

EXPLORING THE POWER OF IMAGING STRAIN ANALYSIS MADE SIMPLE AND AFFORDABLE

RAPIDCORRELATOR™

RapidCorrelator offers full-field multi-scale Image Correlation analysis for materials, structure strain and deformation measurement. RapidCorrelator analyzes, interprets and depicts relationships and effects between reference and deformed object images put under mechanical pressures. Image Correlation is a method based on surface analysis that monitors and identifies changes in a pattern applied to the surface of the objects under observation. Digital images can be sourced from cameras, SEM, and/or AFM (macro to nano-scale).

The hallmark of our Image Correlation technology is a simple and affordable tool with unlimited image sampling, augmented with rich-media object annotation (text, audio, video, graphics, draw tools) to explain/document various artifacts in the analysis. This provides the user with enhanced and enriched capability, quality and versatility for publishing analytical findings. Application domains of RapidCorrelator include but are not limited to:

- Aerospace
- Automobile
- Civil and mechanical infrastructure
- Biomedical, etc.

Simple steps for using RapidCorrelator include:

- Determine sample test
- Set up cameras and configure tool
- Run deformation test
- Collect sample images
- Run analysis
- Annotate, document experience
- Communicate results

Company Profile

XStream Engineering conducts research and development, technology transfer, pre-commercialization and commercialization of advanced engineering solutions.

XStream Engineering is supported by world class scientists and experts in the development and application of Image Correlation and other imaging/engineering technologies for organizations such as NASA, US Air Force and many other industries.

XStream Engineering is a subsidiary of XStream Software Inc., which specializes in research, development, and commercialization of e-learning and assessment, learning management, streaming media and collaboration technology products and services to global and Fortune 2000 companies around the world.

Technical Specifications

Minimum System Configuration

- Microsoft Windows 98, 2000, ME, XP or NT 4.0
- Intel Pentium 3 (or higher) processor
- 64 MB of RAM; 128 MB is recommended
- Hard disk with 100-150 MB of free space
- Internet Explorer 4.0 or higher
- Windows Media Player 6.0 or higher

The performance of the software (accuracy, precision, resolution) with respect to displacement, strain measurement, size of image samples, etc. is a function of the user's software and hardware configuration.

XStream Engineering RapidCorrelator is a truly affordable platform that has been initially released to support 2D correlated analysis. However, over time we will be developing a 3D version. XStream Engineering is backed by world recognized experts, practitioners and researchers in the innovation and multi-modal application of image correlation as well as other technologies in various engineering domains.