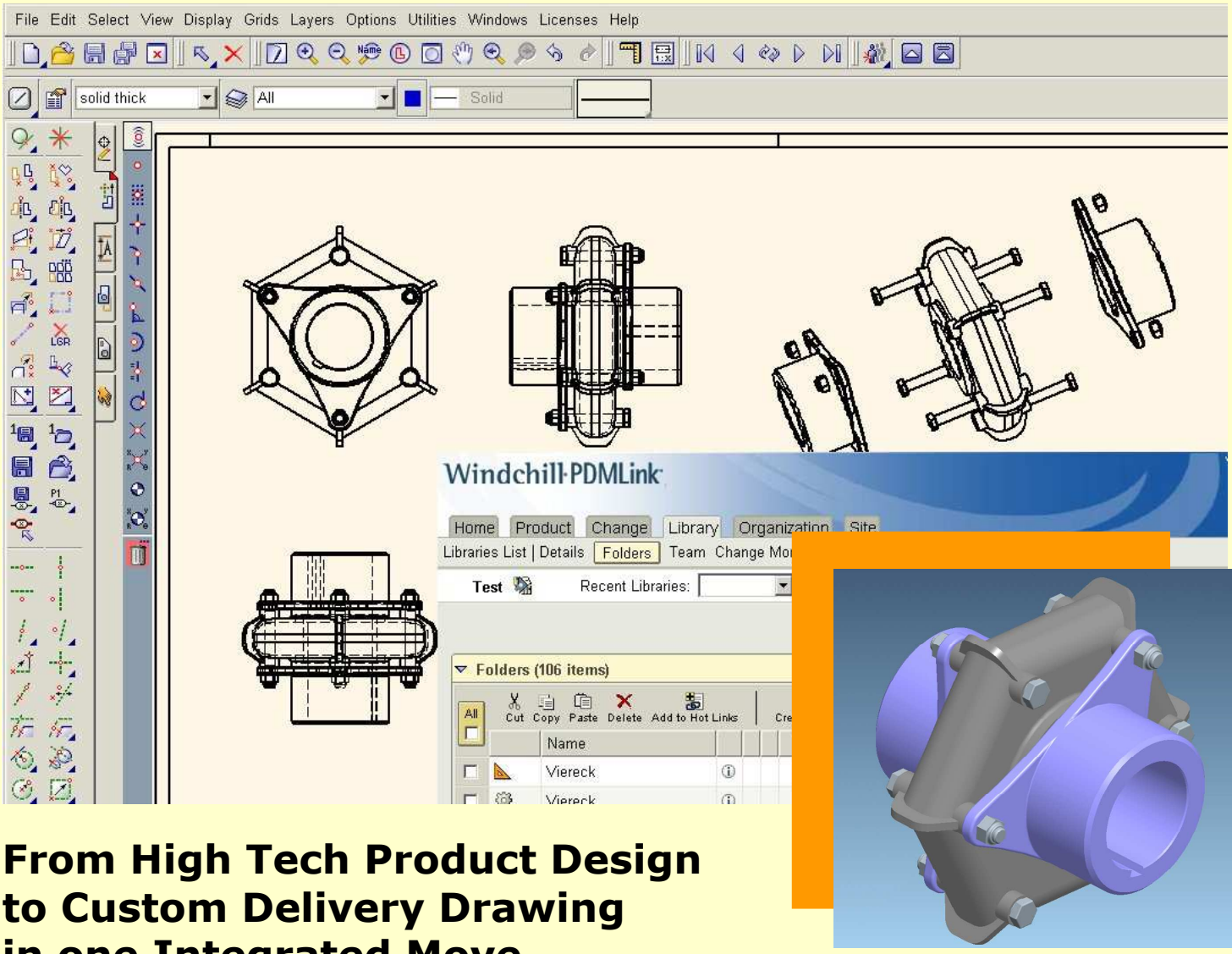


From High Tech Product Design to Custom Delivery Drawing in one Integrated Move

Professional Drafting System Extends Pro/ENGINEER® environment, Handles Legacy 2D

Used standalone by the 2D department, or fully integrated as a Pro/ENGINEER plug-in by product designers, STHENO/PRO™ provides the answer for many Pro/ENGINEER users looking for a complementary solution which maximizes the value of their existing and supplier 2D data, and provides flexibility when dealing with customer drawings, fully integrated into their systems and data management infrastructure.

The professional drafting solution was developed specifically for use with Pro/ENGINEER, providing seamless data exchange, and excellent DWG/DXF data translation capabilities, along with a series of drafting power tools for enhanced productivity throughout the design process.

No Issue with Legacy 2D

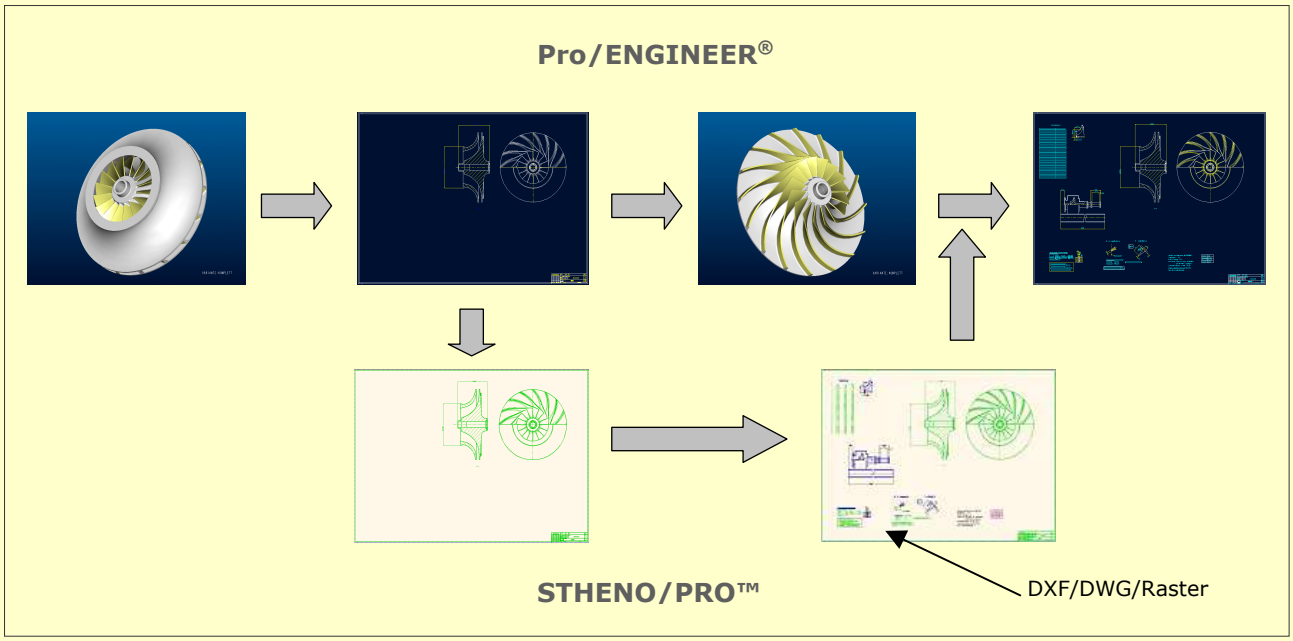
Your product design strategy focuses on Pro/ENGINEER. When customers supply 2D drawings, or there is a need to incorporate a legacy design in TIFF format, considerable time is wasted using a separate 2D system; importing and exporting data, communicating between product design and contract engineers, and maintaining data stored in separate locations. Sometimes 2D is used to augment Pro/DETAIL drawings; at other times Pro/ENGINEER must be used to modify components based on third party 2D data. The less integrated the approach, the more tedious and time-consuming it becomes. STHENO/PRO provides the ideal solution. Here's how:

Axial Fan Compressor Design & Delivery in a Concurrent Design Environment

A company that manufactures axial fan compressors uses Pro/ENGINEER for its high tech product design. Typically, an end customer provides details of the required compressor gear box and motor in DXF format, asking the supplier to deliver a drawing of a simple skid mounting, with the compressor, gearbox and motor (including installation and maintenance instructions), also in DXF format.

When the company first started using STHENO/PRO, the STHENO/IMAGE raster module enabled designers to import tiffs of scanned legacy designs - including blade tip radii drawings - clean them up, and store them within the existing Pro/INTRALINK®, Windchill® or PDMLink™ data management environment.

Now the contract engineer can easily load a standard Pro/DETAIL compressor drawing into STHENO/PRO (Pro/ENGINEER geometry remains locked), while product engineers get on with design modifications. He or she liaises with the customer to provide the delivery framework, inserting the DXF drawing of the motor and gearbox, opening a standard skid design, and modifying it using STHENO/PRO's intuitive SMART Edit tool, which allows for quick dimension editing without the need for a sketch, and provides "parametrics on demand" without requiring full constraints. The engineer can then create or add symbols and other typical details, including mounting instructions, electrical connections, lubrication, and flange connections; as well as special information relating to compressor installation, such as blade route angles and the blade tip radii drawing; and maintenance indicators, such as erosion factors.



Concurrent Design using PRO/ENGINEER with STHENO/PRO

Because STHENO/PRO works bi-directionally with Pro/ENGINEER, it is easily updateable, so that the final Pro/DETAIL output provided by the product design engineer is quickly merged with the STHENO/PRO drawing. The file can then be stored as a Pro/DETAIL or STHENO/PRO file within the Pro/ENGINEER data management environment. Where customers require, the end drawing can also be saved and delivered as a DXF file.

This concurrent way of working not only saves time, but also means that no Pro/ENGINEER license is required for the contract engineer.

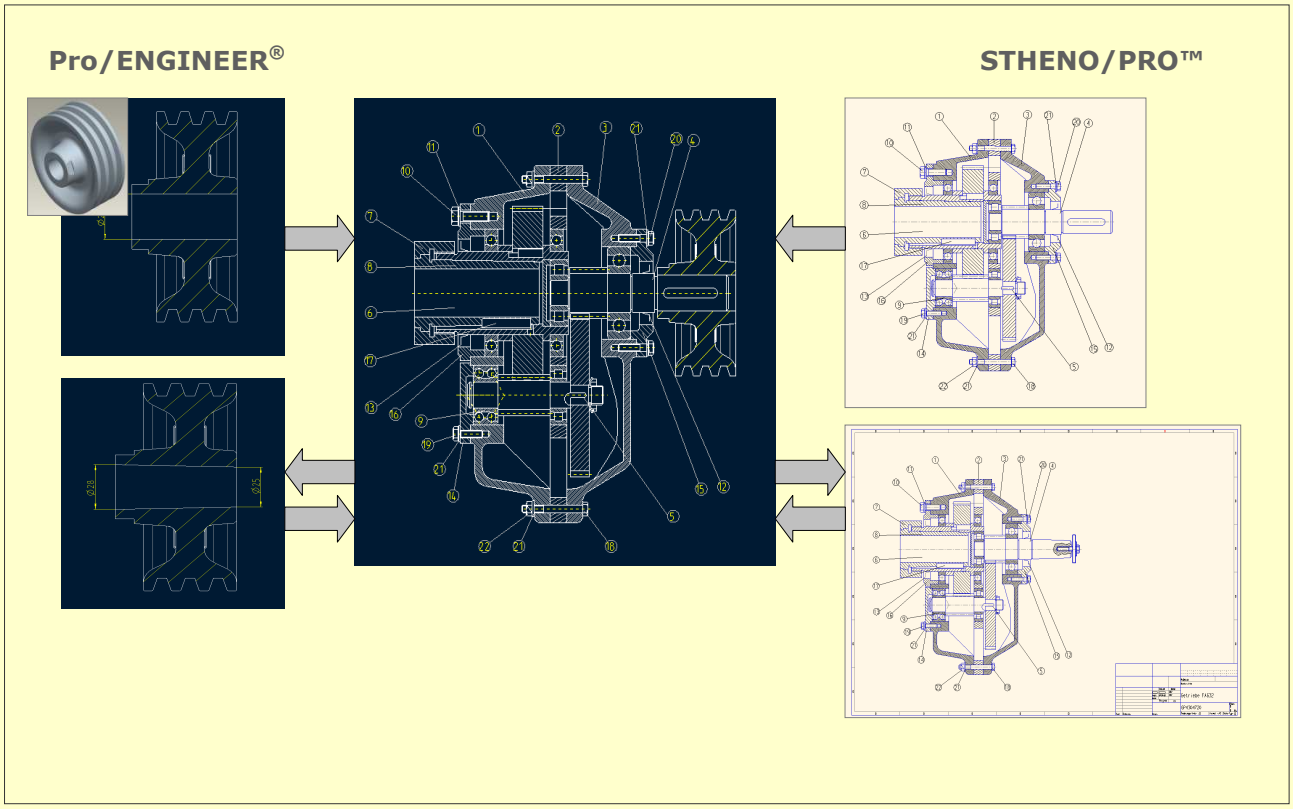
Integrated 2D for Mating Component Adaptations

STHENO/PRO also works as a plug-in for Pro/DETAIL, running within Pro/ENGINEER. It is an ideal tool when needing to make adaptations to 3D models based on dimensions provided in customers' 2D or legacy designs.

For example, a client supplies an AutoCAD® drawing (DWG) of a gear box. The product design engineer needs this information to adapt and arrange a pulley accordingly. In addition, the gear box shaft needs to be further modified.

STHENO/PRO supports all current versions of AutoCAD and opens the format without data loss. The relevant portion of the gear box drawing can be opened in Pro/DETAIL as the user switches seamlessly between the two applications. Dimensional information measured in STHENO/PRO can be used to alter the size of the pulley, which is then added to the assembly. In STHENO/PRO it is easy to modify the customer's drawing, adding a retaining screw and washer to the shaft.

The finished design is stored as a Pro/DETAIL file within the Pro/ENGINEER data management system. It can be returned to the customer in any format he or she requires.



Integrated Design using PRO/ENGINEER with STHENO/PRO

DXF/DWG, IGES 2D, and Raster Compatible

STHENO/PRO was developed by PTC Gold Tier Software Partner CAD Schroer, which has been specialising in 2D data exchange for over 15 years. The solution brings all of a company's legacy, supplier and customer data in line with its Pro/ENGINEER strategy, while minimising design, development, software, hardware and resource costs, and shortening design cycles. Supporting a flexible systems strategy, the product is available on Windows®, Sun Solaris®, and Unix®.

For more information visit www.cad-schroer.com