CAD/CAM PACKAGE X19
HOW TO CHOOSE A CAD SYSTEM?

Never believe the brochure’s claims or the name on it (including this one 😊); just ask several competitors to fully demonstrate, in parallel if possible, the entire process on your real products: design, grading, checking, altering, cut planning, nesting, cutting.

Test the efficiency of automatic nesting not on one or two markers, but on more than one hundred, to get a clear image of the performance. Ask to do the tests yourself, store the results and repeat the tests on the delivered version of the application, to be sure you get the same values.

Check current and future interconnectivity of the system, ability to import/export files in most usual native CAD formats and to communicate with cutters, plotters and other peripheral, in order not to become a prisoner of one technology.

Check current and future conditions for any recurrent costs such as update/upgrade, expiring software license, availability of the product.

Make sure the options and features you are interested in are part of the offered CAD package, if not check what are the additional costs.

Check if the software package responds to your future evolution and to the current trends on the market: e-commerce, mass customization, industry 4.0, cloud technology.

Ask for a long trial period, with minimal or no costs from your side.

SO, HOW TO CHOOSE A CAD SYSTEM?

If your company needs to expand its business and you decide to invest in a CAD system or you simply want to replace your old technology, here are some hints on how to make your choice.
Gemini Pattern Designer is the flagship of Gemini CAD package. X19 version is the result of company’s 15 years of experience in the field and the continuous innovation invested in the product, to respond to the challenges and needs of our existing end-users (over 16,000 in 38 countries) and future ones.

Repeating the story of its initial launch back in 2004, Gemini Pattern Designer claims now again to redefine the state-of-the-art standards in soft product development, by incorporating all valuable existing industry knowledge and adding innovative tools never seen before in any competing product, such as Style Selector feature or AutomART® technology for digital printed goods.

Gemini Pattern Designer X19 features all options for shape construction, depending on user’s preference: free, assisted and parametric methods, or any combined approach. Gemini was the first to introduce native Bezier curve shape and corner angle control and further developed this geometrical platform by introducing Linked Pieces feature, with automatic shape synchronization, while maintaining the freedom to move, rotate, flip parts on the digital workspace, to preserve the natural feeling of manual pattern development on a working table.

The quality is in details, and to handle such details Gemini Pattern Designer has now 24 types of seam allowance customizable corners, a unique Folds Editor to handle multiple and complex folds with 3D folding visualization and library and the most advanced set of tools for Notch Management.

Keeping trace of the entire history of changes in the model, it is possible now to manage different design evolution branches, due to the new Model History module. In the same time, the encryption and security of the intellectual property and the rights to access the content for team members and partners are managed with Model Access Rights Management module, through the proprietary myCad.cloud web platform, developed by Gemini CAD Systems.
Continuing its tradition, Gemini Pattern Designer X19 has the most powerful and comprehensive Grading System ever seen on the market, yet easy and simple to understand and to use. Whether we talk about linear proportional size adjustment or multiple grading systems or formula linked grading rules or various grading alterations, it is all there. Access to sizes and grading table is now possible throughout the entire program, regardless of working mode or current selection.

Packing sizes in a point or along a direction or Marry or Walking a piece onto another to check the matching, are now much easier due to the widget control, a simple tool to help execute operations directly on the piece surface, allowing a fast and efficient interaction. The Interactive Measurement Table does what the name says: it reacts in real time at any change in the design and automatically points out the deviations or other important values matching using advanced formulas.

Gemini Pattern Designer X19 features a full set of tools for decorating the patterns and including useful technical information for later manufacturing processes, such as: text bullets, text along path, information cartridge, accessories, graphical representation, seam line technical representation, etc. The working mode can be quickly switched from standard-CAD to sketching. The entire content can be exported in standard vector files such as PDF.

& more... much more...
There are two usual methods for processing MTM patterns: the alteration method and the parametric skeleton method. Gemini CAD Systems offers support for both methods, by incorporating two dedicated plug-ins.

**Basic Alteration MTM Plug-in**

The Basic Alteration method consists in finding a standard size close to the customer’s measurements and applying small alterations to that particular size, in order to better fit the customer. Being relatively easy to use, the Alteration method is the most common choice of users, and it is the method provided by most of competing CAD applications. However, it has many limitations and the results are not satisfying when the measurements of the customer present significant deviations from the standard size set.

**Expert Parametric MTM Plug-in**

The Expert Parametric method has a totally different and modern approach. The construction of the patterns is based on a geometrical infrastructure, called skeleton. The skeleton is built by using the classic pattern construction techniques and steps, as described in any pattern construction manual, thus being very simple and logical for any trained pattern designer. The skeleton contains formulas and geometrical relations that are based on measurements. By introducing different measurement values in the formula, the shape of the skeleton will change, but it will always maintain the correlation and shape constraints.

Expert Parametric method has a series of advantages and applications:
- Better product fitting and perfect pattern matching, including on extreme sizes.
- Applicability as automatic grading for mass production orders, by directly using the dimensions from standard size tables.

Both methods are used by fashion houses, haute couture boutiques and mass customization businesses that produce on-demand, made-to-measure clothes. On top of this, the Expert Parametric MTM Plug-in can be used as automatic grading for mass production orders, allowing a fast adaptation of products to local markets or distribution chains.

See how Basic Alteration MTM plug-in works

See how Expert Parametric MTM plug-in works
Gemini enables the use of graphical content such as: vector SVG and PDF files associated with accessories such as buttons, embroidery, printing and fused decoration, industrial standard point symbols, industrial standard sewing and processing lines, text capsules with arrows pointing towards pattern elements, text along paths and contours, customizable piece info-cartridge. This large pool of information-carrying elements can be used by the designer to make-up each pattern piece in order to pass the necessary instructions to further manufacturing phases.

First of all, there is no need for a parallel design process run with other software tools, using drawings and sketches not linked to the actual CAD patterns. Second, all added information is placed and linked to the patterns, therefore is permanently synchronized in terms of position and content with the current version of the model. Third, all the information is stored inside the CAD files and its evolution can be managed in the same way as the patterns, including restore points, branches and rights of access for different contributors.

One of the features most appreciated by Gemini Pattern Designer users is the Product Data Sheet editor. Now Gemini brings this functionality to a totally new level: all make-up information and graphics shall be output in the new Product Data Book, as well as in the Product Technical Sheet. We apply WYSIWYG concept: "what you see is what you get", which means all the information will be exported into PDF files containing everything as it is visible on the screen.

It is important to mention that all the information shall be exported in vector format, therefore all fine details can be zoomed-in and clearly studied.
GEMINI SPREAD & CUT PLANNER

Gemini Spread & Cut Planner is the link between the design room and the cutting room. It provides fast and high-quality automatic or interactive optimization for the spreading and cutting operations.

The operator inputs the quantity of products ordered by the client for each model, size and fabric, and some general settings regarding cutting conditions such as the preferred spreading length, the maximum number of sheets in the lay or the fabric width. This information can be also retrieved automatically from the company’s ERP system. The Gemini Spread & Cut Planner application can automatically generate the most efficient plan for the product grouping and distribution, so a minimal number of markers and lays are needed to obtain the ordered quantities.

This automatic operation doesn’t take more than 1-2 minutes. The user may choose among several automatic and manual or semiautomatic lay planning strategies, so the best results are achieved every time. The entire order, containing the cutting plan and a collection of lays and optimized markers, is included in one centralised file, easy to store and share. A Cut Plan Report offers a comprehensive view over the effort, time, consume and efficiency of each order passing the cutting room and provides clear information for operators on spreaders and cutters.

- Automatic and manual lay definition
- Automatic order optimization
- Cutting Room order report
- Export for plotters, cutters
- Export for other CAD systems
- Integration ERP systems using OTX open format

Gemini Spread & Cut Planner

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Gemini Nest Expert holds since 2009 a leading position in terms of efficiency and speed of its automatic nesting module. This performance was achieved due to the proprietary nesting algorithms, based on multi-core parallel processing, which later evolved to multi-machine nesting and the apparition of nesting servers and nesting farms. Gemini CAD Systems is a pioneer in this field, being the first one to propose such solutions for nesting flexible materials.

Today, with its X19 version, Gemini pioneers again nesting technology by bringing the full power and scalability of Microsoft Azure platform to offer cloud nesting services, accessible to its clients on all type of devices and also to third parties through APIs. No need to invest in equipment or to worry about peak season, nesting is available anytime, at any volume of work, on any device.

Gemini Nest Expert can perform fully automatic nesting on simple, folded or tubular fabrics, with or without plaids, stripes or textures or shading, with specific widths and contractions, according to each part specifications and freedom. Gemini Nest Expert can output the nesting results in all major industry standards: DXF-AAMA, HPGL-PLT, ISO-CUT and RS274D.

Gemini Nest Expert features the unique ability to import and nest graphical content (ready-to-print PDF files), performing the function of an imposition software application for digital textile printing. It can send the nested result directly to a wide format digital printer and to a single-ply cutter with VisionCUT® scanning system.

Based on its ability to import native markers and pattern files from other CAD systems, Gemini Nest Expert can be used as a nesting server by companies operating on other CAD solution, with less efficient automatic nesting.

Most of nesting applications use only one core of the processor

Gemini MultiCore Automatic nesting uses all cores of the processor

Gemini Cloud Nesting brings the power of cloud computing to any device

- Fully automatic, high-efficiency marker nesting optimization
- Special automated features such as: automatic nesting for fabrics with stripes & plaids, for tubular or folded fabrics, fusing-block definition, compensation of fabric shading defects, etc.
- Import of native pattern and marker files from several other CAD systems
- Import of standard DXF, PLT, ISO-CUT files
- Import of PDF graphical files for digital printed textile and flexible goods
- Export to plotters, cutters, digital printers
- Data exchange with ERP systems using OTX open file format

See how our obsession for fabric savings saves the planet
WHAT ELEMENTS OF PATTERNS WILL BE EXTRACTED AUTOMATICALLY?

The Photo Digitizer can automatically extract the pattern contour, using precise Bezier curves, can identify corners and mark them as reference points, can identify different type of notches (marked or cut), internal points and internal lines. By convention, the longest internal line found will be declared as grain axis. When the patterns are created inside the office, it is useful to respect some standard marking procedures, to avoid any manual adjustment of the digitizing results.

Quickly and easy inspect the result of the automatic digitizer using the Contour Play function. Measure distances and perimetric contour, check and adjust the internal elements or the shape of the curves if necessary, add or delete any element, input the piece name, all in one single window. Done! Easy to use zoom and navigate functions and the special magnifier viewer make your activity easy and efficient.

Save the patterns directly in the native format of your CAD system. It does not matter what CAD system you use, the Photo Digitizer is compatible with it (with the ones most used). The system will remember the save settings (location, format etc.), so you can have the patterns available directly to your CAD system with one simple click.

Don’t waste time placing the patterns on a special digitizing surface, fixing them with adhesive tape or other time-wasting methods. Just clean-up a bit your normal working table, leave the patterns there and go to the computer. ONE simple click, and the camera automatically captures the picture and transfers it to the computer. The image is automatically processed and the patterns are extracted in just few seconds. A smart and simple calibration procedure is necessary only one time when you first install the system, offering a comfortable precision of less than 0.7mm.

YES, YOU REMEMBER WELL: THIS IS THAT PICTURE USED IN OUR BROCHURE FROM 2006. THE BEAUTIFUL PROOF OF A TECHNOLOGY STILL RELEVANT TODAY.
The need to be unique in a globalized society drives the growing demand of customized goods. Industry is facing today a huge challenge to find efficient ways for mass customization. To enable customers to choose different options for a product and to create their own configuration (whether it is a made to measure shirt or a digitally printed cycling suit), designers must develop variants of models (styles or designs) in their CAD applications. The number of such variants depends on the number of options available and it grows fast because it is obtained by multiplying all options.

Style Selector mimics the interaction between customer and an e-commerce webpage or the dialogue with the tailor in a boutique shop while customizing a product. So, all Gemini CAD Systems had to do was to create a platform on which the designer of the product can edit the full scenario containing all questions and all possible answers, and to define what actions to take (usually to add or remove patterns from the cut set) depending on the answers. For each question or answer, the designer can add graphic content and explanations, advices for customer or different rules and conditions when a question is valid to ask, or an answer should be in the available list.

The huge pile of pre-defined variants is no longer needed. When the designer wants to add a new option, he will just add a new question in the list, with its own possible answers among which the customer will choose.

Publishing or updating a customizable product on an e-commerce website is no-hassle activity and requires zero programming effort once an API based connection is set with APOGY Bespoke. When using standard platforms like Magento or Shopify, it is even easier. There are already Gemini plugins available. The cost and time for publishing and updating operations are reduced dramatically. After the consumer expresses its preferences, APOGY Bespoke cloud processor handles all the transformations needed for generating a new variant and continues the process by generating optimized production orders based on delivery time and fabrics optimization. The complete automatization of the process allows to obtain real time cost calculation and to manage also the flow of information for associated processes, such as packaging or shipping. ERP integrations can easily be performed through modern APIs.

Gemini CAD Systems proposes a completely new approach on this problem. Instead of storing hundreds of variants, the CAD projects will actually contain the list of options (Questions to ask), answers (possible alternatives to choose) and actions (things to do on the model if an answer is chosen). The CAD system will no longer create hundreds of pre-configured variants but instead it will create on spot the variant needed based on the answers provided by the customer. APOGY Bespoke cloud processor will automatically generate new variants based on consumer preferences and create optimized production orders.
In the last 15 years, thousands of companies around the globe relied on our CAD-CAM solutions to automate their processes in industries like fashion, apparel, automotive or furniture. Our desktop applications brought a pragmatic approach in 2D design, nesting, production planning. We are now proud to extend our portfolio with an online ecosystem containing SAAS applications able to extend or improve workflows already covered by our classic CAD-CAM products. All Gemini online and desktop applications take full benefits our secure unified identity management and single sign on system based on OpenID Connect and OAuth 2.0.

The world is changing at a high speed and any business faces new challenges like mass customization and fast fashion. We know that everyone in fashion wants to improve processes and be more agile while working in a connected, global market. Although you already have a nice CAD system, this is not enough anymore. Fashion industry needs scalability and vertical, integrated solutions, something an old, on-premise PLM system cannot offer. Our commitment in this revolution is to remain pragmatic.

We value our clients and we promote a completely transparent relationship. So, no matter if you became the user of our CAD-CAM products through one of our distribution partners or by collaborating directly with us, we have a new web platform designed to help you:

- Manage and update your organization’s data
- Manage users and permissions
- Check your contracts, licenses and USB dongles
- Assign licenses and services to your users
- Easily buy licenses and services whenever needed
- Check billing and invoicing data
- Download new releases and product documentation
- Stay connected with Gemini and check product roadmaps and release notes
- Be part of Gemini family and get in contact with other organizations. Share your experience and learn from others’ best practices
- Receive news about promotions or special offers from Gemini

We know that having a great product is not enough. This is why we, together with our distribution partners, constantly invest in having the best support teams. We rely on well trained and experienced CAD engineers for solving any problem you might encounter. Part of our online ecosystem is a new ServiceDesk platform aiming to make the communication better and more efficient between you and our support agents. Depending on your support subscription, you can still contact us through a dedicated phone line.

How does it work for you? You simply describe the problem you encounter using a self-explanatory web-form. This web page guides you through all steps required to obtain the information Gemini support team needs in order to provide you the fastest resolution possible. Of course, some issues will also require direct communication or screen sharing sessions. Our agents will make sure that all these steps are recorded so you can check the status and history of all your tickets at any time. You can add comments along the way and even escalate the ticket, so it gets the attention of one of our support supervisors. Our ServiceDesk platform allows you to check you tickets history and their resolutions, but also tickets raised by your colleagues. Sometimes it helps to very if others encountered the same problem and what was the solution Gemini provided to them.

Every step in the lifecycle of a ticket generates an e-mail notification for you so you know exactly when one of our operators provided a solution or asked for more details. We trust that this way of handling support activities will improve our response times and return a better service for you. Of course, we also encourage you to use ServiceDesk to suggest new features or improvements. Your feedback is always welcome and valued by us.

Feel free to contact our sales representatives at sales@geminicad.com in order to find out more about our new online ecosystem or how it can benefit your business.
APOGY - A ZERO NONSENSE FASHIONTECH CLOUD

APOGY is the first FashionTech cloud able to tackle the challenges faced by your organization in a pragmatic way. It harnesses entire power of cloud technology and works as the backbone solution connecting the design office, retail platforms and manufacturing facilities. APOGY brings functionalities able to support your critical processes:

**Digital assets management**
- **Without APOGY**, management of digital assets like patterns or production orders means storing them on a local computer and transfer them by email or USB drives when needed. The owner cannot maintain a version history and has no control over their usage.
- **With APOGY**, you get secure cloud storage, with full encryption and geo-replication. In easy terms, your digital assets are safer than ever. You can share them with your partners at any time, at a mouse click. You can even choose for how long or what kind of changes are allowed. For example, you can decide to share a pattern with your manufacturing partner in Turkey for only 2 weeks and block any change in regard to gradings. All these functionalities are enforced by Gemini Pattern Designer, so the encryption system allows you to lock access to a file for unauthorized users after a period, even if an asset is stored locally, offline.

**Collaboration and workflow management**
- **Without APOGY**, the only way of making sure processes are followed properly is to spend more money on quality control and management layers.
- **With APOGY**, you get in control of your process, with full traceability from the design office to the cutting table and beyond. You can answer to questions like “when and who changed the gradings of this shirt pattern?” or “how many iterations where needed until obtaining a mature product?”. Also, you can make sure assembly instructions added by the designer are displayed at the manufacturing site or even automatically transmitted to sewing machines for fast setup.

**Bespoke and made to measure customization**
- **Without APOGY**, made to measure or bespoke orders are handled through hundreds of variants and many hours of error-prone activities of changing patterns. Additional costs and quality issues are difficult to avoid.
- **With APOGY**, made to measure or bespoke orders are handled through hundreds of variants and many hours of error-prone activities of changing patterns. Additional costs and quality issues are difficult to avoid. With APOGY, you get a state-of-the-art cloud processor, able to automatically generate patterns which include size options, individual dimensions, style options or custom artwork. Options are fed to the bespoke and made to measure cloud processor from APOGY dedicated POS web application or from an e-commerce platform. All integrations are possible through modern APIs or by using plugins for standard solutions like Magento or Shopify. Consumer orders are transformed in production orders in a smart way, taking into account fabric consumption, delivery times and other variables.

**Cloud nesting**
- **Without APOGY**, any increase spike in your production means waiting many hours to generate all markers or struggle to get additional computers for a limited time period. Costing and merchandising don’t have access to nesting tools and rely on production department to gather data. Needles to mention costs to keep your equipment up to date and secure.
- **With APOGY**, there is no need to worry about these aspects anymore. APOGY offers infinite scalability in terms of how many nesting orders you can place at once. Don’t keep your customers waiting and stop spending money in maintaining too many computers on premise. With APOGY you also get access the latest improvements in nesting algorithms with no actions required from your side and at zero cost.

**3D live simulation and streaming**
- **Without APOGY**, there is no connection between the 3D solution you use in the design office and what gets displayed on the e-commerce website. Also, the consumers get to see rigid objects placed on standard avatars.
- **With APOGY**, the starting point of any garment 3D simulation is the pattern created in a professional CAD environment. This way, you use the same solution in the design office for reducing sampling and on e-commerce platforms, with no additional work and hassle-free product changes and publishing. Consumers can use their own avatar for the 3D simulation on any device, since all the hard work is done by APOGY cloud and streamed back to the browser or the mobile application. They can even see how the clothes fit them in motion sequences or interact with the garments.
See how APOGY works

APOGY FASHIONTECH CLOUD

PRODUCT DEVELOPMENT AREA
- 3rd party CAD files
- Gemini conversion services for CAD files
- CAD workstation
- Digital printing artwork files (Adobe, Corel)

E-COMMERCE AREA
- Inventory information, external orders - ERP
- External fitting service
- e-Shops (based on Magento, Shopify or proprietary platforms) using plugins or REST APIs
- 3D Simulation using customer’s avatar with live interaction & streaming

MANUFACTURING AREA
- PDF file
- Cut file

APOGY FASHIONTECH CLOUD
- Models database
- Consumers database
- Production planner
- Cloud nesting
- Production reports
- Apogy Bespoke POS interface
- Apogy made to measure and bespoke processor
- Model encryption
- Unified identity management
- 3D Simulation - live streaming

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APOGY FashionTech cloud is built using cutting edge technologies and takes full advantages of being hosted on Microsoft Azure Cloud:

**Security and privacy.**
- APOGY protects data in transit and at rest, using numerous encryption mechanisms, including SSL/TLS, IPsec, and AES. Being a top tier platform-as-a-service provider, Microsoft continuously monitors servers, networks, and applications to detect threats. APOGY is GDPR compliant and Gemini uses privacy-by-design and privacy-by-default methodologies in all its solutions.

**Scalability**
- APOGY is designed as a multitenant application able to handle bursts of traffic or heavy loads with no performance compromise. It helps your business to run during peak times at no risk of losing money or reputation because of hardware failure or insufficient computing resources.

**Easy access from any device.**
- All APOGY components are designed to be accessed from any laptop, tablet or smartphone. We use modern development frameworks and apply responsive design principles. All you need to run your business is an internet connection.

**Flexible integration**
- Easy API-based integration with any other modern system. APOGY is built to easily interact with other platforms as well with other Gemini applications. From body scanning devices and size recommendations engines to sewing machines and e-learning systems for manufacturers, APOGY exchanges information and enables your organization to step into Industry 4.0 era.
GEMINI AutomART® – the innovative solution for digital printed goods

CURRENT TECHNOLOGY AND INDUSTRY CHALLENGES

Textile digital printing is made in at least three major ways: Raw Fabric Printing (producing quantities of fabric with repetitive motifs), Shaped Textile Printing (producing printed and cut parts of garment) and Direct-to-Garment Printing (adding various digital decoration to a ready-made garment). Shaped Textile Printing is widely used for producing parts needed in customized sportswear, advertising, home decoration and it is a sector where the level of automatization is incredibly low. The waste of materials and labor is huge. The most common classical workflow implies the use of two separate environments: garment CAD (an apparel specialized CAD) and Graphics (Illustrator or Corel etc.), that usually merge when white cloth parts are manually placed on a printed transfer paper.

HOW IT WORKS?

Using the ability to handle printable graphical content, the designer can merge the graphical content with the shapes designed and graded in the CAD application, can nest these decorated shapes and can send the result directly to a wide format printer and a cutter. That means the entire workflow is actually changed, as all pre-press operations are performed inside the apparel CAD environment provided by Gemini, benefitting of all typical automation tools specific to garments production, such as grading, checking, cut planning, nesting, etc. The result of this process is a roll of nested printed shapes which must be cut. The technology in charge of this phase is VisionCUT. This system has the capability to scan the printed fabric, to identify the position and distortion of printed shapes and drive a single-ply cutter to cut the parts perfectly, by compensating any distortion within a given set of rules and restrictions. The entire process is fully automatic, in a seamless in-line integration with the cutter.

WHAT ARE THE BENEFITS?

For the first time, producers of digital printed sportswear and other sewn goods can implement a fully automated workflow that reduces the labor costs by up to 60%. Use of consumables such as transfer paper and printer time are reduced by up to 35%, while ink consumption is reduced by up to 10%. Quality in matching the sewn parts on any size is guaranteed and does not require any compromise. The entire process is also compatible with direct-to-fabric printing technology.
VisionCUT® replaces the use of old generation optical recognition systems (camera on head) in CNC cutting applications such as mark recognition or repetitive motifs and can be also extended to new applications such as on-the-fly contour recognition or skew & bow distort compensation, which were previously not covered by old technology. The main difference is that VisionCUT® scans the entire surface of the fabric, thus being able to identify the entire geometry and distortion of the printed elements.

VisionCUT® COMPATIBILITY
VisionCUT® was designed with compatibility in mind. The system contains both hardware and software components that were made totally machine independent, ready to be installed on any single-ply conveyor cutter, with minimal requirements and effort. The installation of VisionCUT® is fully reversible and does not affect the standard operation of the cutter. Gemini team can provide all needed services from consultancy to design and implementation, upon customers’ requests.

VisionCUT® Recognition & Processing Algorithms
Our modular software package allows the system to be configured for various products and work environments. All key-components of the system, like scanning, elements identification, repositioning & distortion rules and restrictions, contour extraction and interpolation, nesting algorithms, cutting optimization, are internally developed by Gemini and define now the new performance benchmarks in the industry.
The sportswear articles and cloths, in general, are usually made of many different fabrics. One of the biggest challenges in cutting multiple orders mixed together in the same marker, with the purpose of reducing the fabric consumption, is to collect the articles back together as making part of the right order. Gemini commits itself to covering the entire manufacturing process. This must also include collect & storage of cut parts at the end of the process. Gemini CutCollect® fits perfectly in this position, providing a full pick-by-light drop-by-light system, with configurable scenarios and rules to fit later stages in manufacturing flow.

This complete integration dramatically reduces the errors in parts handling and storage, providing a solid infrastructure for just-in-time production and mass customization. The information used for collecting strategy is taken directly from the design and order file. The software is capable to process in parallel information from different markers. In this way, all the parts making part of the same article will be stored in the same basket, even if they are separately cut from different fabrics. The application helps collecting the cut parts by highlighting the next piece or the next group of pieces to be collected and by printing the corresponding label for them. The level of automation is so high, that the operator doesn’t need to have any kind of knowledge about the product itself and the product complexity is no longer a challenge for collecting.

Gemini CutCollect® is developed for any automatic single-ply or multi-ply cutter with conveyor table. The system is linked directly to the offload conveyor table of the cutting machine and the collecting process is synchronized with the belt movement. Collecting and piece depositing are assisted by a video projector using an advanced, ergonomic and customizable stand-alone software package. The bundling strategies are fully customizable, as well as the patterns highlighting system (index, color, pattern, etc.).
To complete the workflow in textile & flexible materials manufacturing, Gemini CAD Systems introduces Andura family of CAM equipment, providing a seamless integration with its CAD applications and incorporating state-of-the-art technology. The hardware products are available in selected territories, where Gemini CAD System has a well-established distribution and support infrastructure, being able to provide prompt, reliable and high quality services to its customers.

**GEMINI HARDWARE COMPONENTS**

**ANDURA PLOTTERS**

Affordable and reliable 2 & 4 heads inkjet plotters with easy operation mode, front paper loading and unloading, standard HP ink cartridges, USB and network connection, in 180, 200 and 220 cm width.

**ANDURA SPREADER**

Suitable for all range of fabrics and knitted materials, with various options and accessories: lift roll loading, revolving head, knitted fabric relaxation tool.

**ANDURA BLADE MULTI-PLY CUTTERS**

5, 7 and 11 cm reciprocating knife cutters, with various conveyor table dimensions with width up to 3 m, mobile or static configuration, heavy duty-denim configuration.

**ANDURA LASER CUTTERS**

Single or double cutting head, conveyor table, automatic feeder with self alignment system, various size and configurations.

Please check each hardware product’s brochure or webpage for detailed information and technical datasheet.
ABOUT US

Gemini CAD Systems is a leading global supplier of technology for industries working with soft flexible materials such as textiles, composites or leather. Our activity includes research, development and deployment of software, hardware and workflow solutions for fashion & apparel, furniture and automotive, with focus on computer aided design (CAD) and computer aided manufacturing (CAM) applied in the cutting room.

Gemini’s business is based on cross-linked fields of expertise and a collection of proprietary, in-house developed software and hardware products, built in over 15 years of activity and continuous investments in R&D, serving the manufacturing process from design to cutting by more than 17,000 installations across 38 countries, providing reliable services and technical support throughout all stages.

Gemini is leading the global process of digitalization and automation of fashion industry, with a pragmatic approach based on its FITS strategy: Functionality, Integration, Technology, Sustainability. Its latest FashionTech cloud platform enables the transition to mass products customization, covering all stages from product development to e-commerce and manufacture, with remarkable scalability and connectivity capabilities.

Meet Gemini CAD Systems Team

www.geminicad.com

Member of VDMA
Verband Deutscher Maschinen und Anlagenbau
(Mechanical Engineering Industry Association)