

a set of parameters as input. In some embodiments, the set of parameters may be graphically displayed to a user after the parameters have been received as input. In some embodiments, the set of parameters may be analyzed and new data generated. In some embodiments, the newly generated data may be graphically displayed to a user after the parameters have been received as input.

[0004a] An aspect of the present disclosure provides a fully automated suturing system comprising an automated suture fixture comprising a plurality of motorized actuator devices and a suture target holder, the automated suture fixture being configured to maneuver a target suture device secured by the suture target holder and a suturing arm comprising a plurality of motorized actuator devices and a needle holder, the suturing arm configured to maneuver a needle to pass the needle through a material of the target suture device.

[0004b] Another aspect of the present disclosure provides a suturing system comprising an automated suture fixture comprising a plurality of motorized actuator devices and a suture target holder, the automated suture fixture being configured to position a target suture device secured by the suture target holder, a suturing arm comprising a plurality of motorized actuator devices and a needle holder, the suturing arm configured to maneuver a needle to pass the needle through a material of the target suture device, a data store storing suturing procedure script data, the suturing procedure script data including a data set representing a plurality of positions of the automated suture fixture assembly and the suturing arm for a suturing procedure and a controller configured to access the suturing procedure script data and to provide position control signals to the automated suture fixture and to the suturing arm based at least in part on the suturing procedure script data to perform the suturing procedure.

[0004c] Another aspect of the present disclosure provides a fully automated system comprising a first automated fixture comprising a plurality of motorized actuator devices and a target holder, the automated fixture being configured to maneuver a target device secured by the target holder and a second automated fixture comprising a plurality of motorized actuator devices and a processing-device holder, the second automated fixture configured to maneuver a processing device to perform an operation on the target device.

[0005] In some implementations, the present disclosure relates to a method of manufacturing a target device or component (e.g., to a method of manufacturing, or suturing, a prosthetic implant device, prosthetic human implant device, prosthetic heart valve, prosthetic human heart valve, etc.). The method can comprise disposing the target device (e.g., prosthetic human implant device, etc.) on a holder component of an automated fixture (e.g., an automated suture fixture). The method can also comprise directing or providing input to cause the automated fixture (e.g., automated suture fixture) to position the target device (e.g., prosthetic human implant device, etc.) in a first position, executing a first operation/procedure (e.g., a stitch, inspection, other operation/procedure) on the target device (e.g., prosthetic human implant device, etc.) using a first hand of the operator, directing or providing input to cause the automated fixture (e.g., automated suture fixture) to position the target device (e.g., prosthetic human implant device, etc.) in a second position, and executing a second operation/procedure (e.g., stitch, inspection, etc.) on the target device (e.g., prosthetic human implant device, etc.) using the first hand of the operator. The target device can be a prosthetic human implant device. The prosthetic human implant device can be a heart valve or other type of implant device.

[0006] The step of directing or providing input to cause the automated fixture (e.g., automated suture fixture) to position the target device (e.g., prosthetic human implant device, etc.) in the first position can involve directing or providing input to cause the automated fixture (e.g., automated suture fixture) to move the target device (e.g., prosthetic human implant device) to a desired focal length from a visualization or imaging system (e.g., a camera lens of an imaging system/camera, etc.). The method can also comprise directing or providing input to cause the automated fixture (e.g., automated suture fixture) to move or rotate (e.g., rotate; circumferentially rotate; flip; rotate with respect