	7
VII. REFERENCES	10



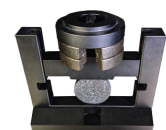
correlated

Laboratory 4

Disk in Diametral Compression Using StereoDIC Imaging Systems and VIC-EDU

TABLE OF CONTENTS

I. OVERVIEW	1
II. DISK IN DIAMETRAL COMPRESSION THEORY	1
III. EXPERIMENTAL PREPARATIONS	3
IV. PERFORMING EXPERIMENT WITH IMAGE ACQUISITION	5
V. IMPLICATIONS OF THEORY FOR DISK FRONT SURFACE MEASUREMENTS	5
VI. LABORATORY RESULTS TO BE PRESENTED	6
VII. APPENDIX	8
VIII. REFERENCES	11



correlated