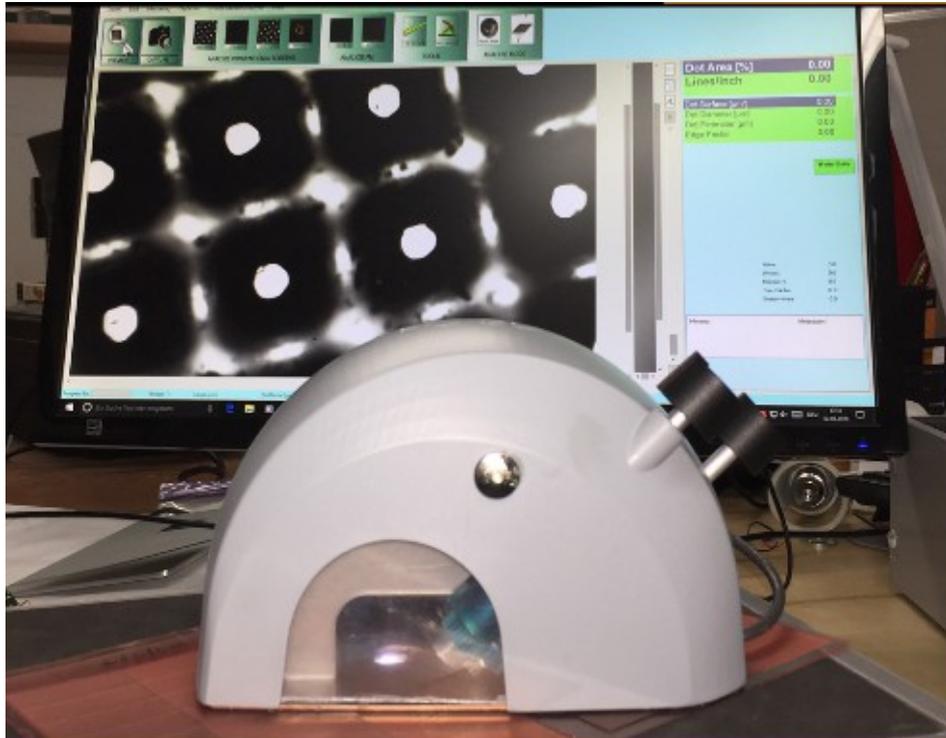


Sibress

FlexoControl3D⁺



Mobile Version incl. light table

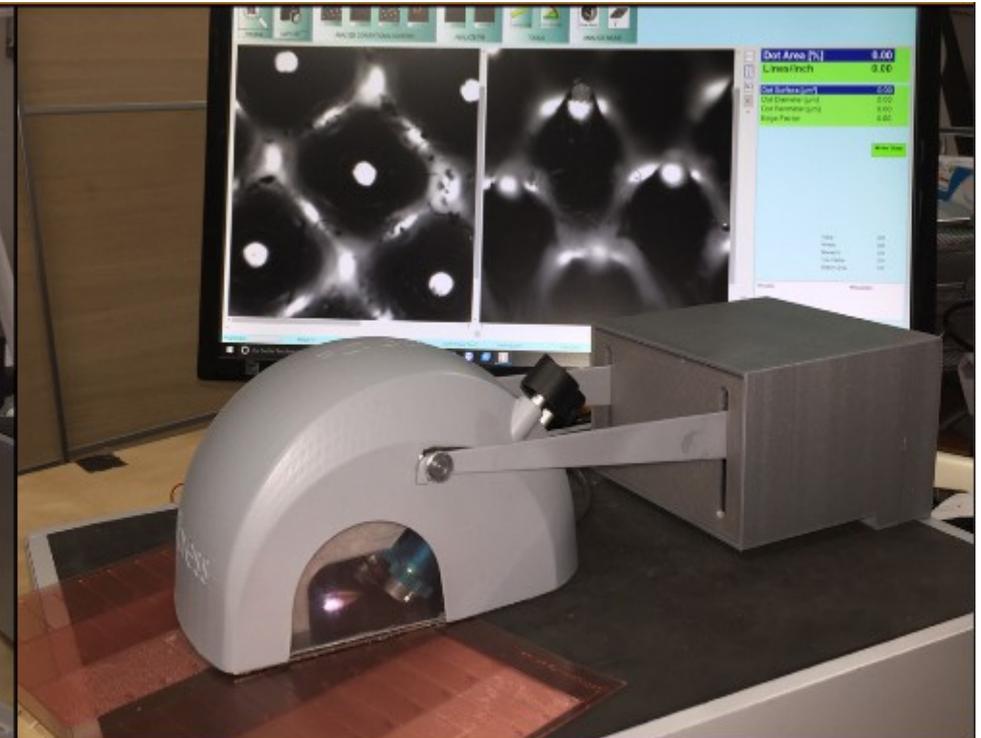


Table top version incl. light table

3D image quality control

- > due to top perfect resolution and sharpness
- > Individual control of light and sharpness
- > Scan of the complete 3D image area

Sibress

FlexoControl3D⁺

The screenshot displays the FlexoControl3D+ software interface. At the top, there is a toolbar with icons for 'PREVIEW', 'CAPTURE', 'ANALYZE CONVENTIONAL SCREENS', 'ANALYZE FM', 'ANALYZE MODE', and 'TOOLS'. The main area is split into two panels: the left panel shows a grayscale image of a dot with red measurement points, and the right panel shows a 3D perspective view of the dot with a yellow cone indicating the measurement area. On the far right, a data panel displays the following information:

Dot Area [%]	0,19
Lines/Cm	32,74
Dot Surface [µm²]	180,70
Dot Diameter [µm]	15,17
Dot Perimeter [µm]	48,99
Edge Factor	108

Below the data panel, there are five histograms with values: 221,40, 33,39, 265,17, 201,31, and 74450,34. There are also buttons for 'Single', 'Add', 'Reset', and 'Revolve'. At the bottom right, there is a table with columns 'MEASUR' and 'MEASUREMENT'.

MEASUR	MEASUREMENT
Line [µm]	15,01
Line [µm]	337,03
3D-Line [µm]	221,40
3D-Maxim [µm]	265,17
3D-Width [µm]	33,39

3D

visualisation and measurement functions of:

- > Relief depth, length and angle of the shoulder, floor area of the dot
- > Multi measurement of the dot with constant result adjustment
- > All results can be stored and named with individual comments
- > All images can be saved, including graphics, also single dot measurement is possible

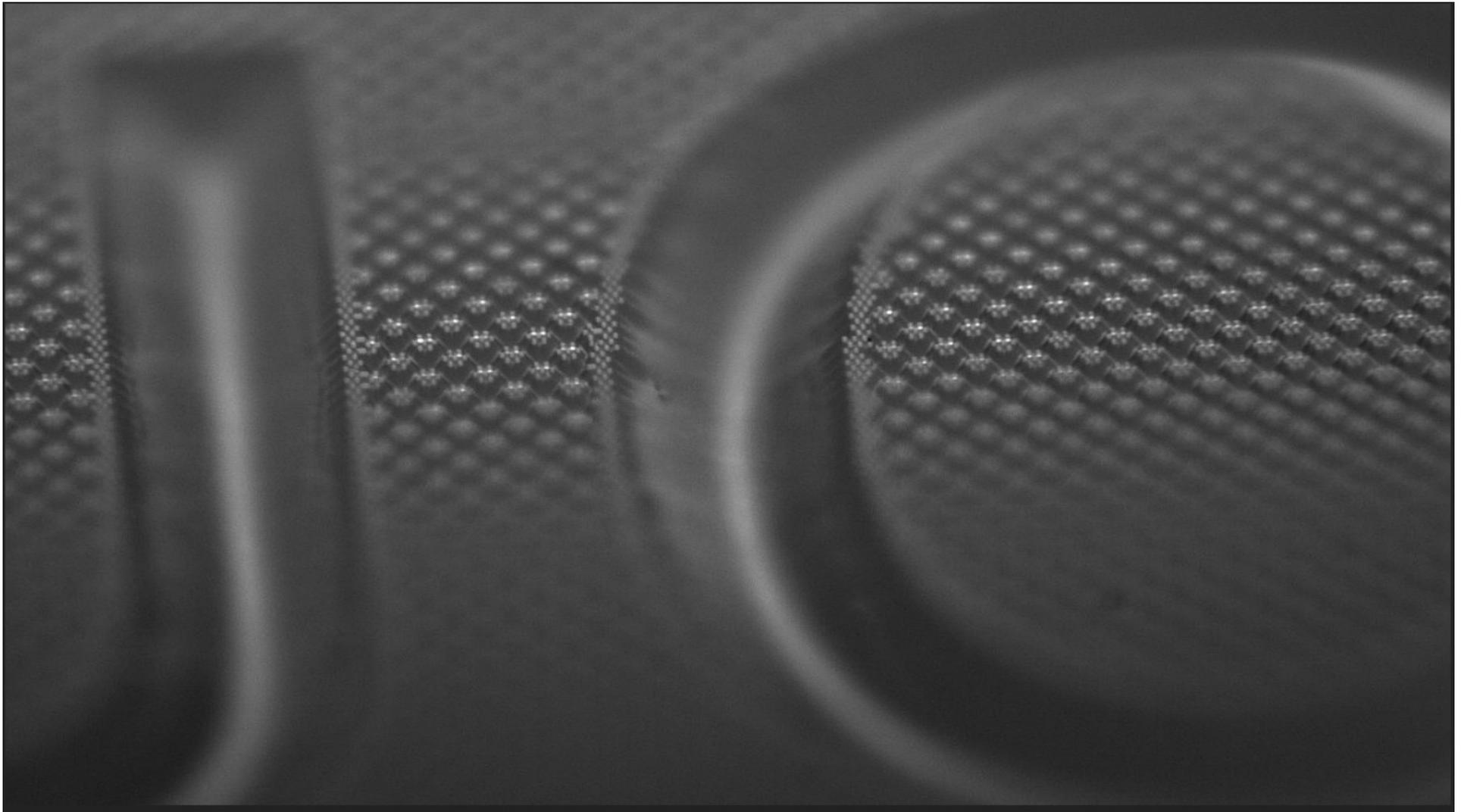
Technical details

Functions	Measurement	Plate Type
Dot area %	Flexo Plates	AM, FM, HD
Dot size (dot diameter)/µm/mil	Masked Material, film	Measurement Technology
Screen ruling (lines/cm or lines/inch), Line Width, Angle	Side view	Sensor: 1,3MB
Color, with C-M-Y-K separation	Conventional flexoplates	Area to be analysed ~2mm ² for top camera
Statistics, Graphics, Data Comparison	Rubber plates, except black	Screen Ruling: 30-85L/cm; 76-216 Lpi
Simultaneous view from top and side	metal back plates, partial	Repeatability: +/- 0,5%
Optical system	Calibration	Optional
Full scan of the entire 3D image, PMAG >4x, resolution > 288L/mm Individual image contrast and brightness control	2D and 3D in X-Y-Z	ISO Calibration target/ USB Lightbox Stationary Lightbox where the instrument is guided

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FlexoControl3D⁺

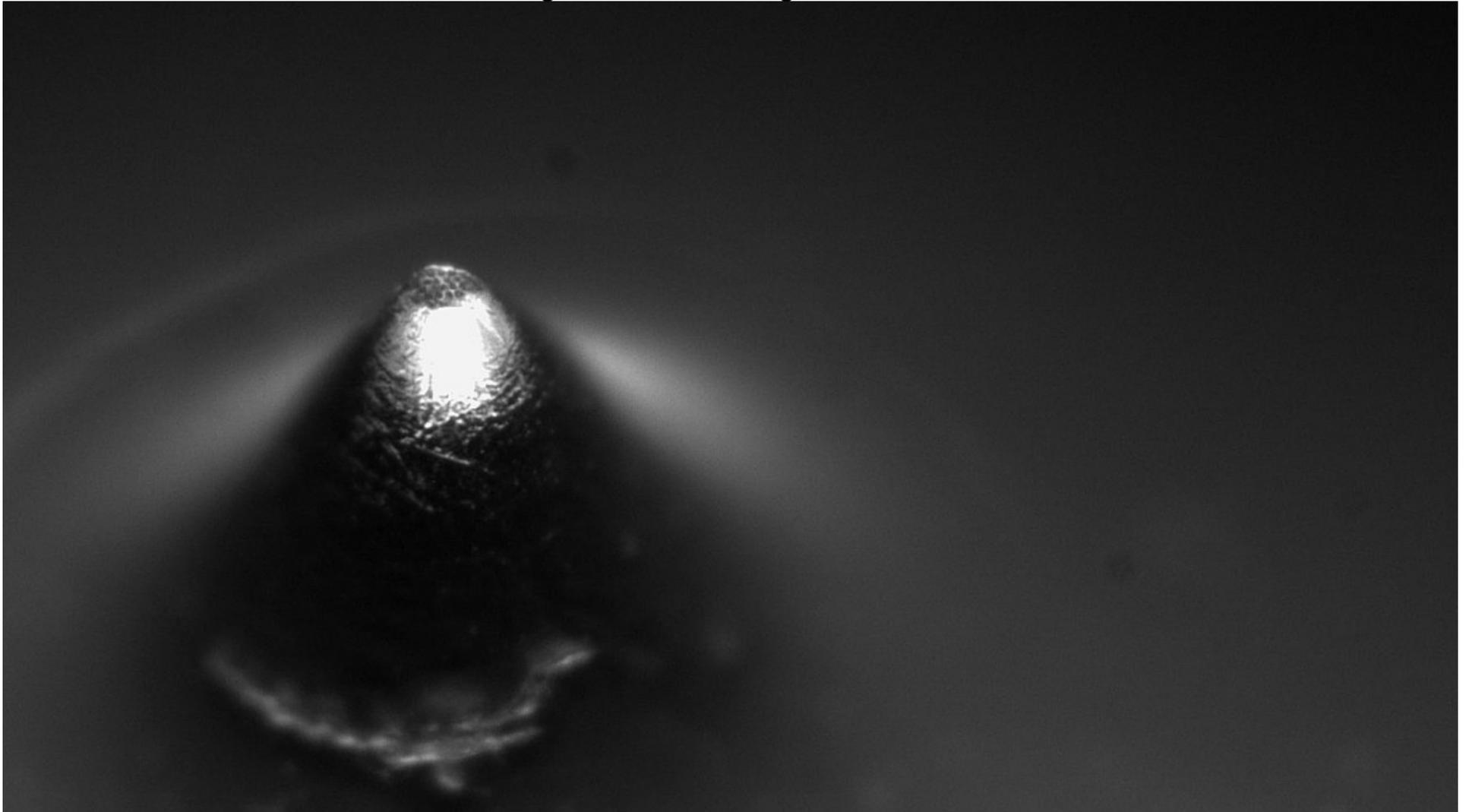
KODAK plate sideview



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Single Dot showing dot surface



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Top and sideview shown in parallel

The software interface features a top toolbar with the following sections:

- PREVIEW** and **CAPTURE** buttons.
- ANALYZE CONVENTIONAL SCREENS**: ISOLATED, JOINED, SEMI-AUTO, MANUAL.
- ANALYZE FM**: DOTS, WORMS.
- TOOLS**: LINE MEASURE, ANGLE MEASURE.
- ANALYZE MODE**: Mono Mode.

The main workspace displays two views of a dot pattern:

- Top View (Left)**: A grid of dots with red outlines and blue lines connecting them.
- Side View (Right)**: A 3D perspective of the dots with a yellow cone overlaid on one dot, representing a measurement or analysis tool.

The right-hand panel displays analysis data:

Dot Area [%]	3,01
Lines/Inch	162,21
Dot Surface [µm²]	738,29
Dot Diameter [µm]	30,66
Dot Perimeter [µm]	107,08
Edge Factor	124

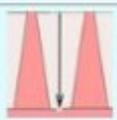
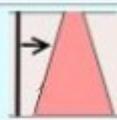
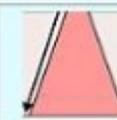
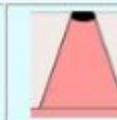
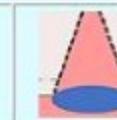
Buttons: **Speichern**

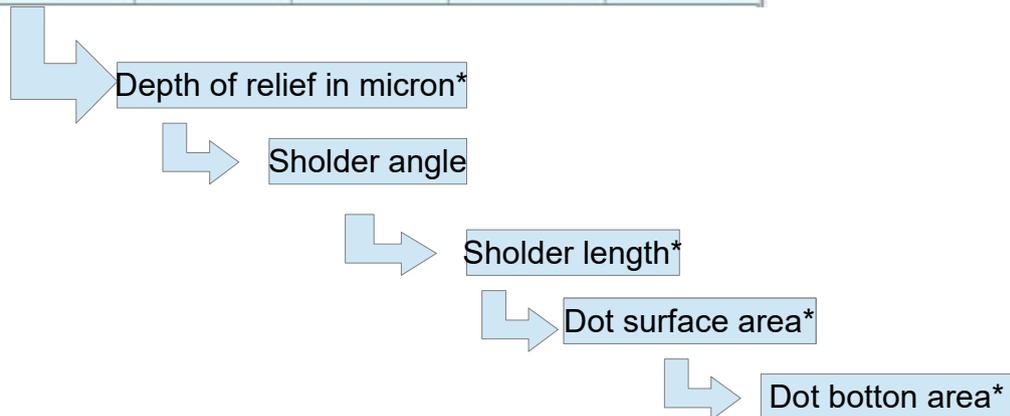
633,25	9,60	642,24	811,39	47660,47
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Buttons: **Single**, **Add**, **Reset**, **Speichern**

3D-Winkel[°]	9,47
Linie [µm]	32,14
Linie [µm]	246,34
3D-Höhe [µm]	633,25
3D-Mantel [µm]	642,24
3D-Winkel[°]	9,60

Details of information

				
633,25	9,60	642,24	811,39	47660,47
Single	Add	Reset	Speichern	



Sibress

FlexoControl3D⁺

Top and sideview shown in parallel

The software interface features a top navigation bar with the following sections:

- PREVIEW** and **CAPTURE** buttons.
- ANALYZE CONVENTIONAL SCREENS** with sub-options: ISOLATED, JOINED, SEMI AUTO, and MANUAL.
- ANALYZE FM** with sub-options: DOTS and WORMS.
- TOOLS** with sub-options: LINE MEASURE and ANGLE MEASURE.
- ANALYZE MODE** with sub-options: Mono Mode and a 3D view icon.

The main workspace is split into two panels:

- Left Panel (Top View):** Shows a grid of dots with red outlines and blue lines connecting them.
- Right Panel (Side View):** Shows a 3D perspective of the dot pattern with a yellow cone overlaid on one dot to illustrate its geometry.

The right sidebar contains a data table and control elements:

Dot Area [%]	3,01
Lines/Inch	162,21
Dot Surface [μm^2]	738,29
Dot Diameter [μm]	30,66
Dot Perimeter [μm]	107,08
Edge Factor	124

Below the table is a **Speichern** button and a row of five cone diagrams with values: 633,25, 9,60, 642,24, 811,39, 47660,47. Below these are buttons for **Single**, **Add**, **Reset**, and **Speichern**.

3D-Winkel[°]	9,47
Linie [μm]	32,14
Linie [μm]	246,34
3D-Höhe [μm]	633,25
3D-Mantel [μm]	642,24
3D-Winkel[°]	9,60

Sibress

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Mask measurement


PREVIEW


CAPTURE


ISOLATED


JOINED


SEMI-AUTO


MANUAL


DOTS

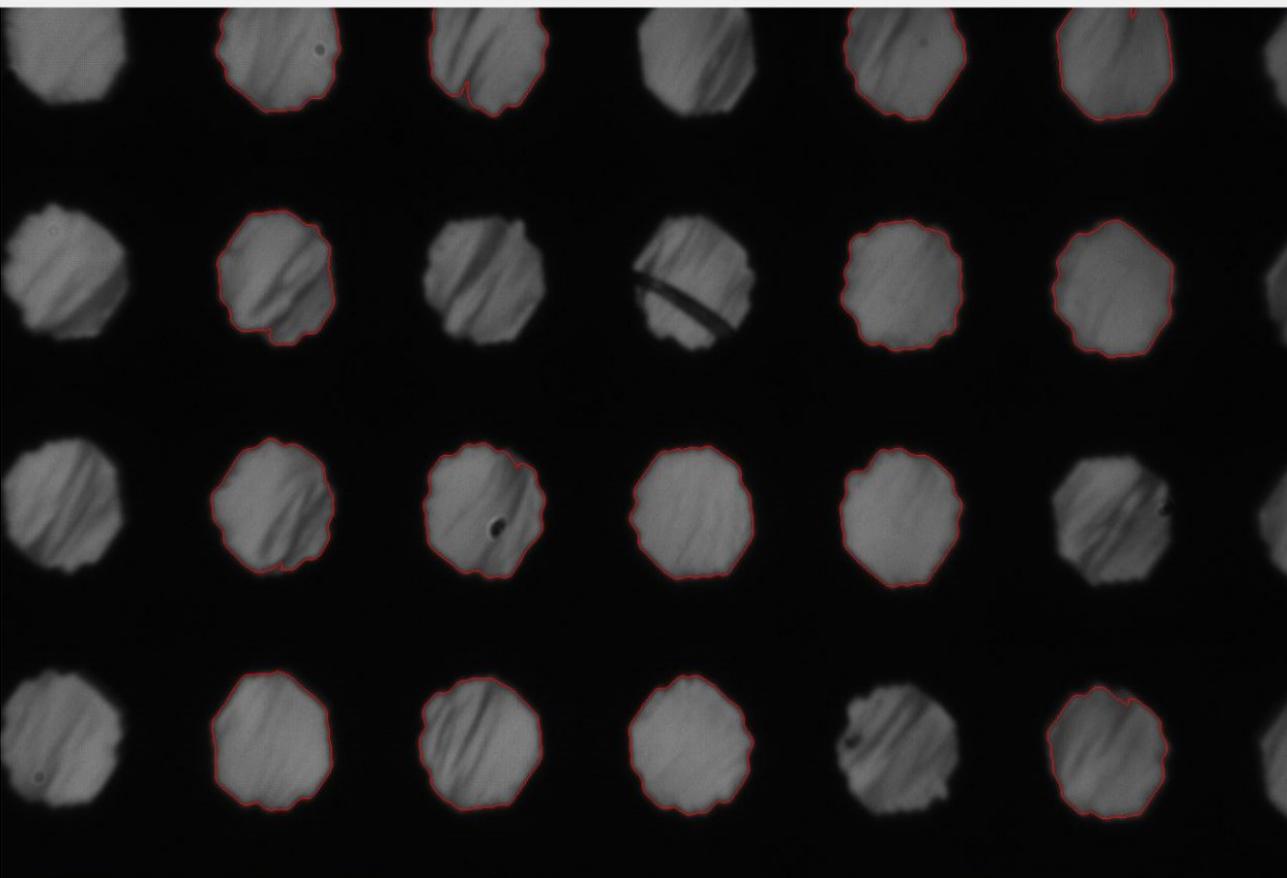

WORMS


LINE MEASURE

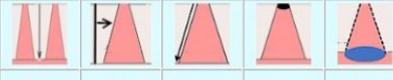

ANGLE MEASURE


Mono Mode


ANALYZE MODE



Dot Area [%]	25,16
Lines/Inch	107,93
Dot Surface [μm^2]	13932,48
Dot Diameter [μm]	133,19
Dot Perimeter [μm]	446,06
Edge Factor	114



633,25	9,60	642,24	811,39	47660,47
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3D-Winkel[°]	9,47
Linie [μm]	32,14
Linie [μm]	246,34
3D-Höhe [μm]	633,25
3D-Mantel [μm]	642,24
3D-Winkel[°]	9,60

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PREVIEW **CAPTURE**

ANALYZE CONVENTIONAL SCREENS
ISOLATED JOINED SEMI AUTO MANUAL

ANALYZE FM
DOTS WORMS

TOOLS
LINE MEASURE ANGLE MEASURE

ANALYZE MODE
Mono Mode

Dot Area [%]	57,99
Lines/Inch	110,23
Dot Surface [µm²]	30794,43
Dot Diameter [µm]	198,01
Dot Perimeter [µm]	642,80
Edge Factor	107

Speichern

633,25	9,60	642,24	811,39	47660,47
Single	Add	Reset	Speichern	

3D-Winkel[°]	9,47
Linie [µm]	32,14
Linie [µm]	246,34
3D-Höhe [µm]	633,25
3D-Mantel [µm]	642,24
3D-Winkel[°]	9,60

Progress Bar 100 % Winkel [°] Länge [µm] Dotfläche [µm²] Durchmesser [µm] Umfang [µm] Linie [µm] 246,34 Linien(L/Inch)

Chart to compare materials, i.e. mask/ plate or two materials

The screenshot displays the 'Graphische Auswertung' (Graphical Evaluation) window in the Sibress FlexoControl3D+ software. The window is divided into several sections:

- Top Bar:** Contains icons for various measurement and analysis tools.
- Menu Bar:** Includes options like 'Daten', 'Prozess 1', 'Prozess 2', 'Editieren P1 und P2', 'Graphik in die Zwischenablage', 'Speichere Datentabelle', and 'Drucke Datentabelle'.
- Data Table:** A table with columns for 'Messen', 'Mess-Prozent Feld', 'Referenz', 'Proz. 1', 'Proz. 2', 'D_RP1', 'D_RP2', and 'D_FIP2'. It lists 15 measurement points.
- Comparison Data Plot:** A line graph titled 'Comparison Data Plot' showing cumulative distribution curves for three different materials (Referenz, Proz. 1, and Proz. 2) against a percentage scale from 2.5% to 99%.
- Right Panel:** A control panel with various parameters and buttons. It includes a '3D' view selector and a 'Speichern' (Save) button.

Messen	Mess-Prozent Feld	Referenz	Proz. 1	Proz. 2	D_RP1	D_RP2	D_FIP2
1	3	1	3.17	0.80	-2.17	0.20	2.37
2	5	2	5.15	2.74	-3.15	-0.74	2.41
3	10	4	10.31	6.99	-6.31	-2.99	3.32
4	20	12	32.73	17.00	-20.73	-5.00	15.73
5	30	18	32.69	26.43	-14.69	-8.43	6.26
6	40	25	53.79	35.76	-28.79	-10.76	18.03
7	50	35	57.80	55.06	-22.80	-20.06	2.74
8	70	55	69.38	73.82	-34.38	-18.82	-4.44
9	80	65	85.66	77.95	-20.66	-12.95	7.71
10	90	80	90.74	82.59	-10.74	-2.59	8.15
11	100	100	99.99	99.98	0.01	0.02	0.01
12	0	0	0.00	0.00	0.00	0.00	0.00
13	0	0	0.00	0.00	0.00	0.00	0.00
14	0	0	0.00	0.00	0.00	0.00	0.00
15	0	0	0.00	0.00	0.00	0.00	0.00

Sibress

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- C M Y K separation, showing Cyan % of print area

The screenshot displays the Sibress FlexoControl3D+ software interface. The top toolbar includes icons for PREVIEW, CAPTURE, ANALYZE CONVENTIONAL SCREENS (ISOLATED, JOINED, SEMI-AUTO, MANUAL), ANALYZE FM (DOTS, WORMS), TOOLS (LINE MEASURE, ANGLE MEASURE), and ANALYZE MODE (COLOR MODE, TOP LIGHT).

The main workspace shows a color separation analysis of a print area. The left panel displays the original image with color channels. The middle panel shows the Cyan channel separated, with a cyan percentage of 32.01%. The right panel shows the Mottle channel with a percentage of 9.08%. The bottom right panel shows the K-Black channel with a percentage of 0.00%.

The ChannelAnalyser window displays the following data:

Color-Channel	Mottle
Cyan	9.08 %
Magenta	32.01 %
Yellow	0.00 %
K-Black	0.00 %

The bottom status bar shows the following parameters:

Progress Bar	Winkel [°]	Länge [µm]	Dotfläche [µm ²]	Durchmesser [µm]	Umfang [µm]	Linie [µm]	Linien[L/Inch]