

tukaCAD

TUKADESIGN

1. Introduction

TUKAcad is a complete solution for digital pattern making, grading and marker Making on a Windows environment. TUKAcad increases productivity of pattern making and marker making, while reducing development costs.

Pattern Makers are able to use powerful CAD tools to draft patterns from scratch or modify existing blocks with grading information to create new patterns faster and more accurately. TUKAcad makes it easy to create various types of notches, darts, pleats, seams, drill holes and internal contours.

2. Process Improvement

Grading stays with patterns.

The changes made to one (base) pattern are automatically reflected in the entire size range eliminating the need for recalculating the grade rules. By utilizing existing pattern blocks or reference patterns with grading to develop new styles, grade rules are automatically applied to the new style pattern, eliminating the need to reapply grade rules on new developments.

Demo Video: <http://www.youtube.com/watch?v=86MZHdLRZeg>

Ability to work with other CAD data

TUKAcad imports and exports data in industry standard formats such as ASTM.dxf and AAMA.dxf for data exchange with other cad systems.

Function Speed

Functions have been streamlined to reduce the number of steps (mouse clicks) the pattern maker needs to make to perform the function. Speeding up pattern development TUKAcad's multitasking capability allows the user to perform workload distribution automatically over the network. Built in program scans the status of all connected workstations and while user works in the foreground with cad functions, jobs for Plotting, Grading and Marker are carried out in the background without any degradation in performance.

Demo Video: http://www.youtube.com/watch?v=i1_lcZT1r6A

Automatic backups

Automatic data backup set at predetermined times insures work performed is not lost. If multiple files are open backs are created for all.

Demo Video: <http://www.youtube.com/watch?v=DUDeNa8LiQA>

MS Office Integration

System has built in integration for MS office to seamlessly create emails while working in TUKAcad.

Demo Video: <http://www.youtube.com/watch?v=XCLWdka-NWU>

Email files

Pattern files, marker, plot and cut files are automatically zipped for emailing thorough MS office integration

Video Help

TUKAcad has built in video/ audio help demonstrating every tool and function. Videos run one minute or less describing how to use a tool or perform a function. . In addition, new software releases come with text “ What’s New” listing built into help menu. Multi languages
Software text and video help available in multi languages

Pattern Card Reports

System allows for automatic generation of customizable excel reports, i.e. pattern cards/cutters must, specification sheets and measurement charts

Demo Video: <http://www.youtube.com/watch?v=XCLWdka-NWU>

3. Functionality

Training Videos

TUKACAD comes with built in, step-by-step, training videos for every key function. These videos come complete with audio and video from TUKATECH’s trainers. Keep the trainer with you at all times, by playing back these videos at your convenience.

Demo Video: <http://www.youtube.com/watch?v=MDWsS6lt40A>

Report sharing

Data can be uploaded to existing PLM and PDM systems, along with images, or stored in designated network files. Allowing for easy access to information for Fabric Buyers, Production Engineers, Costing and Product Merchandisers.

Image Placement

Cad images of fabric prints, plaids, stripes, logos, etc. can be imported for direct application to the pattern piece or to the work area for accurate placement engineering. Allows for engineering of pattern pieces based on artwork or fabric characteristics. The same images can be transferred to marker making for perfect matching.

Demo Video: http://www.youtube.com/watch?v=wkhI_UlyNvA

Ruffle Tool

System quickly creates ruffles or spiral pattern pieces utilizing single layer drop down menu simplifying the development of these difficult pattern pieces. Ideal for DRESS, CHILDREN and CONTEMPORARY fashion manufacturers.

Demo Video: <http://www.youtube.com/watch?v=mwIFIGLVMl4>

Circular tool

Function tool will create a 90, 180, 270, or 360 degree circle, or any opening angle piece.

Angle Grading

Angle grading simplifies grading on difficult points without the need for alternate grain line. Ideal for BRA manufactures.

Demo Video: <http://www.youtube.com/watch?v=31QQvRLhdx0>

Half Size Grading / Variation Grading

The ability to quickly and easily create half size or variation grading without having to redevelop grade tables. Ideal for MADE TO MEASURE.

Demo Video: <http://www.youtube.com/watch?v=wq1eOY07oY4>

Scale and Shrink

TUKAcad allows application of scale shrinkage per size, with options to include or exclude seam allowance and base size. Scale and Shrink function adds scaled percentage values in piece description for easy reference. Ideal for DENIM applications

Demo Video: http://www.youtube.com/watch?v=M_BxY8Y7CAc

Before and after wash measurement reports

Create measurement chart in excel format that shows before and after wash pattern measurements.

Demo Video: <http://www.youtube.com/watch?v=XCLWdKA-NWU>

Notch and drill hole grading

Notches and drill holes can be graded in many ways to suit the need of the product development process.

Flexible Grading

The flexible grading rule system allows graders to build rules for a single point or the entire piece or different grade rule libraries. Flexible search engines eliminate duplication of grade rules.

Reference Blocks

This feature will keep a copy of the original pattern piece and save it as a layer within the piece to compare changes made to the block. Options allow you to easily restore or remove this block and even have the system stamp the date and time on the reference block. The reference block's segment lines provide user the ability to see changes as they make them or after making them to insure changes are correct. Also provides user last change reference in the event user is interrupted during pattern change process.

Demo Video: <http://www.youtube.com/watch?v=mwFIGLVMI4>

Mirror Pieces

Half pieces can be defined instead of mirroring, making the workspace more efficient. Half pieces will automatically open when plotted or sent to TUKAmark.

Demo Video: <http://www.youtube.com/watch?v=X3BiogCh0MA>

Arrange Workspace

Arrange workspace function allows rotation of big pieces, automatic rotation to horizontal grain line, for all pieces or for by specific material group, for user to optimize workspace.

Demo Video: http://www.youtube.com/watch?v=Om6zkV1F_40

Compare Length

Compare length function allows user to measure pattern segment differences by straight distance, by X & Y coordinates, and along the curve of the segment.

Demo Video: http://www.youtube.com/watch?v=xGk_prf_K8Y

Global seam allowance

User can apply a seam allowance value to all pieces or to selected pieces. Ability to apply seam allowance to individual segments.

Plot to PDF

Demo Video: <http://www.youtube.com/watch?v=siGITyP-nwk>

TUKAMARK

Introduction:

TUKAmark software allows users to make markers manually for production and automatically for quick pre-cost estimation and review.

Marker makers can call up additional pieces and sizes at any time during the process, creating flexibility in the marking process.

TUKAmark auto mark

TUKAmark auto marker function allows users to automatically place the pieces in a marker by fabric type or classification to quickly create costing and sample cutting markers.

TUKAmark piece placement

Pieces can be grouped and quickly placed manually via mouse click and drag function. Mouse can also be utilized to bump and pack pieces, zoom in and out for user review and other short cut functions.

Manual marking fabric savings

TUKAmark allows the operator to utilize fabric selvages in seams. Function clearly shows on screen the exact width with actual selvage line. Pieces within selvage and on selvage are visible on screen or on printed marker. This unique feature allows an additional 2% - 4% fabric savings.

Actual image of fabric

Actual images of fabric design can be imported for accurate piece placement in regards to plaids, stripes, engineered prints, etc. These images are brought in via .bmp, .jpeg, .tif, etc

Add Text

Marker maker can add text anywhere in patterns or markers throughout the process for spreading or cutting special instruction and or production process information.

Full matching capabilities

Ability to define piece placement for multiple stripe and plaid line matching. System gives user a variety of options to set parameters for matching.

Pattern information

Comprehensive pattern information, pattern perimeter definitions and other pattern information quickly and easily displayed upon demand.

Buffers

Ability to add buffers during marking for control of cutting quality. Buffers can be added on entire pieces or selected segments of the pieces to take advantage of fabric parameters.

Alter patterns

System allows marker maker the ability to edit or alter patterns while making markers. This allows marker makers to better utilize fabric widths and actual fabric characteristics.

Existing plotters

System comes with built in drivers for import and export to input and output devices. Software creates plot files that can drive any existing hardware or non Tukatech plotters.

Multi ply combo

User can combine 2 sizes of the same piece so that they are stacked inside each other for cut downs, for double sided materials, outside production, etc.

Track style changes

System has update command that allows user to quickly update pieces in an existing marker reflecting pattern piece changes to a style. System scans date of latest pattern making activity and marries that to date that markers were made. If date is not sequentially correct system automatically advises user.

Automatic cutter productivity increase

System allows user to create and edit cut paths for numerically controlled (NC) cutters that improve productivity by 7 - 14%.

Marker reports

System generates customizable excel marker reports.

The reports show; fabric utilization, marker efficiency, marker width and length, total perimeter cut distances, visual mini marker, piece placement information and placement confirmation. Data can also be uploaded to existing PLM and PDM systems or stored in separate network files for downstream, non- system users.

SMARTMARK

Introduction

SMARTmark is a fully automated marker making software add on to TUKAmark.

Powerful algorithms automatically make more efficient costing, consumption, fabric purchasing and production markers, quicker than manual marker makers.

SMARTmark NET Q

Net Q is set up as a “Live” processing center to make markers based on the orders it receives. It’s installed on a stand - alone station that can be online 24 hours a day and accessed from remote sites.

Automatic vs manual marker making

The time SMARTmark NET Q spends working on each marker is user defined, based on marker type, between 1 and 10 minutes per marker. Utilizing actual ratios and sizes to be cut, will save anywhere from 3 to 15% in fabric cost per marker, and in considerably less time than manual marker making.

Marker report

SMARTmark net Q will make markers to the highest efficiency possible then save the completed marker back into the user defined folder and automatically generate the marker excel report. The report can be stored in the same folder as the marker or in user designated folder for non - system employees.

24/7 processing

Ability to load multiple marker orders in queue for continuous processing 24/7.

Utilize full production fabric widths

Ability to quickly make markers to utilize actual cut-able widths of production fabric rather than cutting narrowest common width. Approximate fabric savings average 3 - 5% annually.

Prioritize processing

User can change the queued order sequence to prioritize marker order processing.

Partial orders

User can enter partially placed or “incomplete” marker files into the Q and instruct the system to finish the markers. This allows utilization of SMARTmark NET Q for higher efficiency and faster marker making on unique style or fabric characteristics or to mimic unique marking configurations.

Bundle nesting

Define shading areas within the marker area based on actual fabric shade variations and SMARTmark will automatically nest bundles within those areas.

Block fusing

System has multiple block fusing options that user can select to determine optimal placement methodology.