## Features of Make-The-Cut (4.6.1) and KNK Studio (8.0)

✓ Standout Feature

• Regular Feature

— Feature Needs Improvement

<u>Category</u>	<u>Feature</u>	Make The Cut	KNK Studio
Screen	Toolbars	<u>Movable</u>	✓ Movable and customizable
	Zoom	<ul> <li>10% - 1000%</li> <li>Zoom to Select, Virtual Mat, All Shapes</li> </ul>	<ul> <li>6% - 800%</li> <li>✓ Marquee Zoom</li> <li>✓ Zoom to Select, Document Area, or Previous View</li> </ul>
	Units	<ul> <li>Rulers and display W and H in inches only</li> <li>Some measuring functions with optional metric</li> </ul>	✓ Inches or mm with easy toggle
	Grid	<ul> <li>1" grid lines only</li> <li>8 snap-to-grid settings</li> <li><u>Circle grid option</u></li> </ul>	<ul> <li>✓ <u>Unlimited grid line spacing</u></li> <li>✓ Unlimited snap-to-grid settings</li> <li>● 9 color options</li> </ul>
	Guidelines	— Only appear around selected images	<ul> <li><u>Custom guidelines (including angled)</u></li> <li>Guidelines can be added through any two nodes</li> </ul>
	Document Area	<ul> <li>Custom Virtual Mat dimensions</li> <li>9 color options</li> <li>Limited design space outside of Virtual Mat</li> <li>Position origin set at upper left corner of Virtual Mat</li> </ul>	<ul> <li>Custom Sign Blank dimensions</li> <li>Hide document</li> <li>Design space around all four sides of document</li> <li>Move ruler positions</li> <li>Change position origin</li> <li>9 color options for background and document outline</li> <li>Unlimited colors for document fill</li> </ul>

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	Image Appearance	<ul> <li>Anti-aliasing gives smooth edge appearance</li> <li>Must select Contrast mat to see true colors</li> <li>Option for Fill, Outline, or Both</li> </ul>	<ul> <li>— No anti-aliasing - images appear rough/uneven</li> <li>Option for Fill, Outline, or Both</li> </ul>
	Line Style on Images	<ul> <li>Thin line and single color only</li> <li><u>Dash option (for cutting)</u></li> </ul>	<ul> <li><u>Any thickness and any color</u></li> <li><u>Dash option (for cutting)</u></li> </ul>
	Layers	<ul> <li>Easy ordering, locking, re-coloring, hiding of shapes</li> <li>Used to control what is sent to cut</li> </ul>	— Awkward to learn and use
	Pages	<ul> <li>✓ Easy assignment of layers to pages</li> <li>✓ Option to have shapes on a page visible on all pages</li> </ul>	— Awkward to learn and use
	Shortcut Keys	Over 100 pre-assigned	<ul> <li>Over 100 pre-assigned</li> <li>✓ User may edit assignments and add another 34</li> </ul>
	Undo Functions	<ul><li>Undo and Redo</li><li>Ability to set limit</li></ul>	<ul> <li>Undo and Redo</li> <li>Ability to set limit</li> <li>✓ Navigators allow user to go to a set point in design</li> </ul>
Import/ Export	Import Raster	<ul> <li>.jpg, .bmp, .tif, .png, .gif</li> </ul>	• .jpg, .bmp, .tif, .png, gif plus other less common
	Import Vector	<ul> <li>✓ .svg, .svgz, .pdf, ai, eps, .wpc, .gsd, .ttf, .scut, .scut2</li> <li>✓ Copy paste from KNK Studio into MTC</li> <li>— Color doesn't import on all file types</li> </ul>	<ul> <li>.ai, .eps, .dxf, .wmf, .pdf, .gsd, .plt plus other less common</li> </ul>
	Export Raster	<ul> <li>.jpg, .png</li> <li>✓ Option to export .png with transparent background</li> <li>✓ <u>Watermark and Drop Shadow options</u></li> </ul>	<ul> <li>.jpg, .bmp, .tif, .pcx, .png</li> <li>— No option to export .png with a transparent background</li> </ul>

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	Export Vector	<ul> <li>.ai, .eps, .svg, .pdf</li> <li>✓ to Basic Shapes and to Online Gallery</li> </ul>	• .ai, .eps, .svg, .pdf, .plt, .dxf plus other less common
	Additional File Access	<ul> <li>100+ Basic Shapes</li> <li>✓ Import from Online Gallery of &gt;5000 files</li> <li>✓ Import from Lettering Delights.com</li> </ul>	<ul> <li>✓ <u>9 Basic Shapes customizable to hundreds of variations</u></li> <li>Clipart Viewer of &gt;3900 files</li> <li>✓ Customizable category access</li> </ul>
Text	Font Types Supported	<ul> <li>TTF, OTF</li> <li>✓ <u>OPF</u></li> </ul>	<ul> <li>TTF, OTF</li> <li>✓ VEF, WFN (includes &gt;40 free engraving and line fonts)</li> </ul>
	Character Map	<ul> <li>Full character set available</li> <li>✓ Option to resize display</li> </ul>	— <u>Full character set available</u>
	Input Options	<ul> <li>Bold; Italic</li> <li><u>Rotate left/right</u></li> <li>Justify (Left/Center/Right)</li> <li>Line Spacing</li> </ul>	<ul> <li>Slant; <u>Vertical Text</u></li> <li>Justify (Left/Center/Right and Top/Center/Bottom</li> <li>Character Spacing; Line Spacing</li> <li>✓ Vertical Text</li> <li>✓ Kerning</li> </ul>
	Special Text Features	<ul> <li>Open fonts w/o preinstall in Windows</li> <li>Split by lines, spaces, or characters within text input window</li> <li><u>Kerning by dragging text</u> or manually moving individual characters</li> <li><u>Fit text to arc using Objects to Path</u></li> <li><u>Fit text to path using Bézier Warp</u></li> </ul>	<ul> <li>✓ <u>Organize installed fonts into custom groups</u></li> <li>Spell check</li> <li>✓ Modify font/size/style within existing text</li> <li>✓ Copy/paste font and style onto other text entries</li> <li>✓ <u>Fit text to arc</u></li> <li>✓ <u>Fit text to path</u></li> </ul>

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Designing	Image Selection	<ul> <li>Click image</li> <li>Marquee-select</li> <li>Hold Shift key to add to selection</li> <li>✓ <u>Click on thumbnail on Layers bar</u></li> </ul>	<ul> <li>Click image</li> <li>Marquee-select</li> <li>Hold Shift key to add to selection</li> <li>✓ Select by group</li> <li>✓ <u>Select by color</u></li> <li>✓ <u>Select by size</u></li> <li>✓ Select by open path</li> </ul>
	Image Manipulation	<ul> <li>Resize; Slant, Mirror; Flip,; Copy; Paste; Paste in Place</li> <li>Align images in 11 different ways</li> <li>Rotate (freely drag or in preset deg increments)</li> <li><u>Space (by dragging only)</u></li> <li>Equal Space</li> <li>Duplicate vertically, horizontally, <u>grid</u> or in a <u>circle</u></li> <li><u>Bezier Warp</u></li> <li><u>Wrap Objects to Path</u></li> <li><u>Hide and Lock by Layers</u></li> <li><u>Delete by Area</u></li> </ul>	<ul> <li>Resize; Slant, <u>Stretch</u>; Mirror; Flip, Copy; Paste</li> <li>✓ Align images in 22 different ways</li> <li>Rotate (freely drag or in any increments)</li> <li>Space (any distance)</li> <li>Equal Space</li> <li>✓ Duplicate vertically, horizontally, grid, staggered, or in a circle</li> <li><u>Warp</u></li> <li><u>Object to Path (with equal spacing)</u></li> <li>— Lock (but doesn't prevent moving)</li> <li>✓ Hide by color, Hide by all but selected color</li> </ul>
	Image Information	<ul> <li>Width and Height (inches only in main display)</li> <li>Location (top left corner only)</li> <li>Measuring Ruler (length &amp; angle)</li> <li>Perimeter; Area;</li> <li>Node count; Segment count; Point count</li> <li>Cut direction</li> </ul>	<ul> <li>Width and Height</li> <li>✓ Location (unlimited points of reference)</li> <li>✓ <u>Measuring Ruler (length &amp; angle w/set Desired Distance)</u></li> <li>— Node count</li> <li>Cut direction</li> </ul>
	Rhinestone Design	— <u>Automatic outlines or horizontal fills</u>	<ul> <li><u>Outlines and fills using fit circle to paths</u></li> <li><u>Metamorphosis and Stenciling provide even more patterns</u></li> </ul>

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	Welding	<ul> <li>✓ <u>Basic weld</u> plus <u>5 Boolean Join tools</u></li> <li>✓ Preview before accepting</li> </ul>	<ul> <li><u>3 welding tools</u></li> <li>Ability to color/layer shapes to achieve <u>other outcomes</u></li> </ul>
	Shadowing	<ul> <li>Inset and Outset</li> <li>✓ Multiples in one step (Nested Duplicate)</li> <li>Blackout option</li> </ul>	<ul> <li>Inset and Outset</li> <li>Multiples in one step with option to change color and thickness with each shadow</li> <li>Blackout option</li> </ul>
Designing	Additional Design Features	<ul> <li>✓ Jigsaw Puzzle</li> <li>✓ Lattice</li> <li>✓ Conical Warp</li> <li>✓ Thin Paths</li> <li>✓ Warp to Path</li> <li>✓ Customizable Spirals Stars Polygons</li> <li>✓ Auto 4 Point Warp</li> </ul>	<ul> <li>✓ <u>3D Shadowing</u></li> <li>✓ <u>Stencil</u></li> <li>✓ <u>Metamorphosis</u></li> <li>✓ <u>Round Corner</u></li> <li>✓ <u>Fillet Round Corner</u></li> <li>✓ <u>Decorative Border</u></li> <li>✓ Center Line Tracing</li> </ul>
Tracing/ Editing	Automatic Vectorization	<ul> <li>User friendly with preview before apply</li> <li>Option to retain original image</li> <li>Option to blackout internal paths</li> <li>Alpha (transparent background) tracing option</li> <li>Palette trace (merging of colors) option</li> <li>Individual color trace option</li> <li>Color and grayscale scan with stacking</li> <li>Ability to use different trace options on same image</li> </ul>	<ul> <li>✓ Four trace settings with special setting for small parts</li> <li>No preview before apply</li> <li>Original image must be copied first or re-imported</li> <li>✓ Super Size for improved tracing of small images</li> <li>Merging of colors option</li> <li>Individual color trace option</li> <li>✓ Ability to edit raster image before tracing</li> </ul>
	Manual Tracing	<ul> <li>Bézier Curves and Straight Lines function available, but a bit awkward and crashes software easily</li> </ul>	<ul> <li>✓ Easy click/click/click with ability to switch between curves and straight lines by right clicking</li> <li>✓ Polyarc mode offers alternative method that some users prefer</li> </ul>
	Freehand Drawing	<ul> <li>✓ Inverse Erase (add to existing shapes)</li> <li>Freehand with Smoothing and Precision</li> <li>✓ Freehand (Fat Path, Dots, Dashes, Forced Close option)</li> </ul>	• Freehand (Thick Path option)

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	Separating / Joining Images	<ul> <li>Split; Layer; Break; Join, Blackout</li> <li>✓ Reduce nodes (controlled, automatically, or always on)</li> </ul>	<ul> <li>Ungroup/Group, Break Path, Make Path</li> <li>Reduce nodes (controlled only)</li> </ul>
	Splitting Images	<ul> <li><u>Tiling</u></li> <li><u>Knife tool for open cuts</u></li> <li><u>Erase tool for closed cuts</u></li> </ul>	✓ Ginsu knife for open or closed cuts
	Image, Node and Path Editing	<ul> <li><u>Erase Tool</u> for removing areas of an existing shape</li> <li>Inverse Erase for adding areas to an existing shape</li> <li>Easy to close open paths (lines will snap to disconnected nodes or choose connect to nearest node)</li> <li>Only able to edit one path or one node at a time</li> <li><u>Insert node</u></li> <li><u>Insert midpoint node</u></li> <li><u>Neutralize Segment or Convert to Line</u></li> <li>Node edit: <u>Delete; Break; Smooth; Symmetric</u></li> </ul>	<ul> <li>✓ Edit single or groups of nodes/paths</li> <li>✓ <u>Convert path to smooth curve, straight line, or corner</u></li> <li>✓ <u>Insert desired, equal spaced, number of nodes along a path</u></li> <li>✓ Move node to (x,y) location</li> <li><u>Trim and Extend paths</u></li> <li>Start/stop points for path deletion</li> <li>Delete path between any two consecutive nodes</li> <li>Join two end nodes</li> <li><u>Close open path</u></li> <li>✓ <u>Convert to circle</u></li> </ul>
Cutting	Cut Order Control	Cuts inside shapes before outer and right to left.	<ul> <li>✓ Fully functional - <u>nearest, vertical, horizontal</u> or user can customize <u>cut order shape-by-shape</u></li> </ul>
	Weeding	— Must manually add weed shape	<ul> <li>Weed and <u>power (split) weed</u> options</li> <li>Set desired weed offset</li> <li><u>Option to set weed on repeats</u></li> <li><u>Geometric Contour</u></li> </ul>

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	Selecting Images to Cut	— All images on all non-hidden layers sent to cut	<ul> <li>✓ <u>Select by color</u></li> <li>✓ <u>Filter by color</u></li> <li>✓ <u>Select by Size</u></li> <li>Send all to be cut or only selected images</li> </ul>
	Blade Offset	Single setting	• Two settings: one for closing shapes, the other for sharpening corners
	Cut Window Options	<ul> <li>Multi-pass</li> <li>Blade Offset</li> <li>Force &amp; Speed (on applicable cutters)</li> <li>Cut Mode</li> </ul>	<ul> <li>Blade Offset</li> <li>Speed (on applicable cutters)</li> <li>Cut Mode</li> <li>Mirror</li> <li>Rotate</li> <li><u>Nesting</u></li> <li>Cut by Color</li> <li><u>Repeats</u></li> <li>Weeding</li> <li><u>Banner Fill</u></li> <li><u>Cut Order</u></li> <li><u>Pouncing</u></li> <li><u>Move Shapes</u></li> <li>Resize Shapes</li> </ul>
	Print and Cut	<ul> <li>✓ 3 point registration – with automatic movement of alignment device to approx. reg mark location</li> <li>✓ Reg marks automatically printed or an outside rectangle can be used</li> <li>✓ Works with printing from any source</li> </ul>	<ul> <li>— 3 point registration where user drags cursor on screen to approx. reg mark location</li> <li>— User must add reg marks (as shapes) to project</li> </ul>
Other	Raster Image Functions	<ul> <li>Resize; Rotate; Duplicate</li> <li>Recolor</li> <li><u>Fill a Shape (and Tile)</u></li> <li><u>Convert to Texture Snapshot</u></li> </ul>	<ul> <li>Resize; Rotate; Duplicate</li> <li><u>Clip; Crop; Resample, Super Size, Erase; Paint; Magic</u> <u>Wand; Eyedropper; Invert Select; Color Fill</u></li> <li><u>Clipping</u></li> </ul>

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	Other Functions	<ul> <li>✓ Ability to attach other files (including, for example, .jpg, .pdf, .ttf, etc) to current file</li> </ul>	<ul> <li>✓ <u>Badges</u></li> <li>✓ <u>Photo Machine</u></li> </ul>
	Notes	✓ Separate Popup Window - easy to edit	— <u>Onscreen only</u>
	Functions of Interest to Pros	✓ Perimeter of Shapes; Area of Shape; Direction of cut	<ul> <li>Power Weed</li> <li>Weeding of Repeats</li> <li><u>Cut Travel Distance</u></li> <li><u>Cut Time Tracking</u></li> <li><u>Job Cost Notes</u></li> <li>Default Mirror; Default Weed; Default Cut by Color</li> <li><u>Set End Point of Cut</u></li> <li><u>Add Shape Dimensions</u></li> <li>Import Vinyl/Foil Manufacturer's Color Palettes</li> <li>Ability to insert object onto screen, such as Excel spreadsheet, Wordpad doc, Corel file, Photoshop image, etc</li> </ul>