

Manual Measurement Scenario: Prospect does not own a digitizing device and used hand tools such as calipers, thread gauges, radius gauges. In this case the user measured and designed at the same time. User had attended a SW essentials class and was proficient in SolidWorks and good working knowledge of hand tools. Total time to complete the part was 45 minutes.

Point Probing Scenario: Prospect has a digitizer device, by utilizing the device and native software that is included with the device, the end user is capable of capturing point data. In this time study points were taken on the part with the intent of building a solid model. The user spent 20 minutes capturing data and storing the data in a neutral file format. The user then spent 20-30 minutes creating the solid model from the point data, several errors can be invoked in this process by not knowing offset side for probe compensation as well as no constrained geometry. Total time to complete the part was nearly 1 hour.

DezignWorks Scenario: By utilizing DezignWorks a feature based reverse engineering product integrated inside a solid modeling package such as SolidWorks the average user whom has attended a SolidWorks essential class was able to create a totally feature based part with constraints in 7 minutes. This part is totally editable and reflects constraints that were added during the reverse engineering process.

