Advanced C.A.D., C.A.M., C.I.M. solutions for the apparel industries

C.A.D. SYSTEM

Computer Aided Design

-system which provides integrated design-through-production handling solutions (patterns, markings..) for the apparel sectors.

C.A.M. SYSTEM

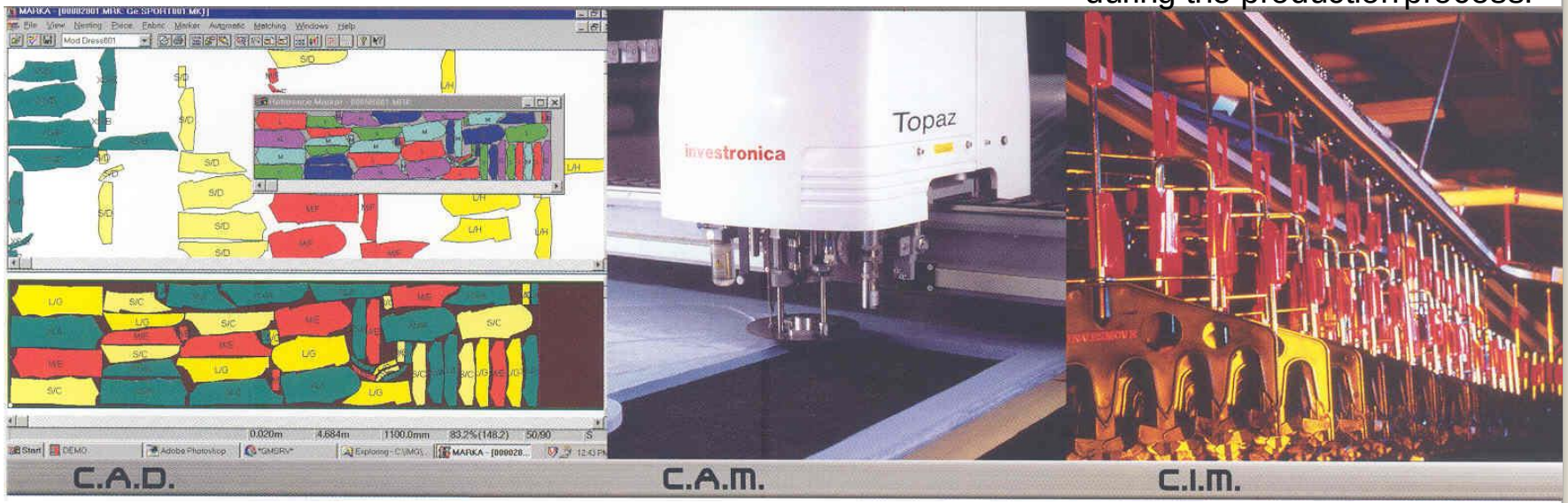
Computer Aided Manufacturing

- digital control system may be applied in any sector where automated knife-cutting for materials is required.

C.I.M. SYSTEM

Computer Integrated Manufacturing

- system which comprises a circular-motion overhead conveyor controlled by a computer assisted panel and is a powerful tool applied in achieving maximum flexibility during the production process.



Tendency to produce the cheap products of high-quality in mass was realized by application of computerised systems in the sphere of design and planning products, in cutting, planning and organising.

CAD SYSTEM - DESIGN

TEX - DESIGN

The art program designed to help designers and merchandisers in the textile and apparel industries work more productively and efficiently.

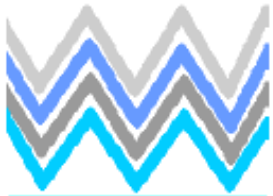
Main characteristics

- Enables designers to create drafts quickly and easy – from the preliminary sketch, through necessary revisions, to the final adopted style.
- Can include the creation of storyboard presentations and Internet broadcasts for collaborative use or presentation.
- Create colour variations and save the variety of colours using

Application for design.

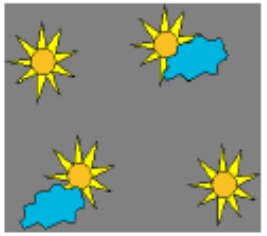
TEX - LINE

The TEX-LINE plug-in module uses both vector and bitmap technology. Working in bitmap facilitates creative artwork, while the vector assists in technical drawing.

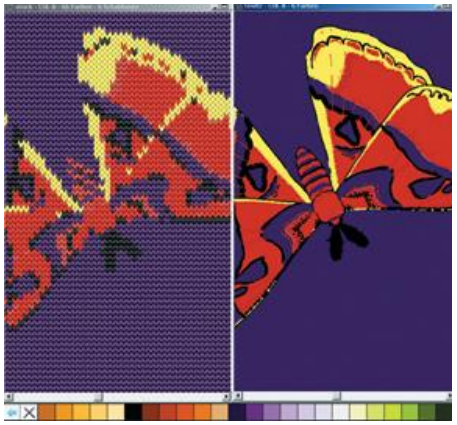


TEX – KNIT - Knit design with realistic effects

The perfect add-on for knit design development. You can develop your own knitting stitches or use the comprehensive Knit Stitch library include with the module. Easing communication for knitting machines.



Drawing design, detail.

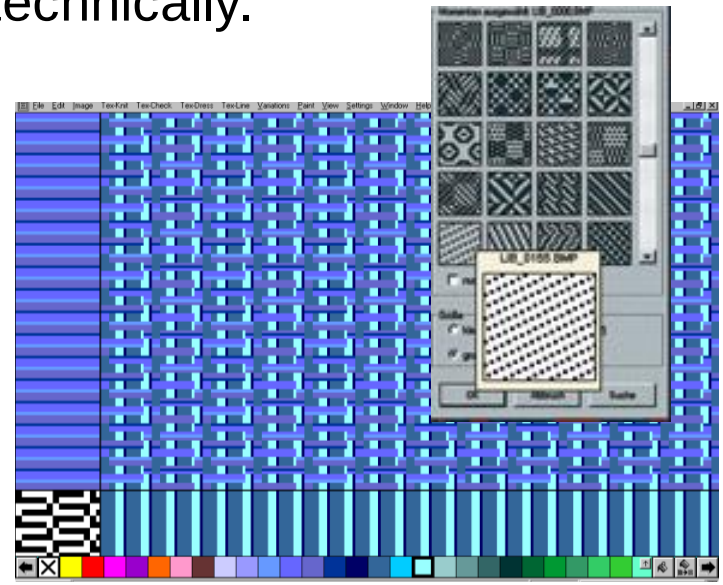


Knit design.

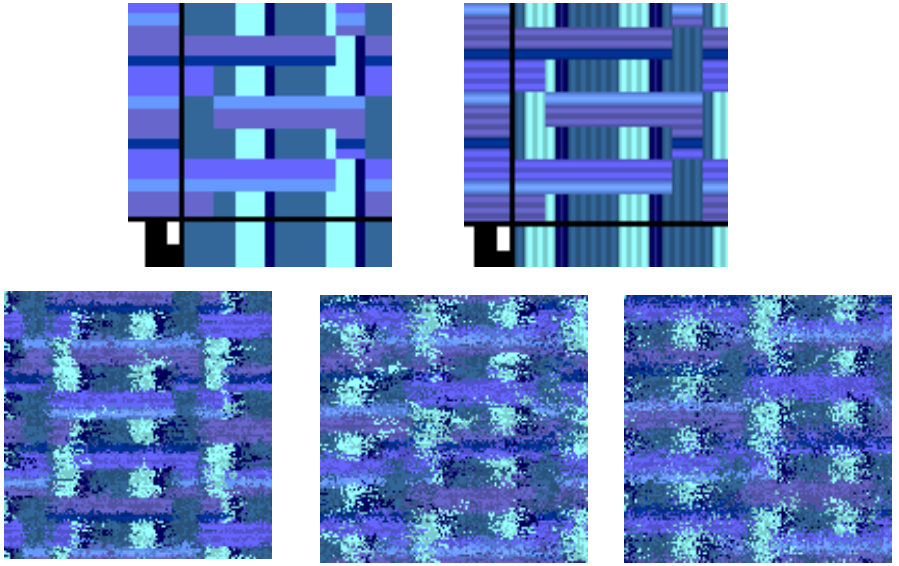
Design of fabrics.

TEX – CHECK - Virtual simulation of yarn dyed woven fabrics

The TEX-CHECK plug-in allows the user to create yarn-dyed woven fabric designs that look as close to actual woven fabric as is possible using a computer.With freely adjustable definitions of warp and weft and their interaction, program perfectly simulates any imaginable fabric.Each individual yarn within each library can be defined visually and/or technically.



Simulation any imaginable fabric.



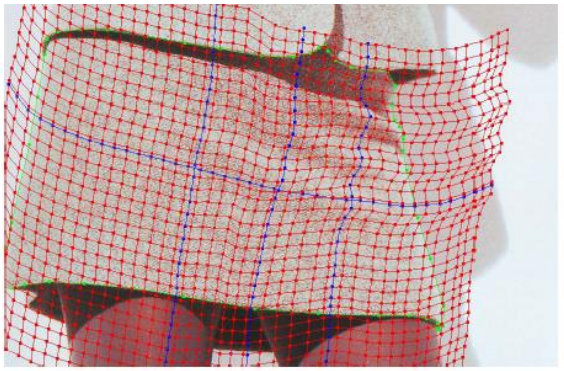
Simulation yarn.

TEX – DRESS - Realistic 3D - simulation

Whit the TEX-DRESS plug-in you can transfer fabric designs directly onto an existing photo or sketch. This dynamic technology enables you to quickly render garments as if being photography sessions. This is an especially useful and cost-effective tool for your sales representatives, giving them the advantage of being able to present the line in virtual format anywhere, anytime.

New look of skirt.

TEX-DRESS also offers a wide range of technical highlights, from the automatic grid calculation to the availability of different perspectives, even a virtual pattern function – all optimizing 3D – simulations from photos. Program´s unique, embedded algorithms perform all calculations automatically.



Simulation 3D effect.

Transforming fabric designs onto existing photo.

CAD SYSTEM – Pattern construction

DIGITIZING

Digitizing a piece is done with the mouse and the menu on the table.

Function:

- identity piece (name, set, size, mirror)
- digitising contour (intermediate points on the curves, grading points – value zero or rule with name from the library or digitising a grading nest , standard notch, variable notch)
- digitising internal contours
- digitising big pieces in parts
- digitising the marks (reference line, position marks)

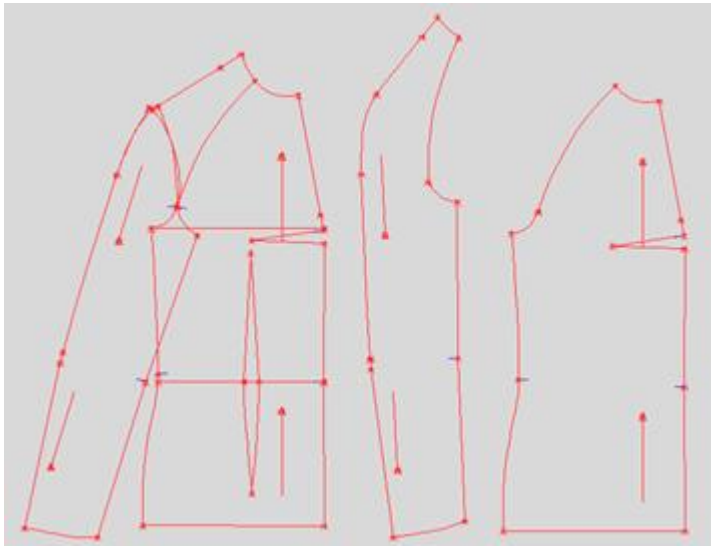
CAD system.

PATTERN GENERATION SYSTEM

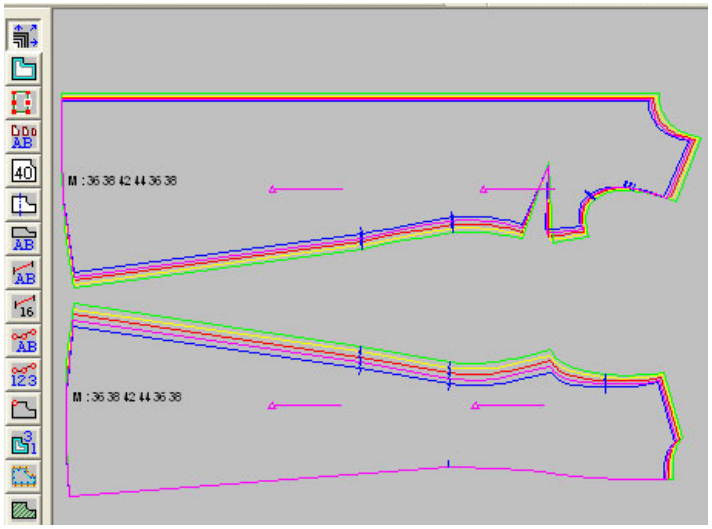
The CAD system with the most advanced automatisms for design, industrialisation and scaling complete garments.

Main characteristics

- The pieces always maintain the seams in all the transformations performed, including: folds, darts, etc…
- All the transformations, such as opening and closing a fan, folding, moving a dart, etc., are reversible.



Modification pieces.



Scaling pieces.

- May define notches, lines or pieces according to other geometric elements of the same or another piece.
- The program has a wide variety of scaling methods, in addition to use of different scaling rules for changes in size, drop and configuration.
- PGS is perfectly integrated with produkt-manager, with modification on the marker program and with MTM for definition of modifications in Custom Tailoring.

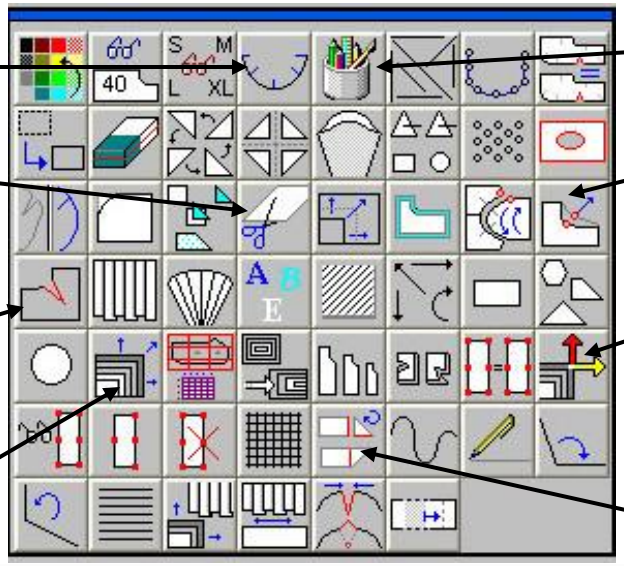
Some commands for modification and create pieces:

Notches – to create and manipulate notches

Divide – to cut a pattern into two pieces

Darts – to create and move darts on a pattern

Grade – to choose which sizes to show on screen

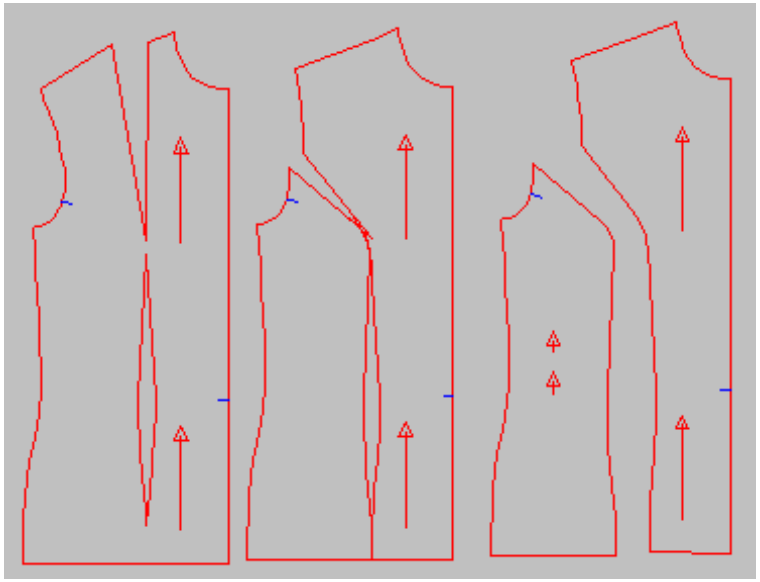


Draw – to draw lines or curves

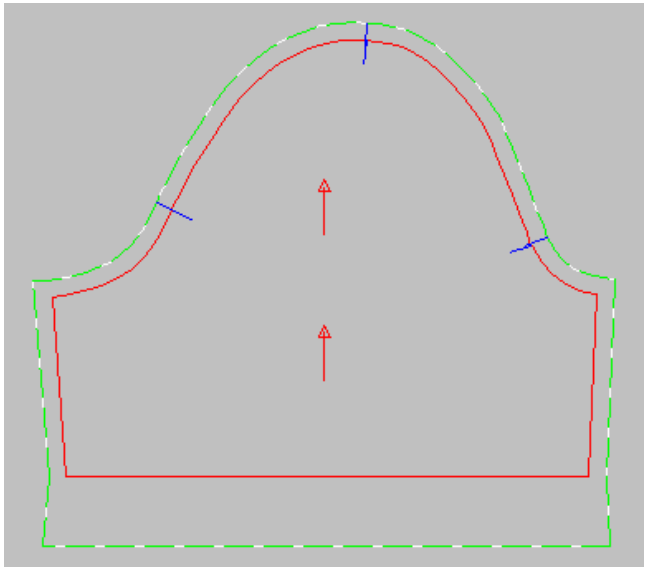
Altering – to move a graded point

Mode rule – the input of grade values for each point pattern

Place – one pattern to be moved/rotate to fit against a second pattern



Move a dart, draw new lines, curves and create new model.



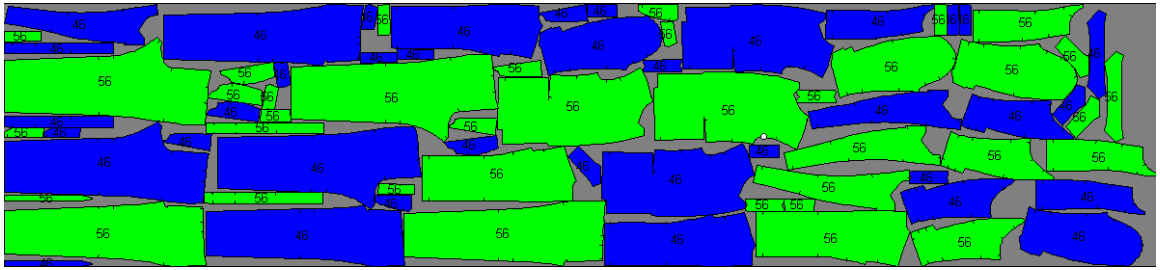
Seam allowances addition, seam corners.

MARKER GENERATION SYSTEM

Maximum performance in interactive and automatic marking

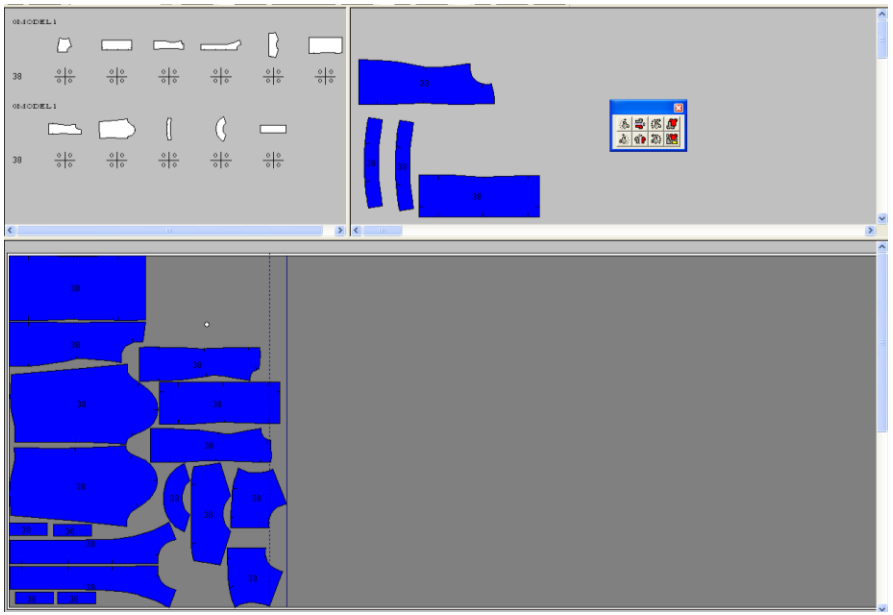
Main characteristics

- Combines interactive fitting and automatic fitting
- Allows all kinds of fabric to be dealt with, whether open, folded, tubular, with stripes, checked.
- Unlimited dimensions as to the number and size of pieces, styles, marker length, etc…
- Marking is dynamic, the user may add new sizes, style or pieces to the marker.
- Supports all kinds of laying methods, for faced fabrics, zig-zag, tubular…

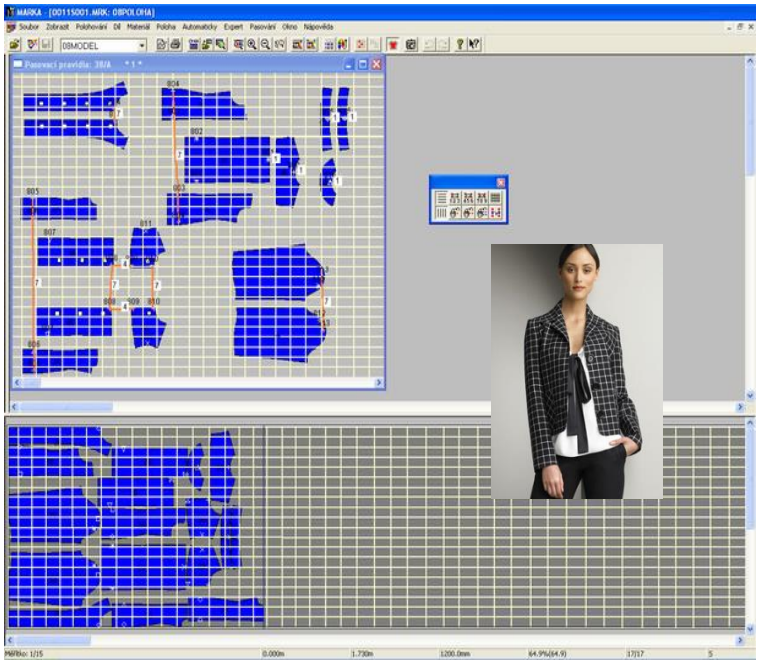


Pattern pieces on the marker plan.

- Great flexibility and simplicity in assignment and management of gross or blocking distances, and safety or distances buffering.
- Allows any marker from the data base to be viewed for use as a reference marker.
- Allows pieces on striped and checked or patterned fabrics as simply as on plain fabric.



Work in the marker generation system.



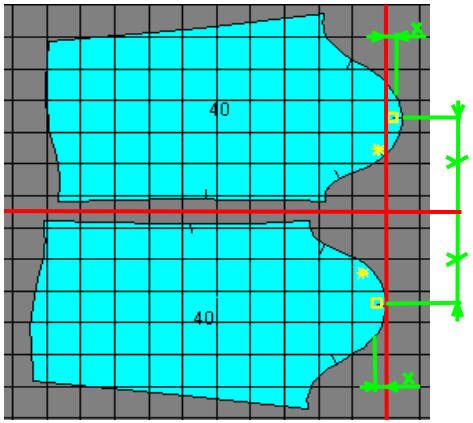
Checked marker plan.

MATCHING SYSTEM

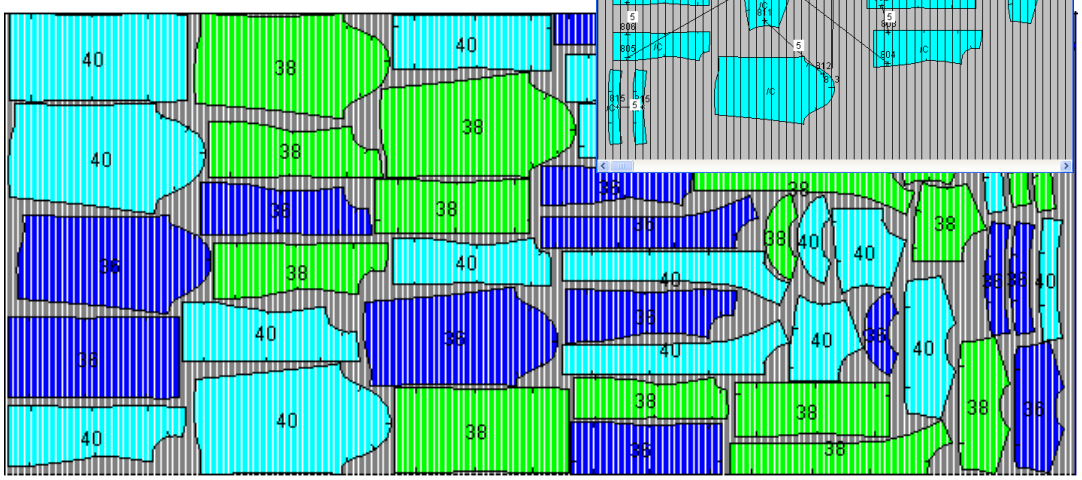
The ideal technological solution to cut patterned fabric in upholstery and tailoring

Main characteristics

- Ideal tool to cut striped, checked and other patterned fabric in the tailoring and upholstery industry, based on the digital process of image on the real fabric, which are taken by a high resolution telecamera.
- The program guarantees the correct position of the cloth patterns on the fabric pattern design.



Matching rules of pieces.



Pattern pieces on the marker plan on striped fabrics.

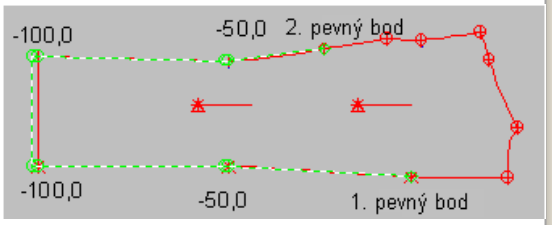
MADE TO MEASURE

M.T.M. the complete automatized solution for industrial custom tailoring. It is program used for the production of individual and perssonalized garments. The specific measures of a customer are employed for the adaptation of standard pieces already saved in the system.

Main characteristics

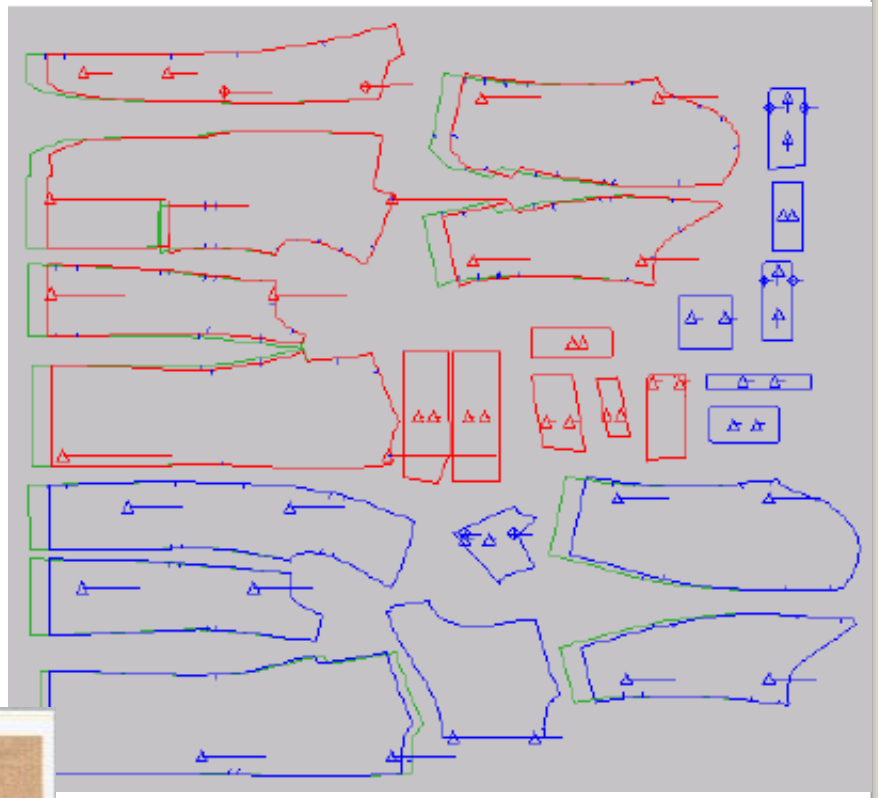
- Automatic performance of the pattern modification on the reference garment to achieve the custom adapted garment patterns for the individual customer . Modifications of the patterns is performed on the nearest reference size to the customer, as identified at the point of sale.
- Automatic fitting of the markers required to manufacture the garment. The individual garment markers are fitted by copying from the reference marker.

Take measurements.



Modification pattern.

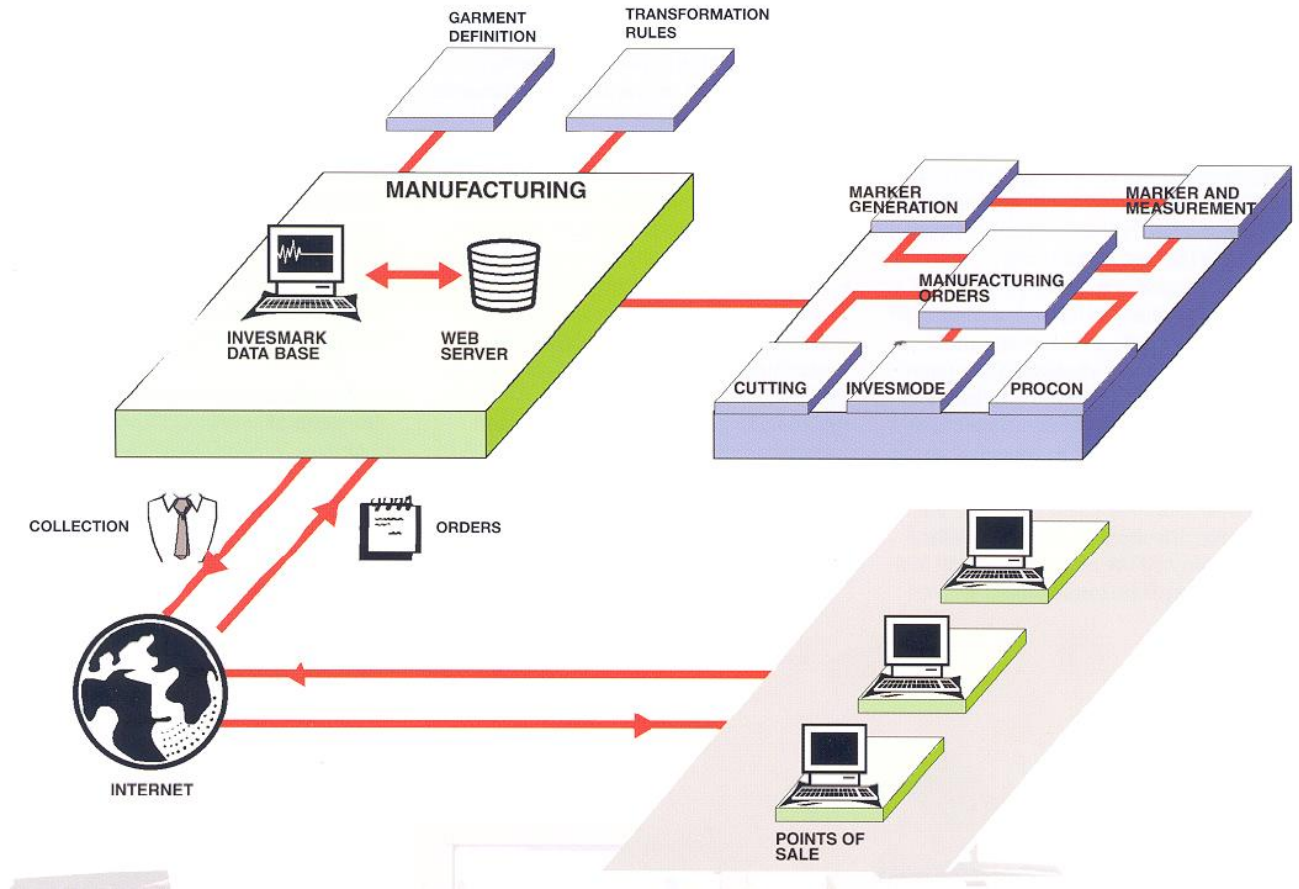
- The set of possible modifications to adapt a garment to the customers individual measurements is unlimited (shortening sleeves, raising shoulder, shortening hems, raise right shoulder 2cm, etc…)
- The data is sent by internet to the factory, where the garment will be produced in the shortest possible time



Creating patterns automatically.

The customer defines the personal options for the product desired.

- Internet publishing of the set of modifications, along with the adequate sartorial methodology to take measurements.



Custom tailoring process.

PRODUKT MANAGER

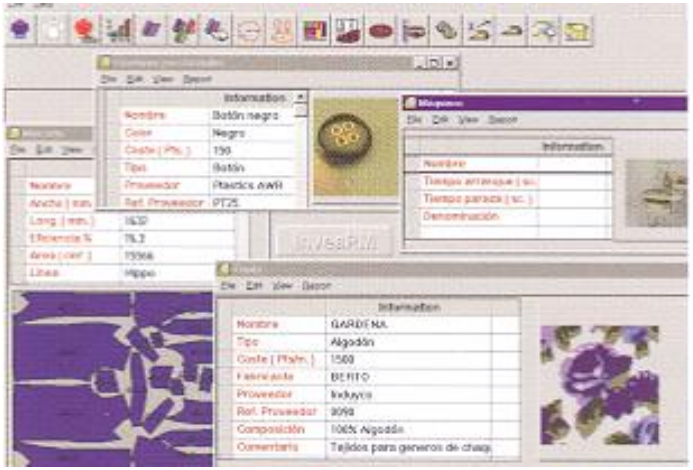
The produktivity and coordination tool to develop and manage collections. It is a product technical information system for the tailoring industry which facilitates agile development of new collection.

Main characteristics

- Integrated management, from the same multimedia data base of all the product technical information: design, sketches, measurements tables, patterns, markers, scaling, processes, operation, etc.
- The best coordination between the different departments which intervene in creation of the collections: design, patterns, procurement, commercial, etc.

Technical information of product.

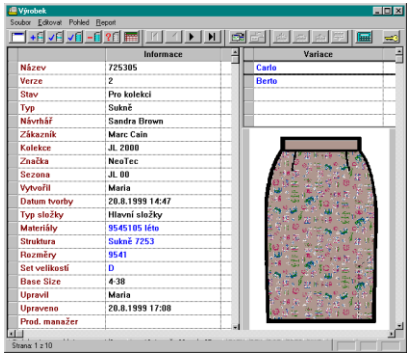
- Improvement in the process of creating new collection, reusing the information from previous campaigns.
- Precise studies of fabric cost, labour and materials, to appraise the different alternatives.
- Preparation of product scaling using standard modules.
- Complete integration with the corporate information systém to share information on accesories, scalig, manufacturing process …
- An organised and agile control process for changes in product configuration.



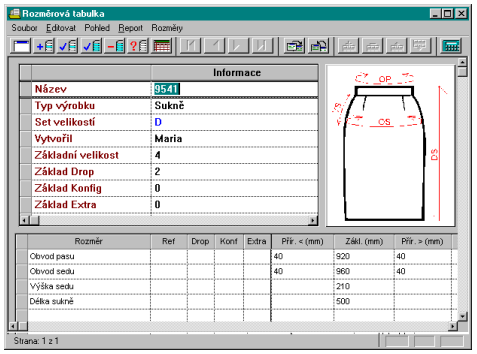
Technical information of product.

The distinguishing features

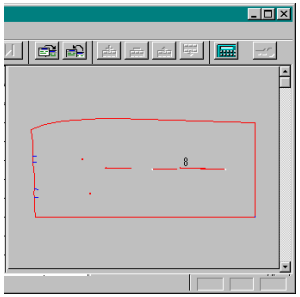
- multimedia data base to manage all the technical information relating to the product:



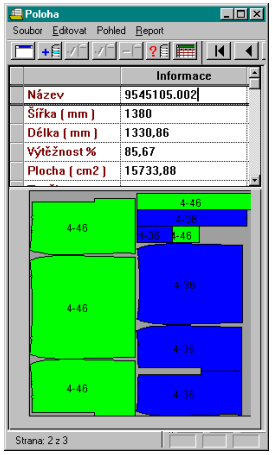
Images of figures and explanatory sketches.

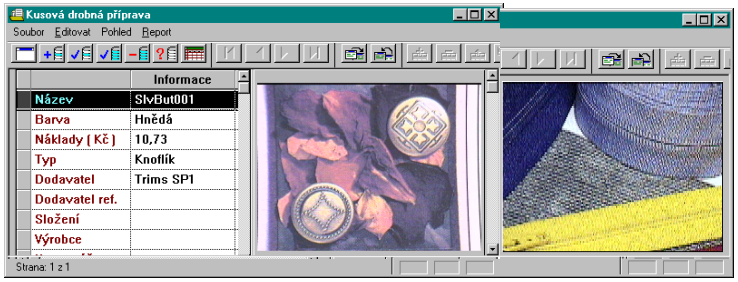


Measurement tables and explanatory sketches.

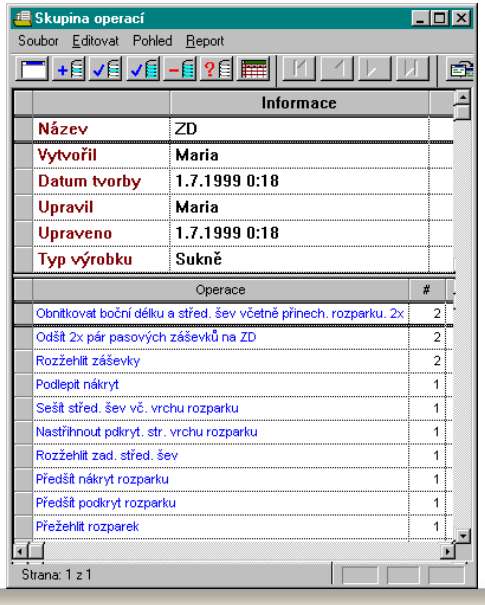


Patterns and markers.

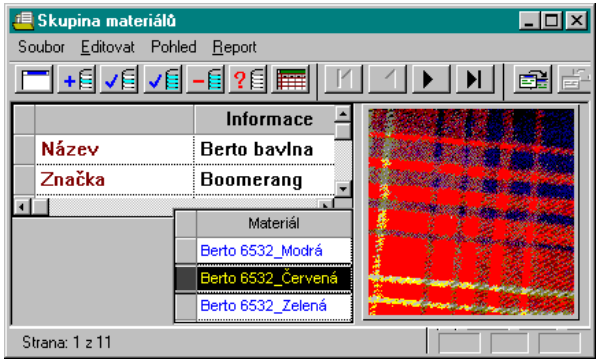




Ornaments and accesories used for each garment in the collection.

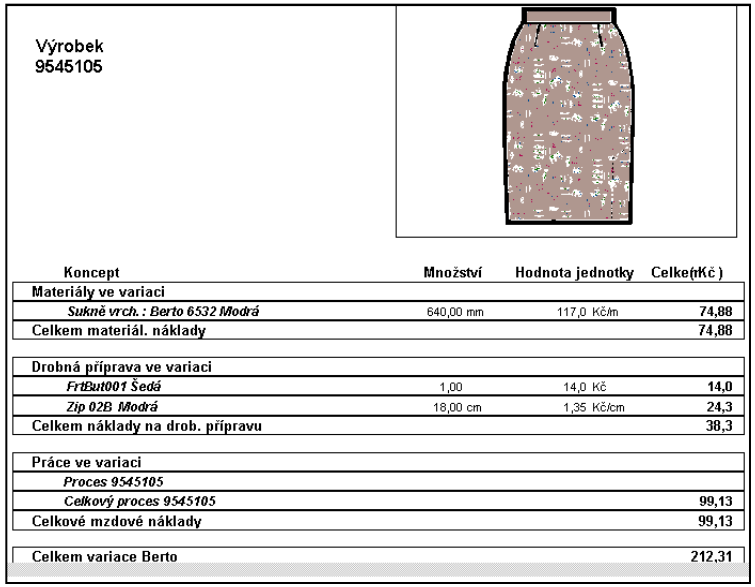


Manufacturing operations and processes. Described in execution diagrams and, if appropriate, video and sound support.



Groups of fabrics used to tailor each garment in the collection.

It provides a wide set of predefined reports and also includes a tool to generate new reports.

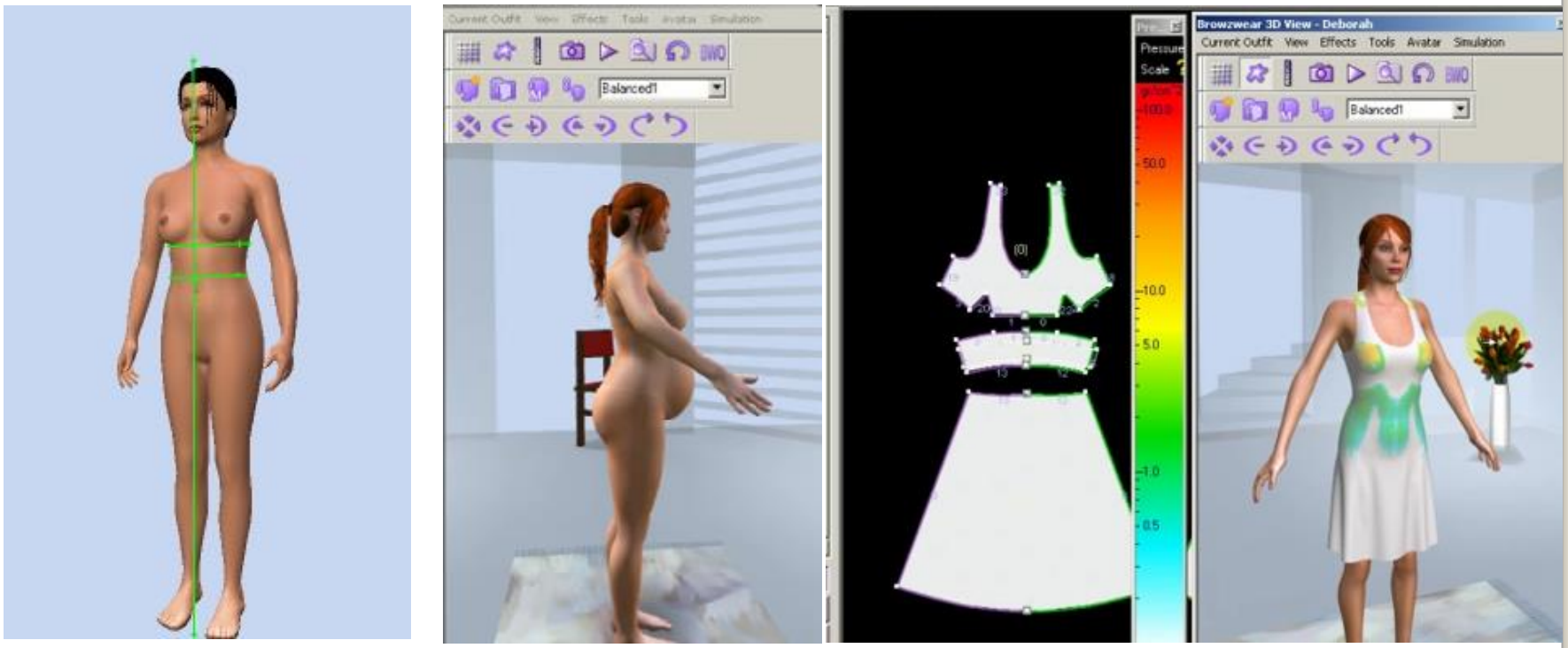


Possibility of performing calculations on the list of materials, as well as on the labour defined in the manufacturing processes and the fabrics required to tailor each garment. The calculation methods may be defined for each company in accordance with its needs.

Possibility of performing calculations on the lengths and areas of patterns, which may be used, for example: to calculate estimates of sets of fabrics and grains.

V – STITCHER - Transform your vision into reality

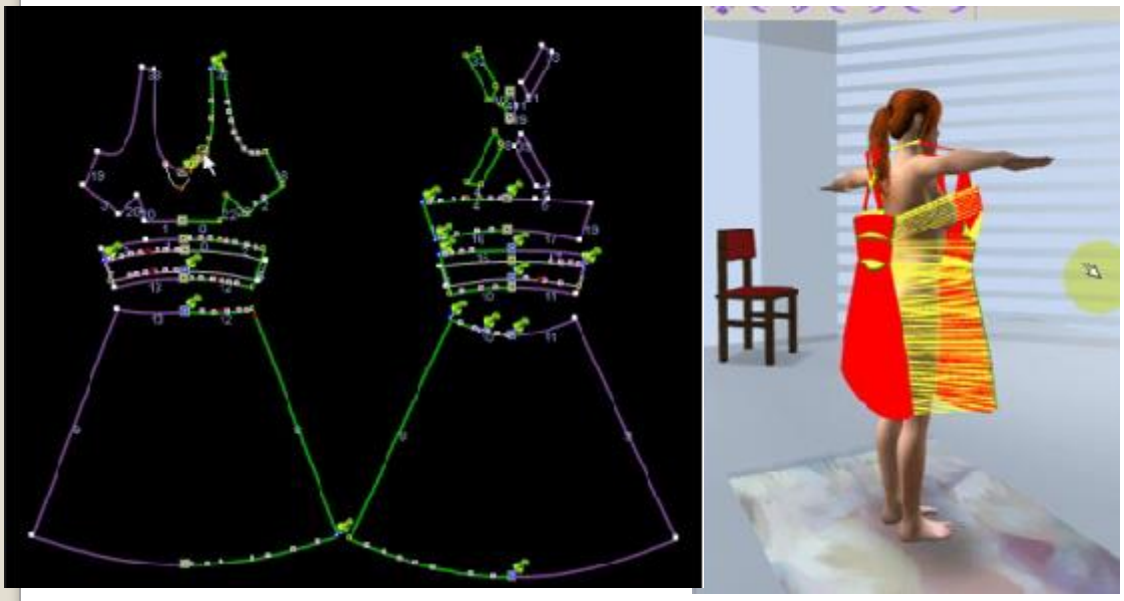
V-Sticher is a 3D design application that lets you streamline the design cycle. It simulates texture, draping and fit of garments by displaying them on a realistic virtual human body based on your pattern, fabric and texture data.



Realistic virtual human body, fit your collection on unlimited body types

FIT

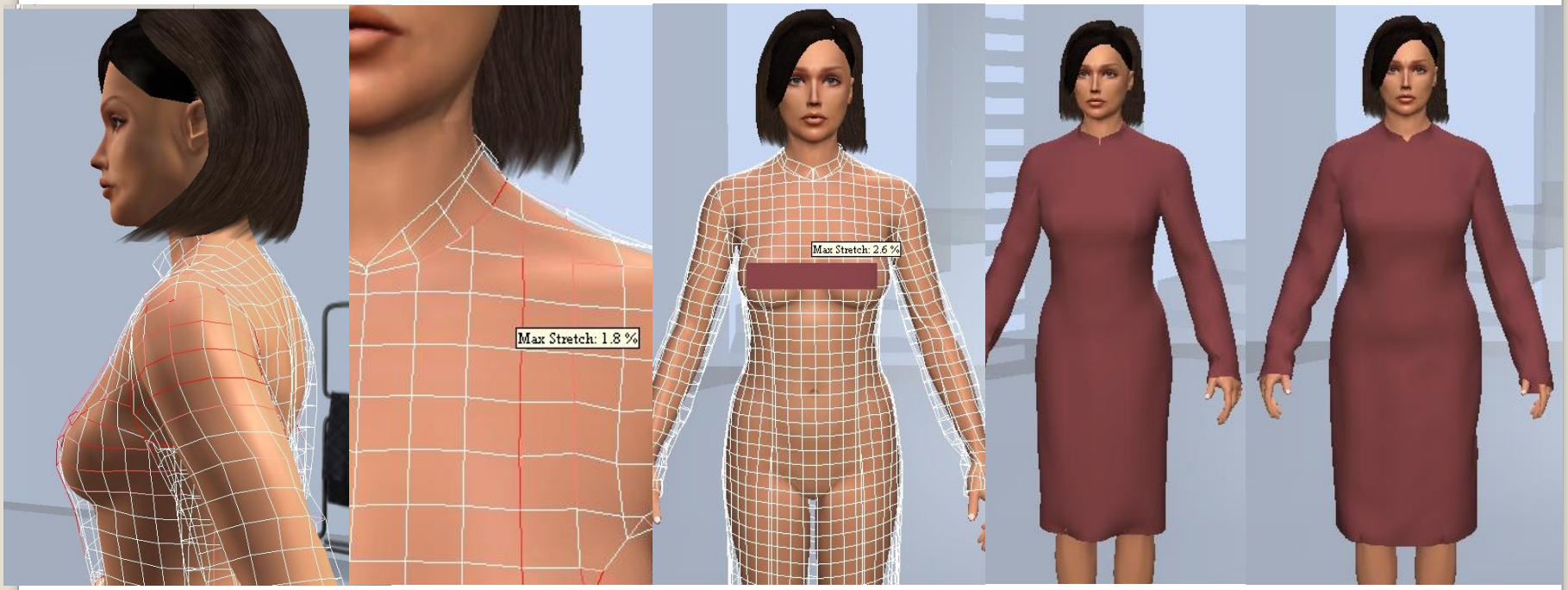
- The most advanced computerized simulation of garments that genuinely reflects reality.
- Exceptionally detailed, true-to-life representation of an adaptable 3D human body, in various poses.
- Transforming standard 2D information into 3D garmens directly from data base from standard CAD system.



Transform your 2D shapes into 3D garment

Various poses

- Supporting fitting sessions by delivering real-time 3D response to any 2D changes using inherent PGS powerful tools
- Advanced testing tools enable accurate of the garment fit



V- Sticher simulates fit of garments by displaying them on realistic virtual human body, unlimited body tapes.

DESIGN

- Designing in 3D using picture perfect textures
- Design, present and transmit garments, fabric, seams, prints and logos in real-time
- 3D, with photo quality true-to-life representation

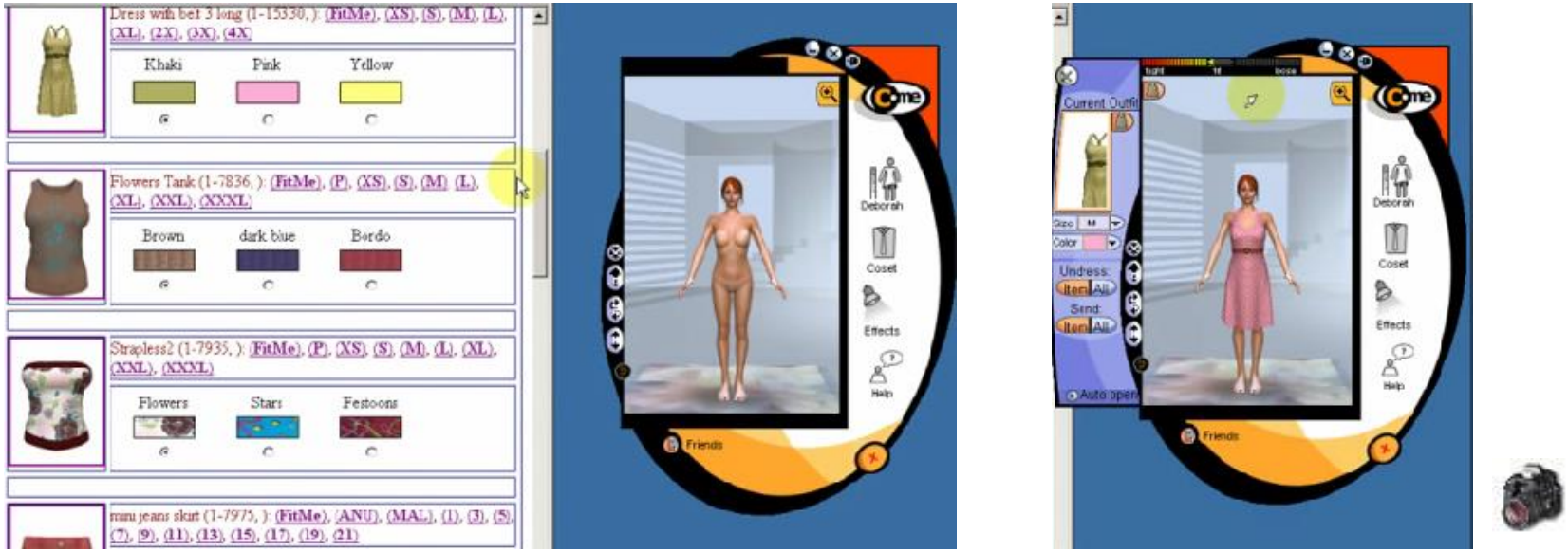
Designing in different sorts of textures.

MERCHANDISE

- Present a real-life view of your collection in high quality, interactive 3D catalogue.

COLLABORATE

- Enabling remote viewing through Internet platform.
- Sharing data among multiple users through integrate database that stores information such as style, shapes, textures, fabrics, attachments and sizes.

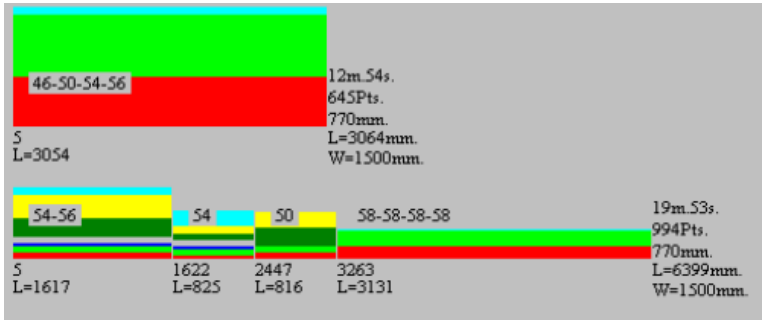


Communicate with your partners, expand your portfolio of design option through a realistic 3D digital catalogue.

CUTPLAN

Intelligent planning for the cutting room: reduced fabric consumption levels and improved response times.

- CUTPLAN is system for planning cutting orders that allows the optimum manufacturing solution to be found for each cutting order.
- CUTPLAN interacting with the designer, provides the set of marks needed for manufacturing a given cutting order in such a way as to optimise at the same time the fabric consumption and the costs for the spreading and cutting operations. To achieve this optimisation, CUTPLAN uses a set of parameters that defines the unit costs for the fabric and the spreading and cutting operations as well as the technological limitations such as maximum lengths and heights for the spreading and cutting tables.
- It provides a graphic presentation of the solutions for marking and spreading.

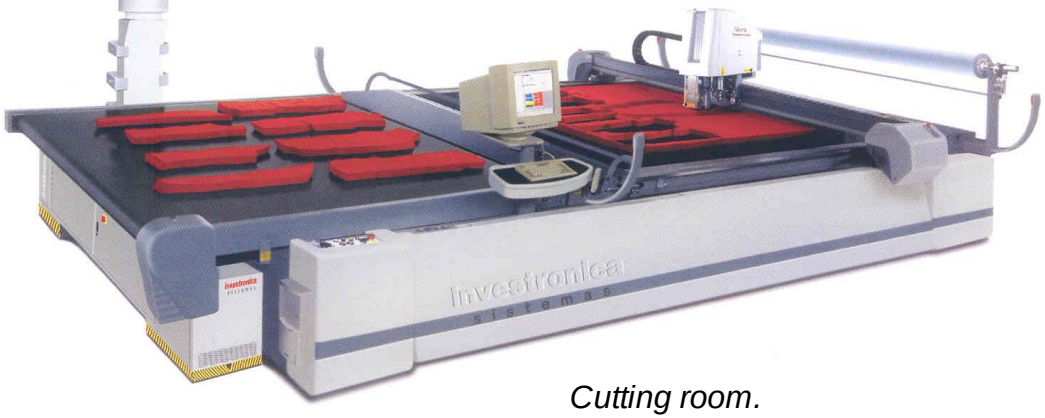


Graphic presentation of the solution for spreading

C.A.M. SYSTEM

CUTTING SYSTEM

- Cutting digital control systems may be applied in any sector where automated knife-cutting for materials is required.
- It has all the standard advantages of a system with such avantgarde technologies as reliability, repetition and precision.
- Top cutting quality, digital control, lateral vacuum, balanced knife, direct digital control,sharpening mechanisms, blade cooling system, automatic control for adaptable regulation of the vacuum level, automatic mat cleaning system, cutting checked or patterned fabrics (Matching system).



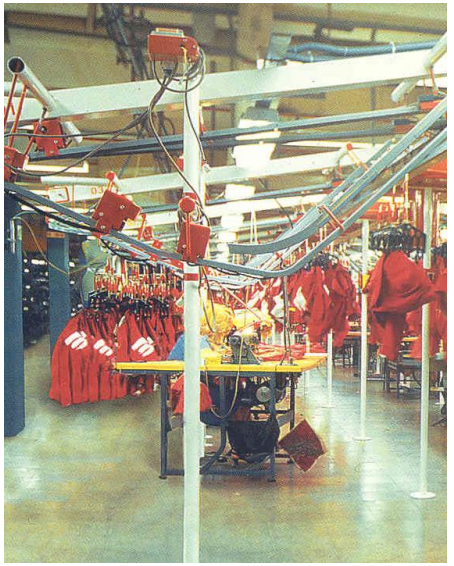
Cutting room.

Detail of a knife.

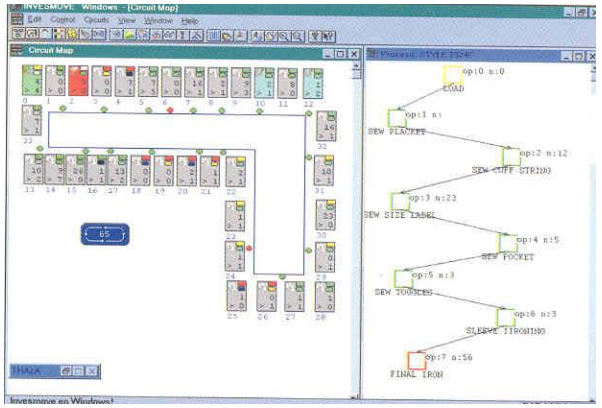
C.I.M. SYSTEM

INVES MOVE

- Invesmove is an aerial transport system for the automatic classification and distribution of production units during the manufacturing process, applicable to apparel manufacture and related industries.
- The computerized control system also makes it a real-time control and management tool for production processes, both in terms of the product during the various stages of the production process and also in terms of the continuous monitoring of the performance levels of operators and the productivity of the production line.



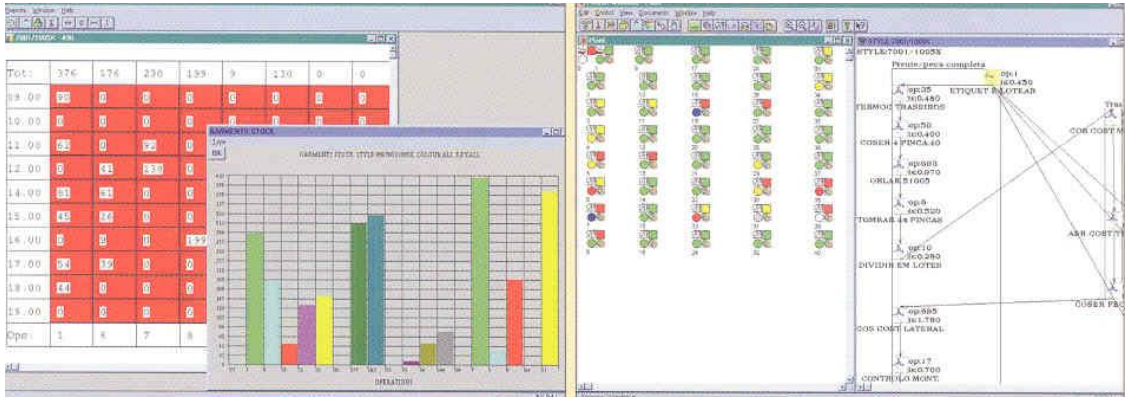
Transformation within the factory.



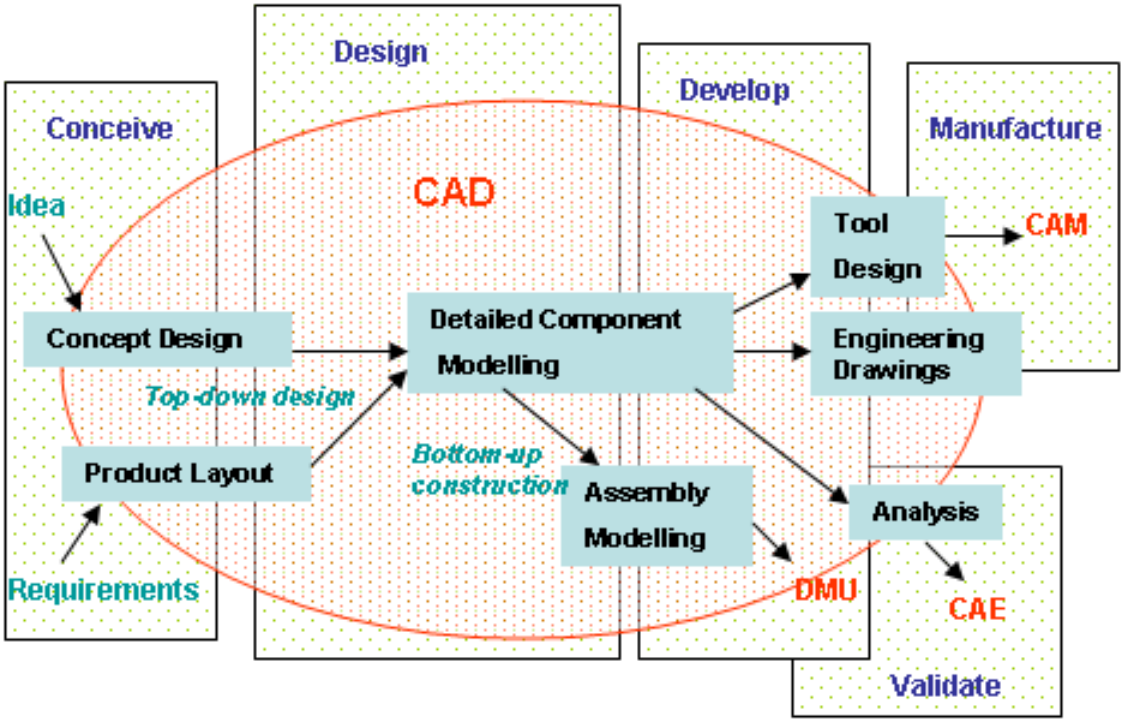
Computerized control system.

PROCON

- PROCON is a real time computer solution for the administration and control of batch-operated production lines.
- One of PROCON ´s many assigned parameters is to define both what operations to carry out and what order to carry them out in.
- The system is equipped with powerful software to handle information on activities at shop floor level.
- Provides valuable real time data via a series of reports on (model status, reports on employees or production flow and rates.



Status of the manufacturing order.


Design
Develop
Manufacture
Conceive
CAD
Idea
Tool
Design
CAM
Concept Design
Detailed Component
Modelling
Engineering
Drawings
Top-down design
Bottom-up
construction
Product Layout
Assembly
Modelling
Analysis
DMU
CAE
Requirements
Validate