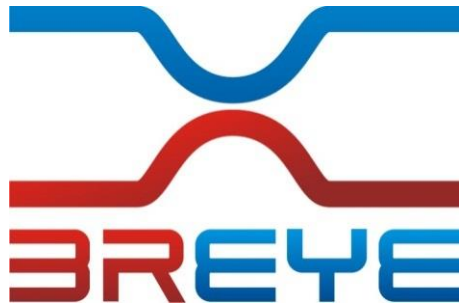# Beta Breye
Braille Analyzer

Non-Contact Measurement of
Braille Dot Characteristics and
Documentation of Your Quality
In accordance with

DIN EN 15823

BREYE

What Does the BREYE Braille Dot Analyzer Do?

- The BREYE Braille Dot Analyzer delivers all necessary information you need during setup of your Braille Embosser or Braille printer in a visual, easy to understand manner.

- The BREYE Braille Dot Analyzer offers the possibility to control your production.

- The BREYE Braille Dot Analyzer automatically creates reports in PDF file format

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The Quality Control Company

The Beta Breye – A Big Plus for Your QA

Dot "Burst"
in Production
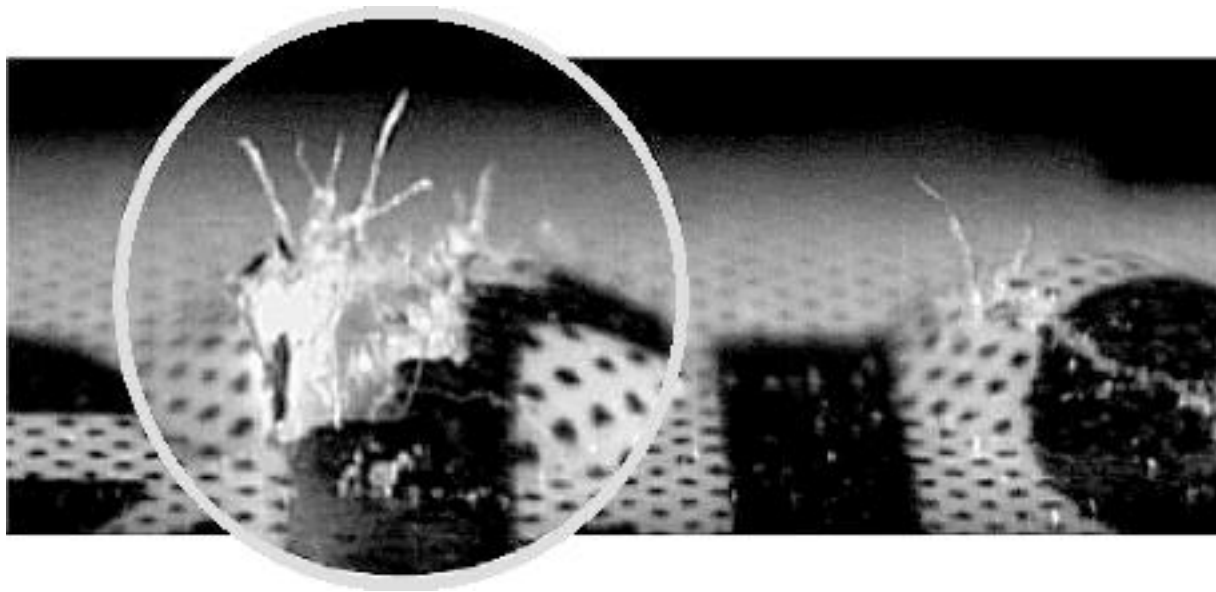
Affordable, pocket sized, and easy to use, the BETA BREYE is a high quality Braille Dot Checker. High accuracy due to non-contact measurements before and after gluing. All package measurements collected in one A4 (8.5" x 11") PDF report.
Visual control of the dots optimizes height versus BURST THROUGH.
The simple and quick quality tool for the press, gluing station and QA control.
Visually check if any of the dots have "Burst". Check if the dots have a uniform shape. Setup your embosser to achieve the very best result.

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Why Do We Need to Check the Characteristics of BRAILLE Dots?

- Redundancy of BRAILLE characters is significantly lower than redundancy of ASCII characters.

- Erronous reading of Braille text on pharmaceutical packaging could lead to serious health problems

- DIN EN 15823 requires checking the quality of the BRAILLE Dots

If you would have to read text of
such a bad quality
it would make you really unhappy

- Even though the text is correct from a grammatical point of view – ist quality is not acceptable!

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Setup Your Embosser

The embosser applies pressure to

- a male **tool** against
- a female **matrix**
- forming Braille dots in the substrate

A correct setup of your embosser is essential

- For the longevity of your tools,
- Production without runnability problems
- **Cost effective production without waste**

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Register Error Between Tool and Matrix

- The tool must be in perfect register to the matrix because the dots of the tool have to fit exactly in the holes of the matrix
- If this is not the case, the resulting Braille dots will not be as stable over time and
- The matrix and the tool are stressed over time
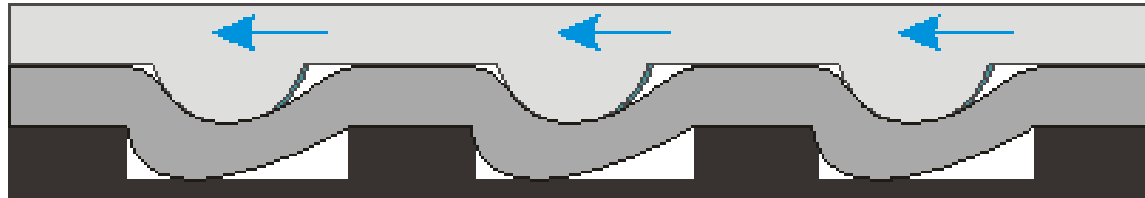
How to Check the Correct Register with the BREYE Braille Dot Analyzer
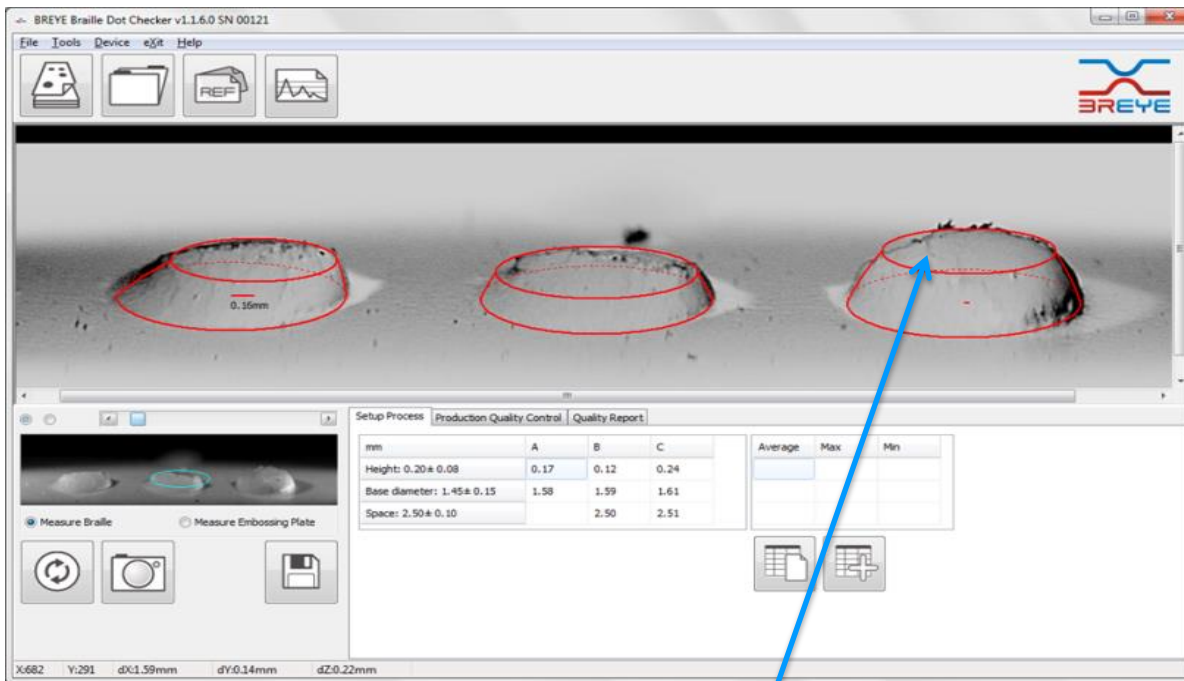
- Check the dots on different locations and in both directions to make sure your tool fits perfectly into your matrix.

- The software tells you about the corrections needed to take in 0.01mm units.
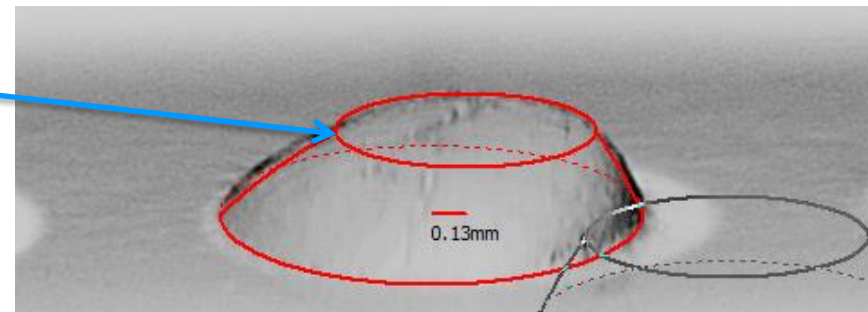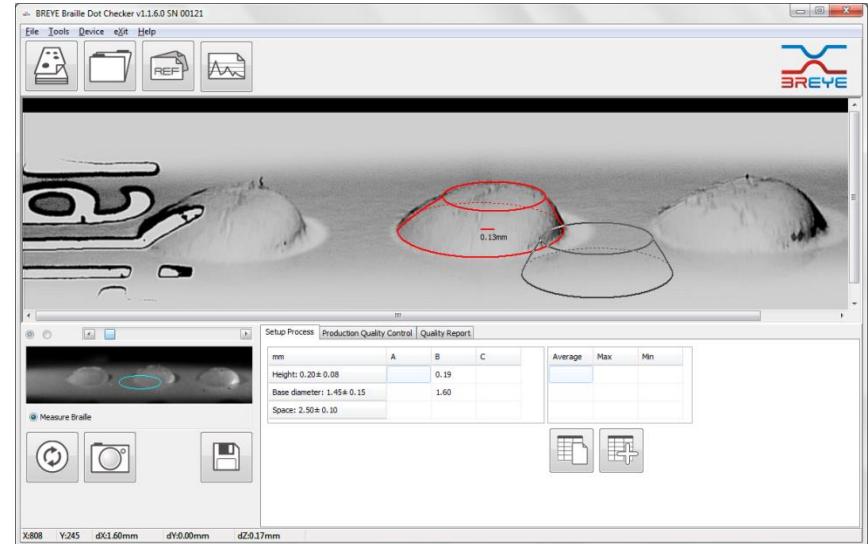
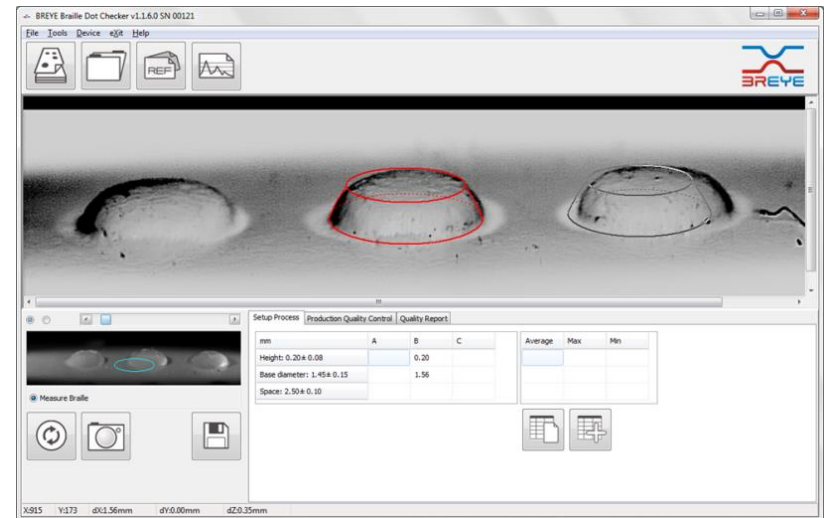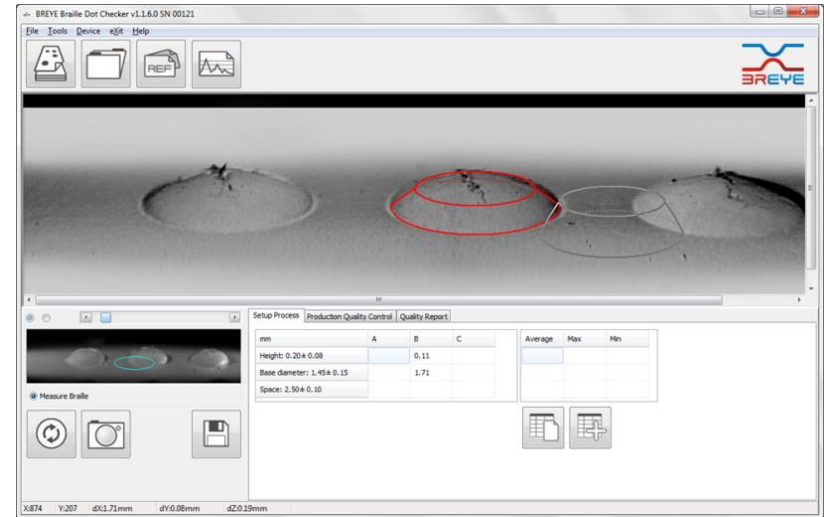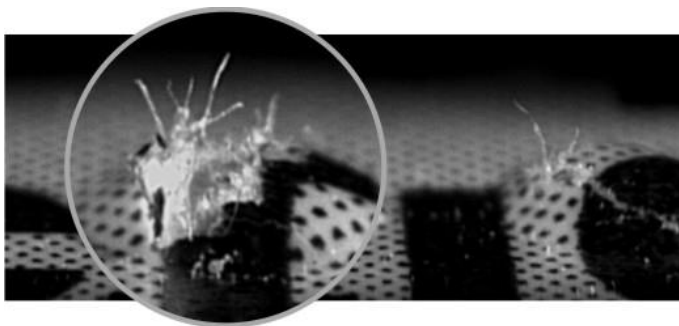# Incorrect Mounting of the Embossing Plate

The Dots Should Show a Similar Height

If one dot is significantly higher than the others, adjustments have to be made.

Achieve Maximum Height for Braille Dots

For a high quality Braille

the dot should achieve maximum possible height

just before breaking the material.

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What You See on the Screen is an Actual Picture of the Braille Dot, NOT a Calculated Simulation

- The human brain can understand dot quality problem relationships better than any computer software

- Visually checking the dots will train the operator to make the right setup corrections on the first shot

- The visual check is independent if done on a flat sheet or finished box

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The Quality Control Company
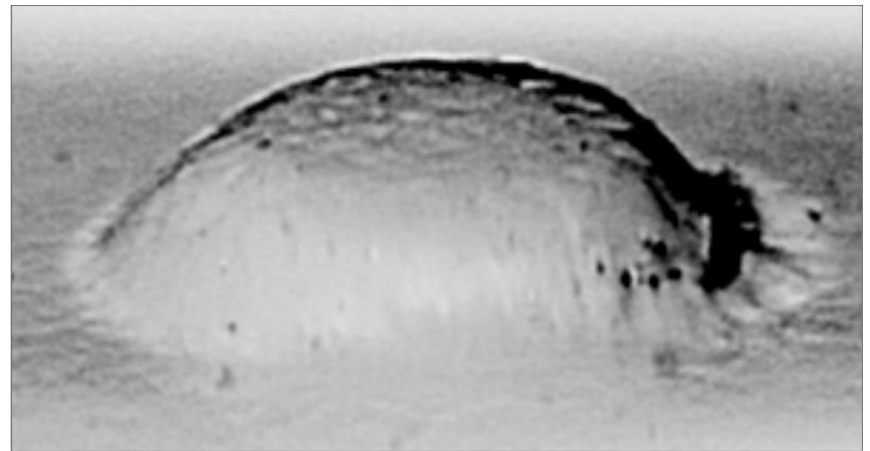
What Has Improved by Using the BREYE Braille Dot Analyzer?

If you would have to read
a text of such a bad quality
it would make you really unhappy

If you would have to read
a text of such a **good** quality
it would make you really ~~un~~happy

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Control Your Running Job

- Measuring a sample package on a regular schedule will lead to a documented quality control of the process
- The BREYE Software supports the ISO EN 15823 recommendation
- ISO EN 15823 recommends to control
  - 3 dots
  - on 3 different locations per package.

Dot 1,2,3

Location A,B,C

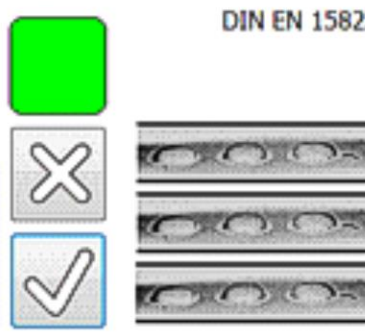| Identification Number						Marburg Medium		DIN EN 15823
PZN-5904914								
Height: 0.20 ± 0.08			Base diameter: 1.45 ± 0.15			Space: 2.50 ± 0.10		
mm	H1	H2	H3	B1	B2	B3	S1-2	S2-3
A	0.17	0.20	0.17	1.54	1.56	1.59	2.54	2.52
B	0.14	0.21	0.17	1.58	1.56	1.57	2.52	2.52
C	0.15	0.18	0.17	1.58	1.55	1.54	2.55	2.50

BETA INDUSTRIES
The Quality Control Company
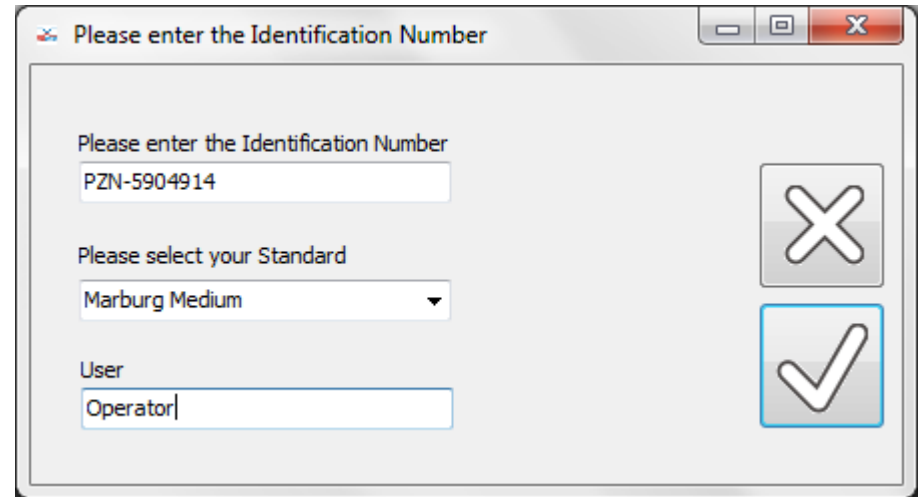
Check Braille Dot Quality Against a Reference

- The BREYE software implements a reference library for Braille Dots including

  - **Dot height** – the most critical criteria for the readability of the Braille character

  - **Dot base width** – the sharpness of the dot is the second most critical criteria for the readability of the Braille character

  - **Space between two dots** inside a character – the least critical criteria for the readability of the dot
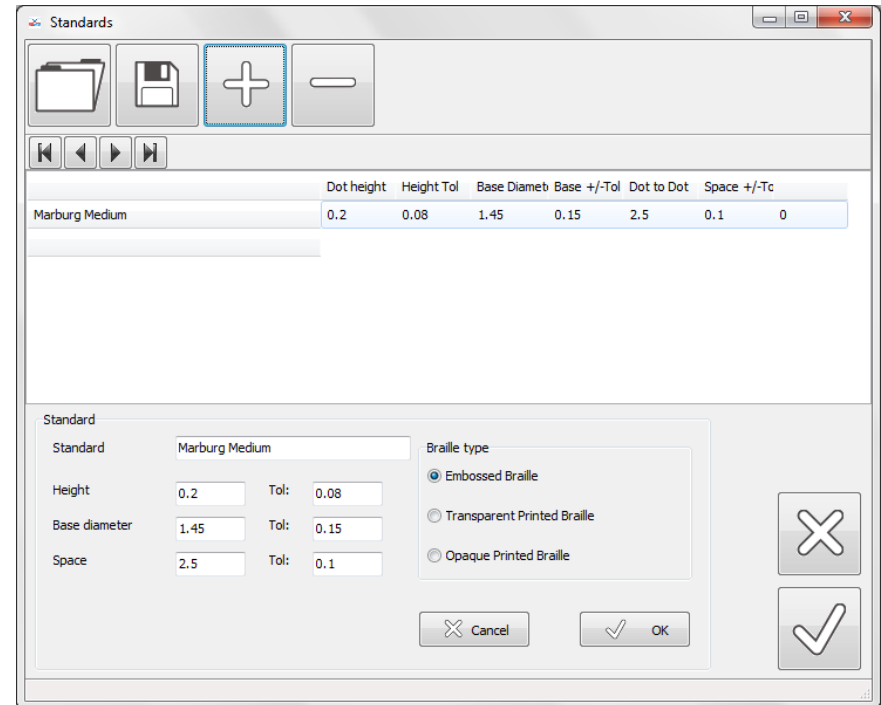
All parameters in tolerance:

Control the Quality of a Single Package

- Click the JOB Icon to start the measurement of a new package.

- Every pharmaceutical packaging product is identified by a unique Identification Number

- The Identification number together with a time stamp identifies a single package
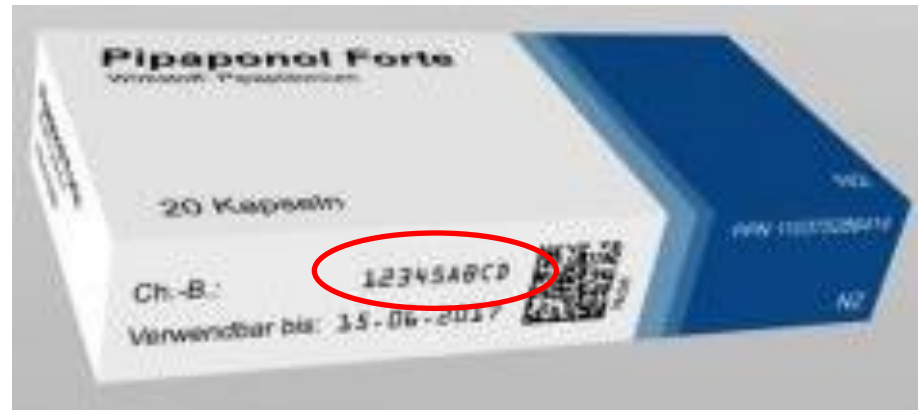
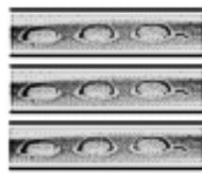# Measure 3 Dots in 3 Different Locations

- A standard defines the reference numbers

- A unique Identification number is assigned to every single pharmaceutical package.

Green square = your measurements are in tolerance

| Identification Number | | | | | Marburg Medium | | | DIN EN 15823 |

PZN-5904914

mm	Height: 0.20 ± 0.08			Base diameter: 1.45 ± 0.15			Space: 2.50 ± 0.10	
	H1	H2	H3	B1	B2	B3	S1-2	S2-3
A	0.17	0.20	0.17	1.54	1.56	1.59	2.54	2.52
B	0.14	0.21	0.17	1.58	1.56	1.57	2.52	2.52
C	0.15	0.18	0.17	1.58	1.55	1.54	2.55	2.50

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The Beta Breye Braille Dot Analyzer Automatically Creates Quality Reports for You and Your Customers

The "Quality Reports" are automatically saved and contain all information

- Time Stamp
- Job ID
- Reference
- Statistics
- Images
- Single measurements
- Green / yellow / orange / red Flag

BREYE QUALITY REPORT

DIN EN 15823

24.05.2012-10:43:57

| Identification Number: | PZN-5904914 |
| Standard: | Marburg Medium |

	Average	Max	Min
Height: 0.20± 0.08	0.18	0.20	0.16
Base diameter: 1.45± 0.15	1.57	1.64	1.52
Space: 2.50± 0.10	2.52	2.56	2.45

mm	H1	H2	H3	B1	B2	B3	S1-2	S2-3
A	0.18	0.17	0.19	1.56	1.54	1.64	2.45	2.52
B	0.16	0.20	0.17	1.57	1.52	1.58	2.56	2.52
C	0.17	0.17	0.18	1.56	1.59	1.57	2.53	2.54

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Create Statistics For the Entire Job

- Create a statistical report collecting all measured packages in one single document
  - Select a time frame
  - Select a Job Identification number or a group of Job ID's by wild cards
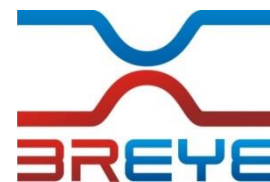 - Click the statistics icon to draw graphs and calculate the statistics

BETA INDUSTRIES
The Quality Control Company
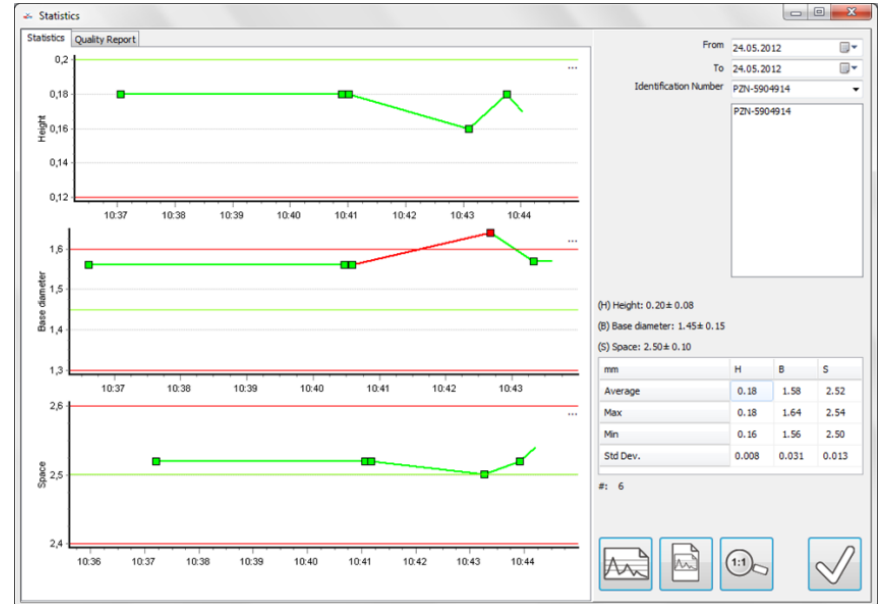
The Big Plus for Your QA

BREYE QUALITY REPORT
DIN EN 15823
24.05.2012-10:43:57

Identification Number: PZN-5904914
Standard: Marburg Medium

	Average	Max	Min
Height: 0.20± 0.08	0.18	0.20	0.16
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Space: 2.50± 0.10	2.52	2.56	2.45

mm	H1	H2	H3	B1	B2	B3	S1-2	S2-3
A	0.18	0.17	0.19	1.56	1.54	1.64	2.45	2.52
B	0.16	0.20	0.17	1.57	1.52	1.58	2.56	2.52
C	0.17	0.17	0.18	1.56	1.59	1.57	2.53	2.54

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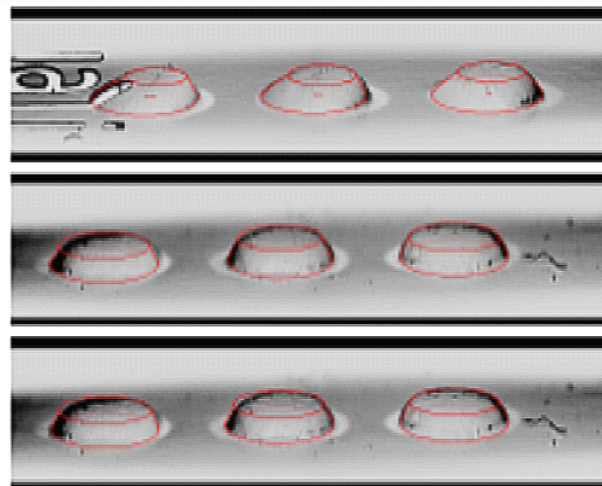
Zoom into the graphs

- You can zoom into the graphs to show details
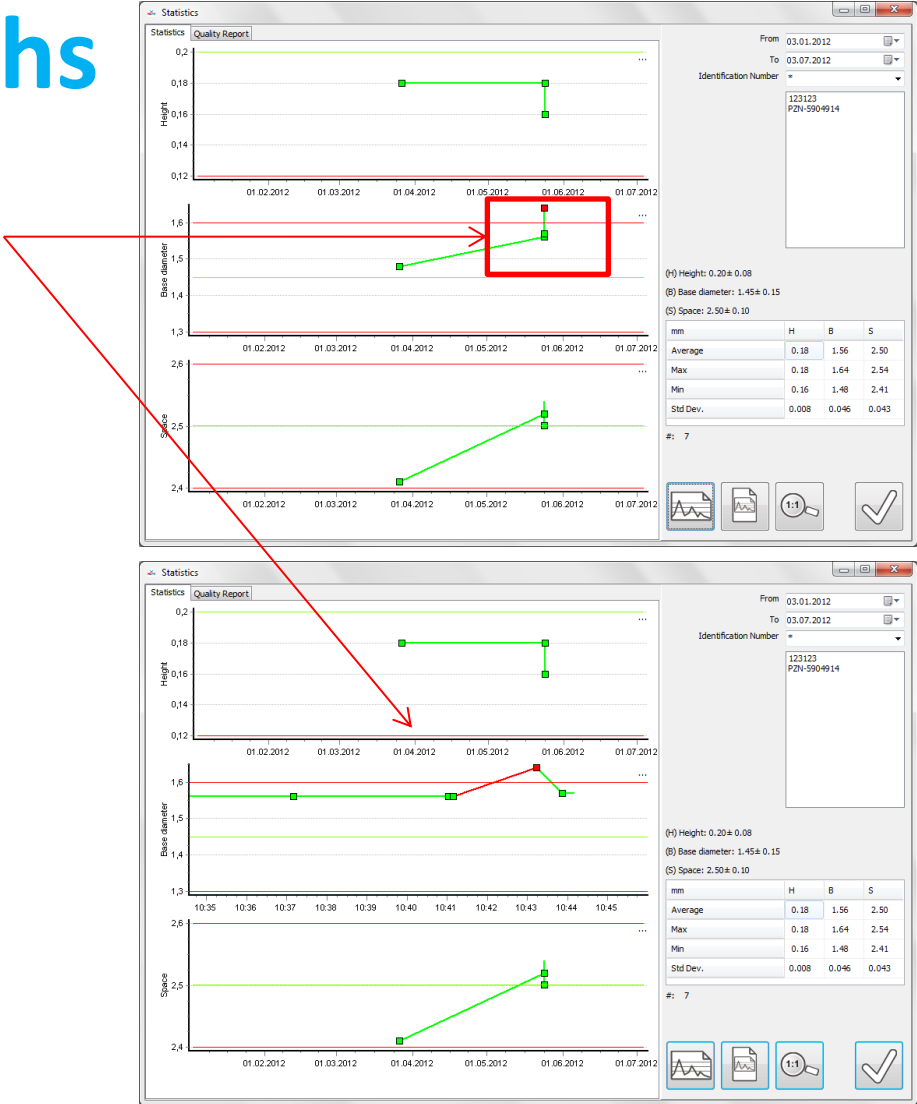
The Out Of Tolerance Dot

- Click on the **out of tolerance dot** to open the respective quality report and to see details.
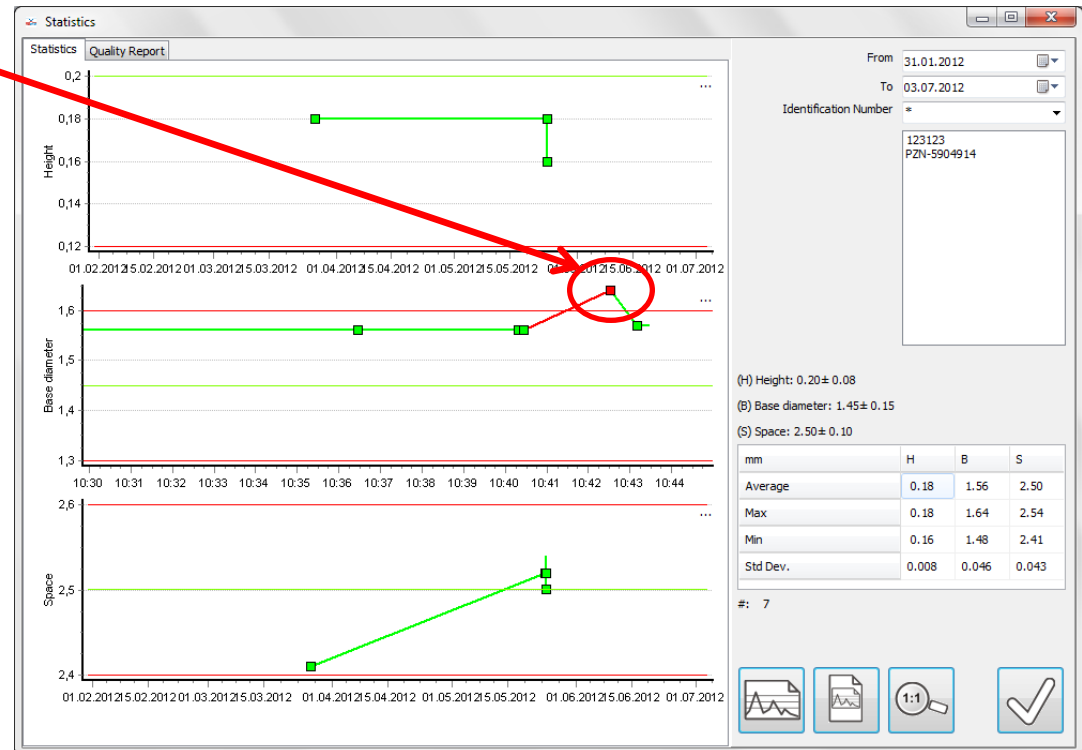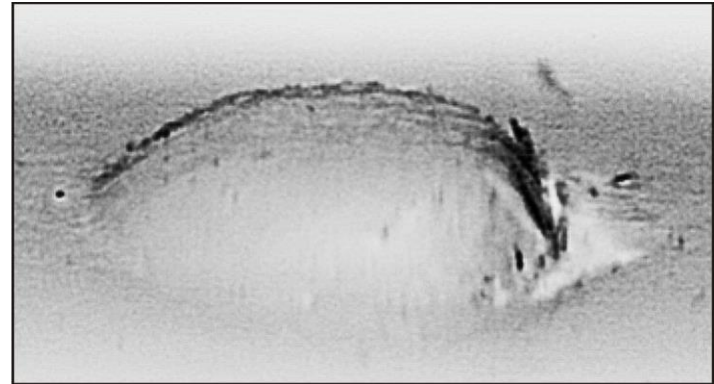
Create a PDF Report of the Statistics
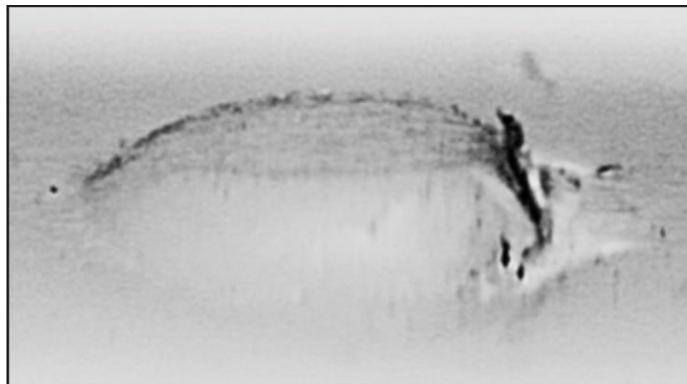
Measurements with a Digital Micrometer

Original
height 0.20mm
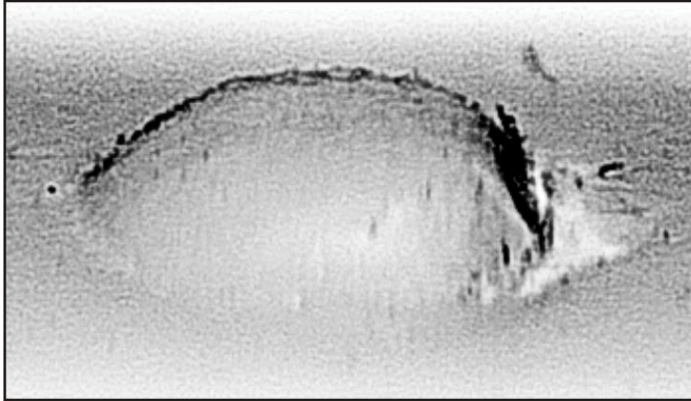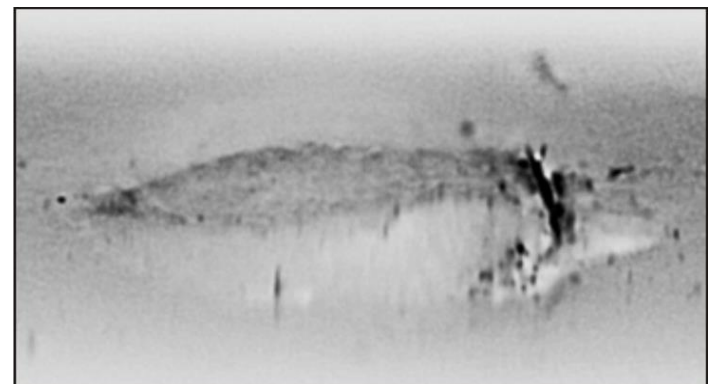
70g ~ -0.2mm very soft
release, height 0.17mm

82g ~ -5mm soft release
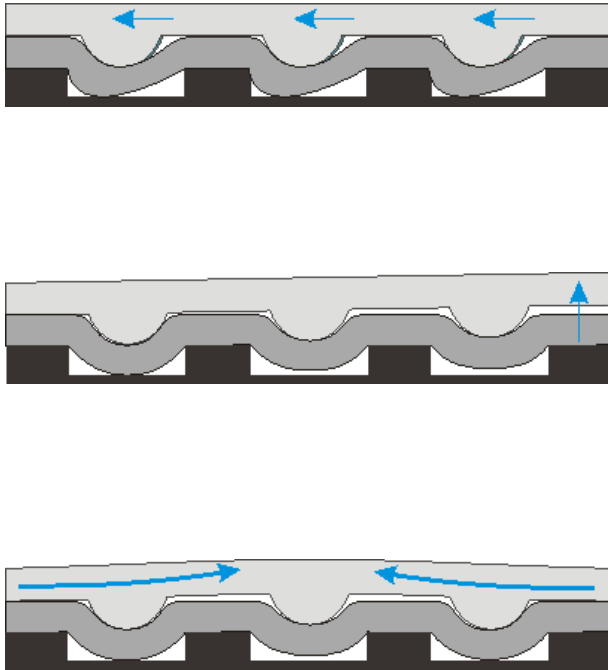height 0.13mm

75g ~ -2mm fast release
height 0.05mm

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You've Done Your Job Right.
How Does Your Customer's Procurement Department Evaluate the Quality of Your Braille dots?

- **BREYE** is a handheld device that can be applied on flat card board but also on finished folded boxes

- **BREYE** is a High End Tool for a reasonable price that fits also to the Procure Department's budget

- **BREYE** is a simple to use tool that can be used by anybody and fits into the production environment but also into office environment.

- **Use the same tools to speak the same language**

BETA INDUSTRIES
The Quality Control Company

The Big Plus for Your Tools

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