Vidya

Visualization & simulation in 3D

Innovation for suits.
The digital simulation of your cuts always brings rewards.

Your business first

Develop properly with 3D

In the fashion industry, it's all about combining competence, experience, optimum quality and sizing & fitting with a short time to market. However, technology is also rapidly entering this scenario. Vidya will help you significantly improve your development process – and not just because you save a lot of time, your draft designs can also be examined very effectively.

The results are convincing: You can make considerable savings in product development time and costs for two thirds of all your model designs – and you can also create added value for the follow-up processes in your value-added chain.
Your advantages:

- High quality and efficiency in the development process
- Faster decision making
- Visually realistic communications basis for cross-border and cross-site coordination
- integration of real body shapes and volumes in design and pattern development
- Savings on physical prototypes

PRODUCT DEVELOPMENT WITH VIDYA

3D visualization & simulation

With Vidya, you can be sure that you have market-leading quality in the simulation of human beings, fabrics and patterns. You visualize standardized pattern concepts, but at the same time you introduce completely new information into the development process, such as the average body dimension data of your customers as a model, and the development of imprints and ornamentation outside the benchmark size. You can also use the digital 3D data right away for your work planning, marketing and sales. Leg length errors, wrongly-positioned prints, the wrong drape – even the smallest details are obvious in Vidya. This saves time and costs during the development phase.

People in 3D

Vidya has basic avatars developed from standard sizetables. The 3D software comes with an extensive population of scanatars and fashion manikins. The body dimension data from iSize is used as a basis. so the visualization software enables you to integrate specific target groups and house models into the development process.
Together with iSize and cad.assyst, you now have a seamless process for pattern adaptation to new sizes systems - for new target groups or the EC harmonization of sizes, for instance.

Outfits, poses and animation

Scanatars and standard models can adopt different target postures in Vidya. The selected model can also be animated and then, for example, take a step, stretch its arms or sit down. Motion sequences can be loaded and assigned to scanatars. Outfits can be checked, exchanged and recombined for sizing & fitting and collection development.

Photo-realistic simulation in realtime

Vidya features a renderer that enables high performance and simulations of photorealistic quality. Even the smallest shadows can be displayed, such as those that appear at buttonhole facings or under collars.

Visual results so good you want to touch them

Vidya precisely depicts the texture and material properties of fabrics. This also applies to the distance between the garment and the body, and the simulation of physical properties such as elasticity, drape and material thickness. so you can visualize both stretch and long, flowing styles perfectly. Vidya also renders seam types and material reinforcing like zips and interlinings extremely realistically. This means you can integrate fabric textures, images and applications into a running simulation. Vidya also images glossy structures, partial gloss, iridescent & crease effects and tone-in-tone patterns – and it shows textures and seams (single or multicolored) both inside and out.

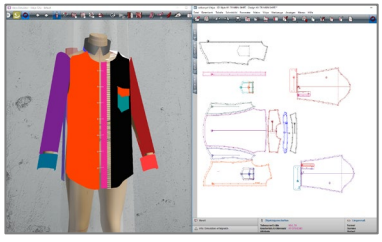

Image 1: Hull surfaces and the first sewing inspection

Image 2: From the 2D pattern to the visualization of the garments in 3D

Material and color

Vidya has an extensive material library. With the materialWizard, you can acquire measured material parameters fast. Fabrics up to 3 cm thick are simulated and garments can have up to 21 individual fabric layers. This can also be used to reproduce the down jacket look. Thanks to Overlay Color, any texture can be displayed in any tone of a color path (e.g. from Photoshop). Color management allows binding colors to be specified by importing spectrally measured colors and rejecting them under neutral lighting scenarios.

Expanded simulation capabilities

The Assyst software has outstanding, real-time imaging quality. During the simulation you can open and close buttons, set up or flip collars at the touch of a button and much more. And user-friendliness hasn't been ignored either: for example, a pocket can be added on a 3D simulation without making changes to the pattern beforehand. The information about the new element is transferred to the pattern as a construction line. Pleats, crease pleats, wrinkles, lining processing, complex multilayers and unwanted diagonal pulls – they can all be seen on Vidya. This means in effect that the visualization software opens up a major part of your collections for digital visualization - enabling you to control designs and silhouettes and visualize the optimal design draft - always based exactly on the original 2D pattern data.

Interaction between 2D and 3D

Alterations in Vidya can be transferred straight to the 2D pattern in Cad.Assyst. Cut pieces and topstitching can be added to and removed from a running simulation and stitching can be opened and closed live. If pieces are changed into a preferred form, the simulation will display this instantly. The CAD dart and pleat function is fully integrated.This means that a dart defined in CAD is automatically available in Vidya and sewn – and this also applies to pleats. proficiency now simplifies construction, setup, set up are, since itself pieces (Assyst) interactively exchange.

PROCESS INNOVATION WITH VIDYA

Innovation in the store

3D proves itself in the verticalized world. Vidya is part of a technology chain consisting of 3D bodyscanner, the product catalog software INTAILOR, Cad.Assyst and the Virtual Mirror. The result is an end-to-end process from development to shop, one which images MTM collections as well as ready-made garments, The body scanner creates a 3D model of your customer. Cad.Assyst transfers the data of the garments or applies the individual dimensions to the selected 2D pattern. Now, the (real) customer can try on garments as often as he (or she) wishes and can configure them with MTM as well – with different sizes, fabrics, colors and imprints. He or she finally chooses a favourite garment. New! The Digital Fashionboard can also be integrated into the process, and it can be used as a presentation medium for 3D simulations and information from the PLM system.

USING VIDYA

Performance

Vidya is one of the most powerful simulation tools in the apparel market.

Vidya Viewer

The free Vidya Viewer facilitates coordination within the company and with your partners – It supports Vidya 3D image formats, allowing users to view 3D models without a Vidya license.

In-depth introduction

Throughout the duration of the project, we will provide you with support to put your innovation project on the road to success – within your scope, your timeframe and your budget.

Assyst GmbH
Max-Planck-Str. 3.
D-85609 Aschheim-Dornach
P +49 89 90505 0
F +49 89 90505 271
www.assyst.de