


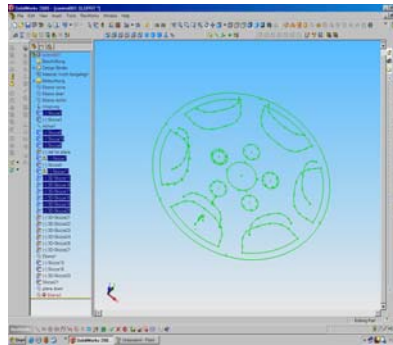
3D CreatorREV + RevWorks - the intelligent Reverse Engineering Solution for all SolidWorks Users.

RevWorks is a certified Gold Partner Product for SolidWorks and offers Engineers and Designers all the necessary functionalities for their tasks directly in The SolidWorks. With the 3D Creator there is a compact and flexible digitizing and measuring system with a freely movable probe available which allows capturing of the 3D values from even complex free form surfaces via RevWorks directly into the sketch level of the SolidWorks.

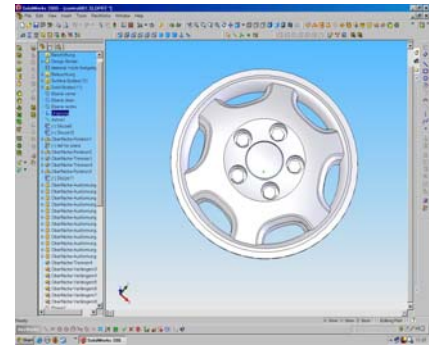
From the 3D part  into SolidWorks sketch level



3DPart + 3D Creator



SolidWorks Sketch level



SolidWorks Feature Tree

System modules

The 3DCreatorREV is a compact optical digitizing and measuring system with a freely movable probe connected via infrared with the sensor unit. Although the sensor unit of the 3D CreatorREV has only 300mm length and therefore fits very well on the working desks and also it offers a very reasonably large working area. Only in case there are very big objects the 3D Creator with the 800mm sensor can be used. The probe with a charging station, a control unit and a reference module completes the system. The compact system can be easily installed on the working place and can be used quickly as all the necessary communication is done from SolidWorks user interface.



3D CreatorREV (300mm)



3D Creator(800mm) with transport case

RevWorks

RevWorks is a powerful reverse engineering tool which is completely integrated with SolidWorks and so there is no need to learn additional software. In order to align the coordinates between the 3D Creator and SolidWorks, RevWorks offers different possibilities. RevWorks includes many features for Engineers and designers to reconstruct even very complex parts more efficiently than by doing it without 3DCreator. All the necessary features for constructing lines, circles, arcs, cylinders, spheres, etc., as well as commands to smoothen the surface are integrated.

Additionally RevWorks can be used in two different modes, either in single point to bring all the geometrical features into the SolidWorks sketch level or in scan modes to realise profile lines from surface on which there is no orientation edge. In such a case RevWorks allows to construct a virtual plane and whenever the probe crosses this plane a point will be taken. Free form surfaces from which it is hard to extract the parametrics information, there point cloud can be generated using scan mode and will then imported as point cloud into SolidWorks. With RevWorks it is possible to control and handle all parameters and functions of the 3D Creator systems in real time out of the SolidWorks user interface so it is possible to achieve an optimal digitizing process. With the dynamic Reference Frame from the 3D Creator the origin of the coordinate system can be fixed and the sensor unit can be moved for efficient digitising without need to change the alignment. The combination of 3D Creator and SolidWorks allows the SolidWorks users a very productive way of doing reverse engineering without the requirement of long training sessions.



Digitalisieren eines Gehäuses



Digitalisieren eines Rohrflansches

With the new release RevWorks 6 the software now also offers the possibility to read complex point clouds which have been produced from a scanners and to produce geometric features out from this input. The user can define the features like lines circles, planes, cylinders, spheres, etc, and RevWorks extract this geometrical forms out of the point cloud und transfer it into the SolidWorks sketch level. Additionally RevWorks can be used to digitise construction geometry. This help planes can be set up vertically to curves, to edges or even axis lines. These new features improve the level of productivity. Especially the real time capturing of the 3D values and the immediate presentation in the SolidWorks sketch level including the surface patches is a very important step between the design and construction process, which allows a much faster realisation of the product development. Means RevWorks helps to shorten the development time increase the accuracy and opens time for additional creativity.

RevWorks increases Productivity in Reverse Engineering

A recently published study estimates that approximately 80% of the new designs are taken out of existing products. With the use of RevWorks in place of the existing methods taking a point cloud the Engineers and the Designers get the capability to bring the 3D values directly into SolidWorks and use this real time inputs for their ongoing development work.



Innovative Produkte für effiziente Lösungen

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