



SYNKABLE VIDEO EXTENSOMETER SYNKABLE-X



SYNKABLE video extensometer adopts Digital Image Correlation (DIC) technologies, it is a contactless method to measure elongation/Extension/deformation/deflection (strain). Video extensometer can track down the test from the beginning, this makes the calculation of elongation at break from software becomes available.



FEATURES

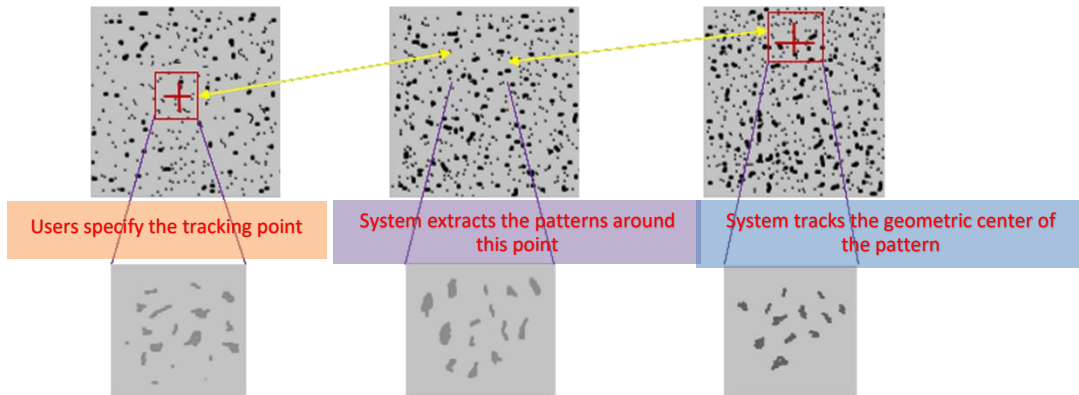
- Visible is Measurable as long as the test specimen is visible throughout the test, the video extensometer could be utilized in such applications.
- The test data to be saved in pictures which can be re-analyzed after test, such as changing the extensometer gauge length, changing the location of extensometer without doing multiple tests.
- It is capable of measuring both Axial & Lateral strains at the same time without adding a lot of sensors like conventional contact-type extensometers.
- The operation without complicated attachment and removing actions like conventional contact-type extensometers, it has none easy-wear parts. It can deliver last and longest service life, better way to ensure operation safety for users especially for destructive tests and tests under extreme temperatures or environments which are hazardous to health.
- Due to no attachment during the test, slippage issues that can happen in contact-type extensometer will not occur. Besides the test requires no additional operations from users, it has eliminated the errors caused by wrong operation of extensometer, such as loosen extensometer gauge arms for wrong extensometer gauge length, extensometer is not properly aligned with axial/lateral axis of sample.
- Because the video extensometer can track down the test from the beginning, this makes the calculation of elongation at break from software becomes available.
- Equipped with Analog output function which enables real-time measuring results to be exported to 3rd party devices.
- Digital output function is available, communication methods could either be serial port or TCP/IP
- Analog & Digital input functions are available, it means the signals from 3rd party devices could be imported to our system for jointed analysis.



TECHNICAL PARAMETER

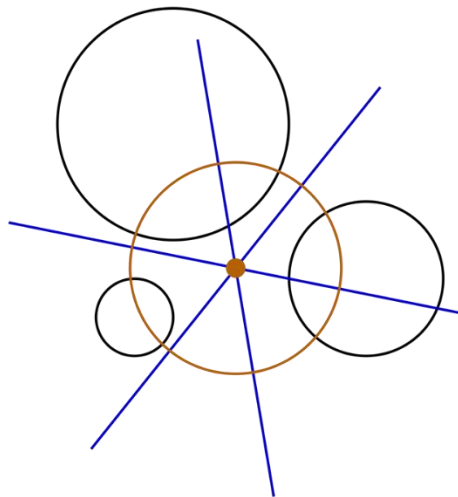
Model	SYNKABLE-X*, X is FOV
FOV	100mm-1000mm upon request
Accuracy	FOV* \leq 650mm, Class 0.5 (0.5%) ISO 9513
Resolution	FOV* \leq 650mm, better than 0.5 μ m
FPS	22Hz -300Hz upon request
Working Distance	\geq 350mm (Customizable)
Tools Included	#1:Tracking single point (Bending deflection/Displacement/Stroke) #2:Tracking two points (Conventional Extensometer) #3:Tracking entire free length / parallel length (Ensure breaking within Le) Others upon request
Light	Dual Shortwave Lights
Communication	USB 3.0

HOW DOES IT WORK?



What is the pattern ?

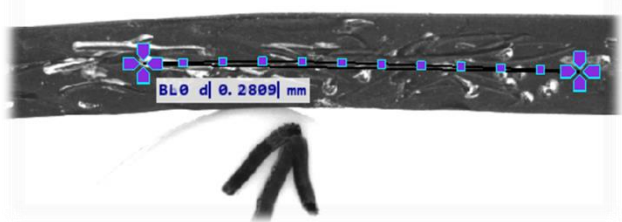
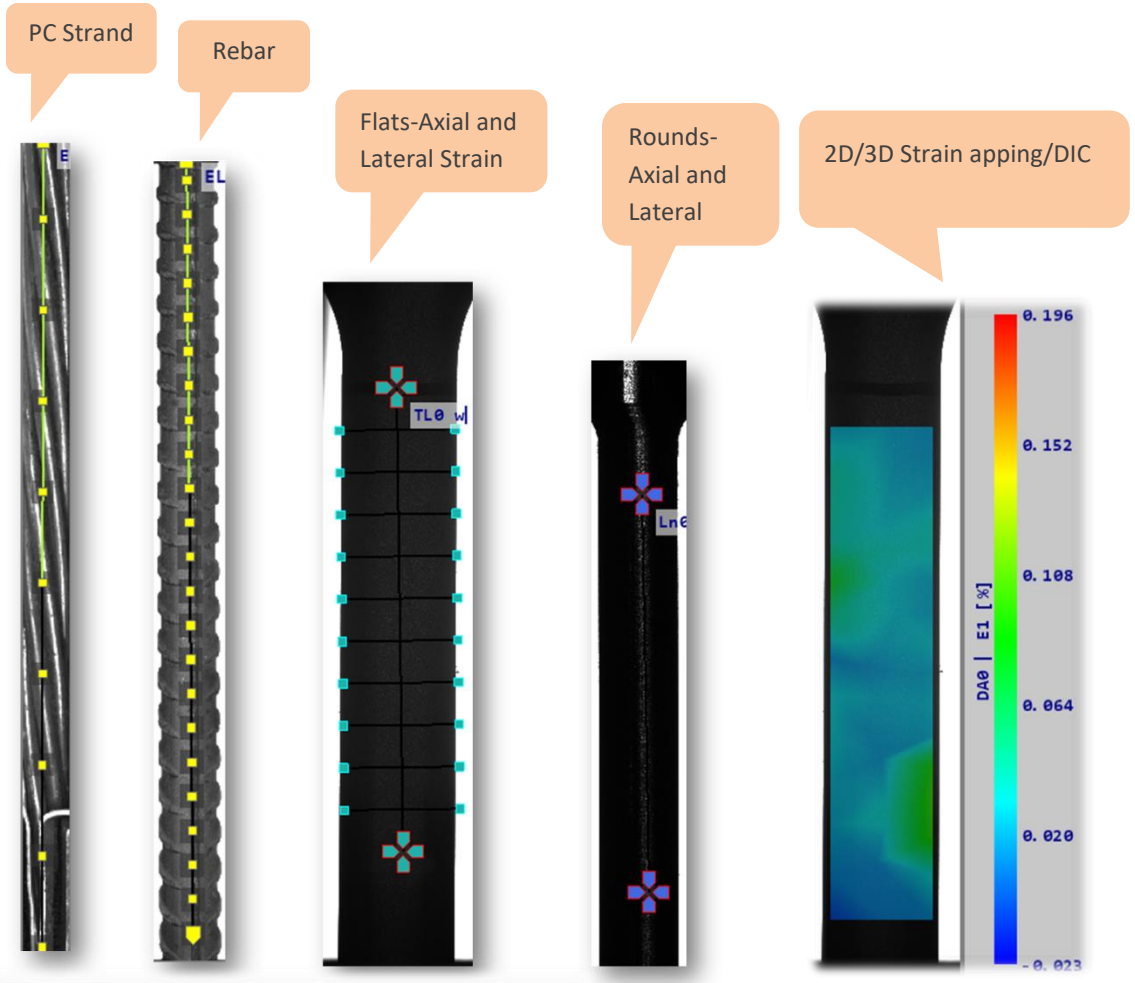
Pattern is a group of points who are much differ from the surroundings in gray level, just like how we identify constellation by the combination and distribution of stars



How Does it Track?

System sets the initial pattern as reference and finds out the geometry center of this pattern, then continually comparing the difference with reference and tracing the center, if one part of the pattern is missing or the pattern deformation exceeds the confidence percentage, the system will update the reference to latest.

PS: The applications on this page are for demonstrating purpose, it does not mean standard supply with all these functions, consult with supplier for specific details



Bending Deflection
Bending Tensile Strain



Crack Length