

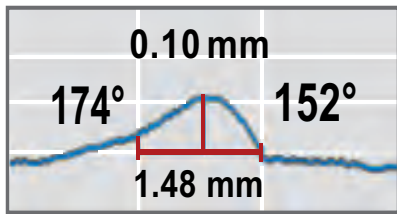
BETA FOLD CREASE & FOLD ANALYZERS

- **REDUCE EXPENSIVE WASTE & REJECTS**
- **CONTROL** variations in the cutting & creasing process
- **MINIMIZE** runnability problems on the packaging line

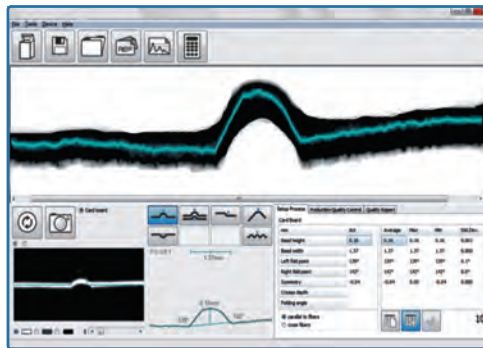


PAPER STRUCTURES & FOLDING CHANGE WITH

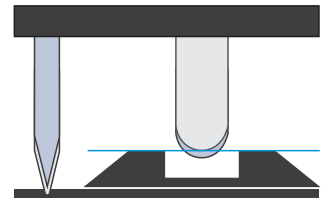
- Fiber lengths, fiber content, and fiber orientation
- Coatings, bond between coatings and paper
- Printed ink & varnish
- Drying conditions that affect the flexibility of the substrate
- Environment – humidity in the pressroom



BETA FOLD SOFTWARE
Images & Analyzes Bead
Dimensions & Delamination
for Production Correction



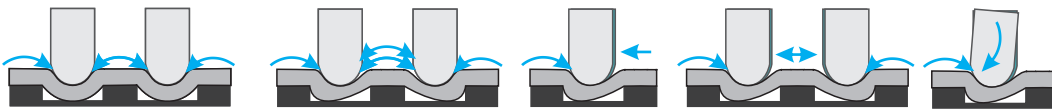
**CALCULATE STATISTICS
& CREATE QUALITY REPORTS**



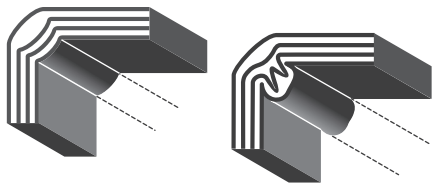
**Detect changes in
die penetration due
to knife wear**

THE THEORY

IN PRACTICE



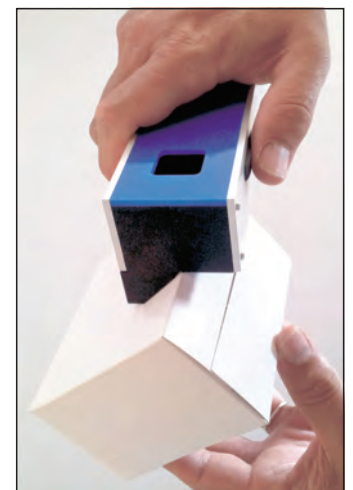
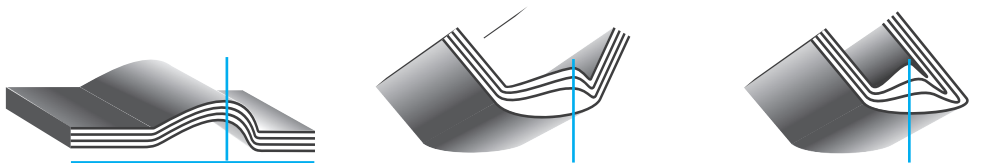
Fiber-fiber bonds between plies are broken to make creased areas behave like a hinge



Insufficient delamination
Bead Binding, Extensive
Tension Spine fracturing
or crease end splitting

**A crease
is a
double
fold!**

Bead symmetry is driven by the folding point sharpness



**Symmetrical Edges to
Insure Your Products
Have a High Quality Look**

Application

Folding carton
On the press
After gluing
In the QA Department

Measure

Bead
Crease
Folding angle

Verify

Bead height, Crease depth
Bead width, Symmetry
Left fold point
Right fold point

Document

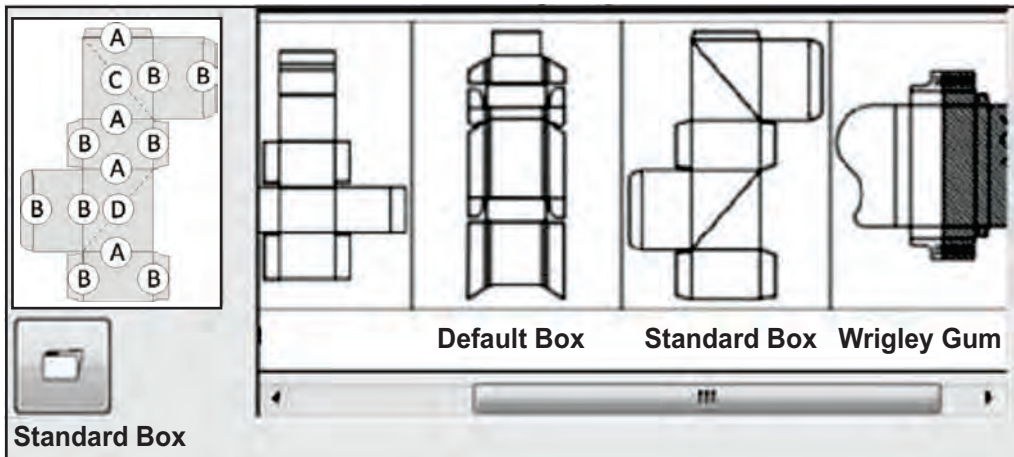
Quality Reports in PDF
Format, establish Statistical
Database

Free 10-Day Trial

BETAFOLD ADVANCED

BETAFOLD ADVANCED SOFTWARE supports networking for multiple users where a variety of different box types are in production. **BETAFOLD ADVANCED** also supports several multi-user client installations working with the central server database and network.

CREATE CUSTOMIZED BOX LAYOUTS **Betafold ADVANCED** offers a Box Editor that enables you to copy any existing Box layout from a PDF or a JPG file or load one of the pre-defined box layout from the box library. You can add or remove measurement positions for [A], [B], [C], or [D] type creases. After saving the new layout this will be available in the list of selectable box layouts in the reference Window.



USING CUSTOMIZED BOX LAYOUTS To simplify when use a large number of boxes, the **ADVANCED** software stores box layouts graphically with their reference numbers. When a reference number is selected, the box's graphic image is loaded and displayed with it's measurement positions. The final report prints the customized box layout with the measurement data.

OPTIONS & ACCESSORIES

Power Crease Option when the bead is not available for measurement and data must be collected from the crease. A metal plate to hold the sample flat during measurement is also included.

The Power Crease function offers additional job statistics for crease and embossing measurements for The BetaFold Crease & Fold Analyzer. Additional crease profile calculations are also available with this function module. The function can be accessed only if the **POWER CREASE** option is enabled. Insert the Power Crease code by selecting the Power Crease License Item from the Help Menu. **The Power Crease** option consists of an upgrade code and a hardware tool that helps to keep the sample flat during crease or embossing.

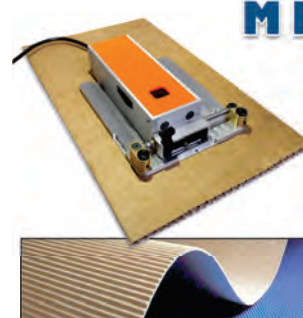
Power Box Option controls the angles and scoring process. The Power Box function and hardware offers additional job statistics for finished boxes. Insert the **POWER BOX** code by selecting the Power Crease License Item from the Help Menu.

E-Guide Pro2 Motorized Scanner Encoder is an optional mechanical tool that guides you while pulling the BetaFold over the embossed area. This leads to a repeatable, fast and accurate control of your embossed area.

UPGRADING BETAFOLD STANDARD TO BETAFOLD ADVANCED Betafolds can be upgraded to the **ADVANCED** version via Upgrade codes. **An initial software version of v1.3.0.0 or later is required.**

BETACORR Corrugated Analyzer

CONTROL CHARACTERISTICS IN HIGH END CORRUGATED FLUTE DIMENSIONS & LINERS **ESSENTIAL TO PRODUCE THE HIGHEST QUALITY PRODUCT FOR POP DISPLAYS APPAREL, WINE, GIFT ELECTRONICS & MORE**



**MEASURE
ANALYZE
CORRECT**

- FLUTE PROFILES
- CREASE PROFILES
- WASHBOARD EFFECT





BetaFold Crease & Fold Analyzer Data Sheet & Product Accessories



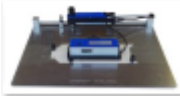
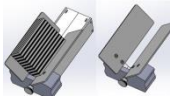

BetaFold SYSTEM REQUIREMENTS

- Windows 10 – 32bit or 64bit
- Screen resolution : 1920 x 1200 or higher
- USB 2.0 High Power (5V-500mA)
- EGUIDE-PRO2 requires an additional USB 2.0 High Power port

BetaFold TECHNICAL DATA

Parameter	Value
Viewing area	3/8" (1cm) across the crease
Measurement range height/depth	0.015" (0.40mm) / 0.026" (0.65mm)
Illumination	White LED
Camera	BW / 1.3 Mpixel
Communication	USB 2.0
Power Supply	USB 2.0 high power
Accuracy	+/- 0.00012" (0.003mm)
Repeatability	+/- 0.00012" (0.003mm)
Measurement time (typical)	1 second
Size	1.5" x 2" x 5.5" (3.8cm x 5cm x 14cm)
Units of measure	Inch / mm
Calibration / Verification	Target included

BetaFold FUNCTIONS

Function description	BASIC	ADVANCED	POWER CREASE Advanced required	LASER CREASE Advanced required	RULE Advanced required	EGUIDE- PRO2 Advanced required Power Crease recommended	POWER BOX Advanced required	3D View Advanced & EGUIDE-PRO required	Cutting Edge Advanced Power Crease required
HARDWARE TOOLS 									
MEASUREMENT FUNCTIONS									
Bead Measurement	x	x							
• Height	x	x							
• width	x	x							
• left fold point	x	x							
• right fold point	x	x							
• symmetry	x	x							
Crease Measurement	x	x							
• depth	x	x							
• width 50%	x	x							
• opening (narrow and standard)	x	x							
• section			x						
• symmetry			x						
• profile			x						
• width at customized depth level other than 50%			x						
Multi Crease (round corner) Measurement		x							
• height		x							

• distance		x							
Beveled Edge			x						
Laser Crease				x					
Cross Section Measurement		x							
Embossing Measurement		x							
De-bossing Measurement		x							
Multi Embossing/ De-bossing		x							
Area Embossing						x			
% of area deeper than reference						x			
Motorized Scanning						x			
Load & Save Scanned Images						x			
Angle Measurement	x	x							
• Bead width	x	x							
• symmetry	x	x							
• folding angle	x	x							
• radius							x		
• roundness							x		
Scoring line							x		
Cutting Edge									x
Cutting Edge Reference									L/T/R/B 4 levels
Creasing Rule (with separate License code)					x				
• rule height					x				
CUSTOMIZED BOX BLANK									
Box Blank	standard	customized							
Folded Box							customized		
Box Editor		x							
Box Blank Layout library		x							
Import formats for Box Blank Layout		JPG, BMP, PNG, PDF							
Customized crease type names and hints		x							
Customized		x							

measurement positions									
Customized Box Layout incl. Measurement positions in PDF reports		x							
Customized Box Layout for Embossing applications			x						
Customized Box Layout for folded Boxes							x		
REFERENCE DEFINITIONS									
Reference database	x	x							
Crease types per reference (across fibers, parallel to fibers)	4	7							
Customized crease type names		x							
Customized crease type description		x							
Measure reference samples directly in reference database window to create reference set		x							
Link customized box blank layout to a reference set		x							
Channel width and depth calculator	x	x							
Crease Channel references and tolerances	x	x							
Bead profile references and tolerances	x	x							
Crease profile references and tolerances			x						
Embossing references and tolerances			x						
E-Guide Embossing references and tolerances						x			
Folded Box Angle							x		

references and tolerances									
REPORTS AND STATISTICS									
Customized Logo and Header Text in PDF reports	x	x							
Setup Process Statistics (Average, Max, Min, Std.Dev.)	x	x							
References in Setup Process statistics	4	7							
Setup Process report in PDF	x	x							
Save measurement data into tab delimited text file	x	x							
References in Job Quality Statistics	4	7							
Job Quality Statistic for Bead control	x	x							
Job Quality Statistic for Crease control			x						
Job Quality Statistic for Embossing control			x						
Job Quality Statistic for Tool control (BOBST only)	x	x							
Job Quality Statistics for folded Boxes							x		
Job Quality Report in PDF	x	x							
Save Job Quality data in tab delimited text file	x	x							
Job Summary Report for Bead control	x	x							
Job Summary Report for Tool Control (BOBST only)	x	x							
Job Summary Report for Crease control			x						
Job Summary Report for Embossing control			x						

Job Summary Report for Folded Boxes								X	
3D Display of Embossing Results									X
Network support									
Network installation		X							
TCP-IP		X							
Hot Folder		X							
Common Reference database on the server		X							
Report destination directory on the server		X							
Disable editing in client installations		X							
Other									
Password protection	X	X							
Auto Save Capture and Analysis Images			X						
Load and Save Captured Images	X	X							



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Flexo Analyzers & Calibration, Densitometer-Spectros, Color Viewers, Magnifiers, Testing Equipment