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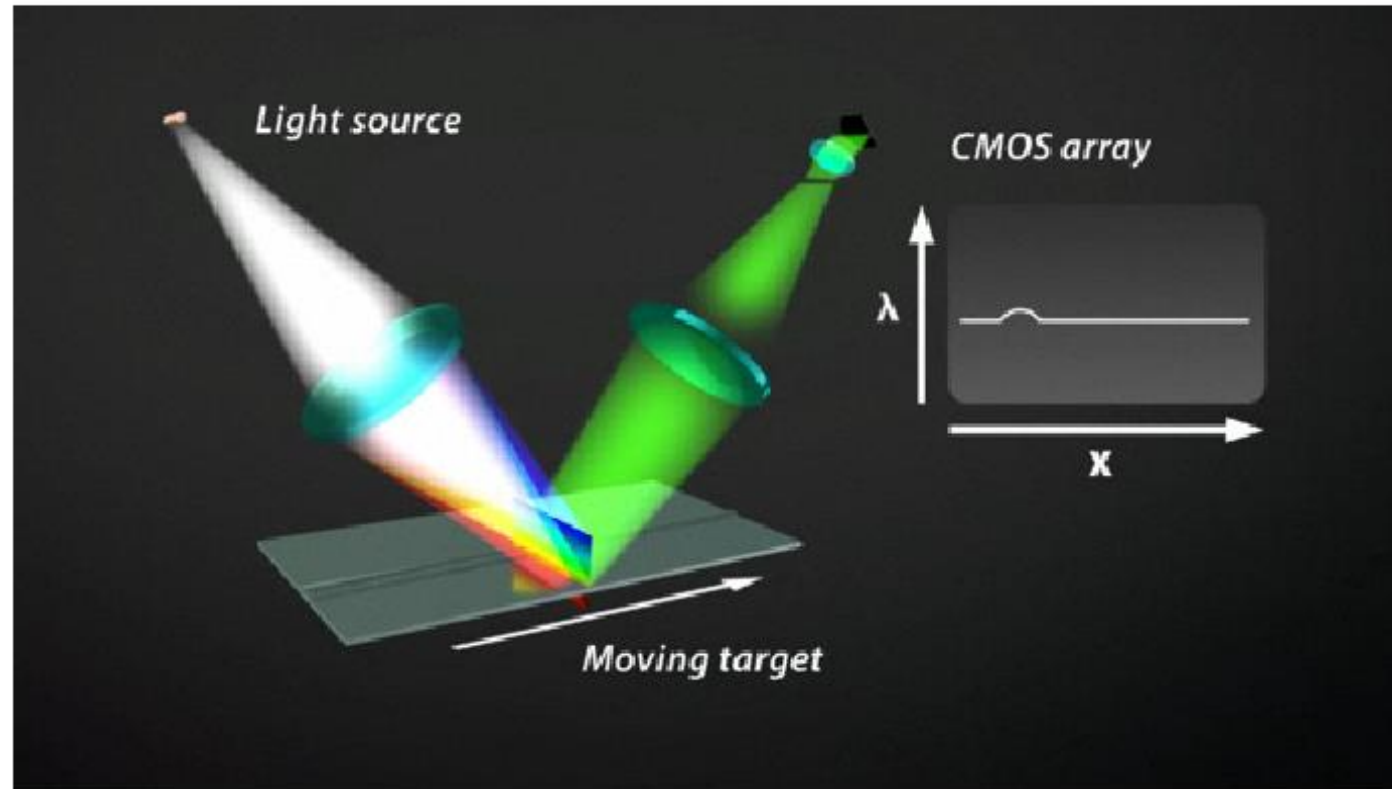
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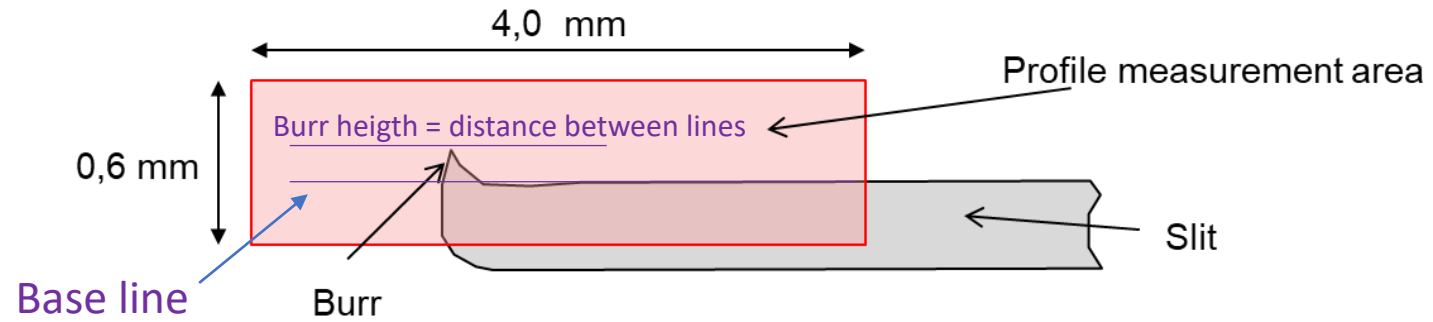
EP 100 +

Offline Burr height
measurement system

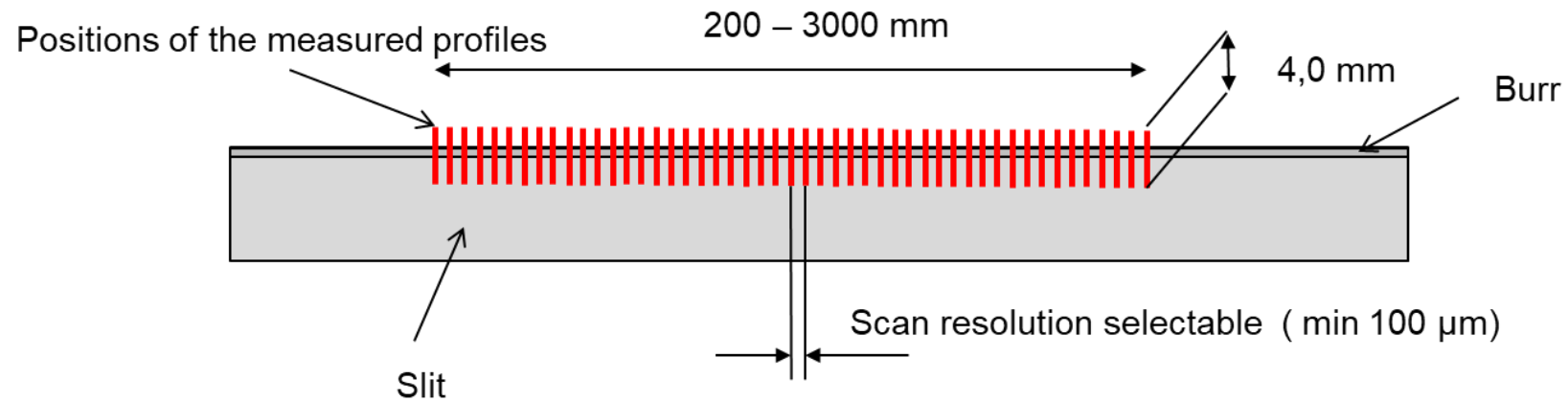


Measurement principle LCI - Line chromatic imaging

Side view



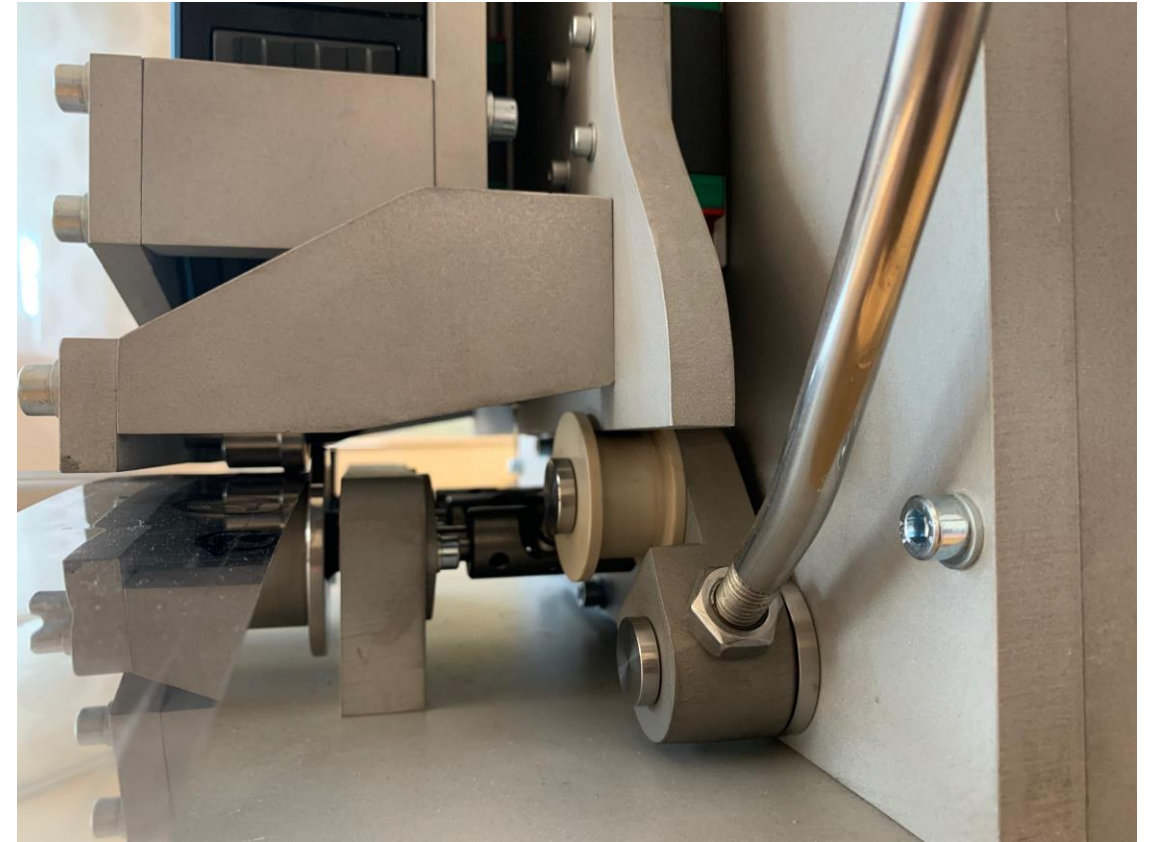
Top view



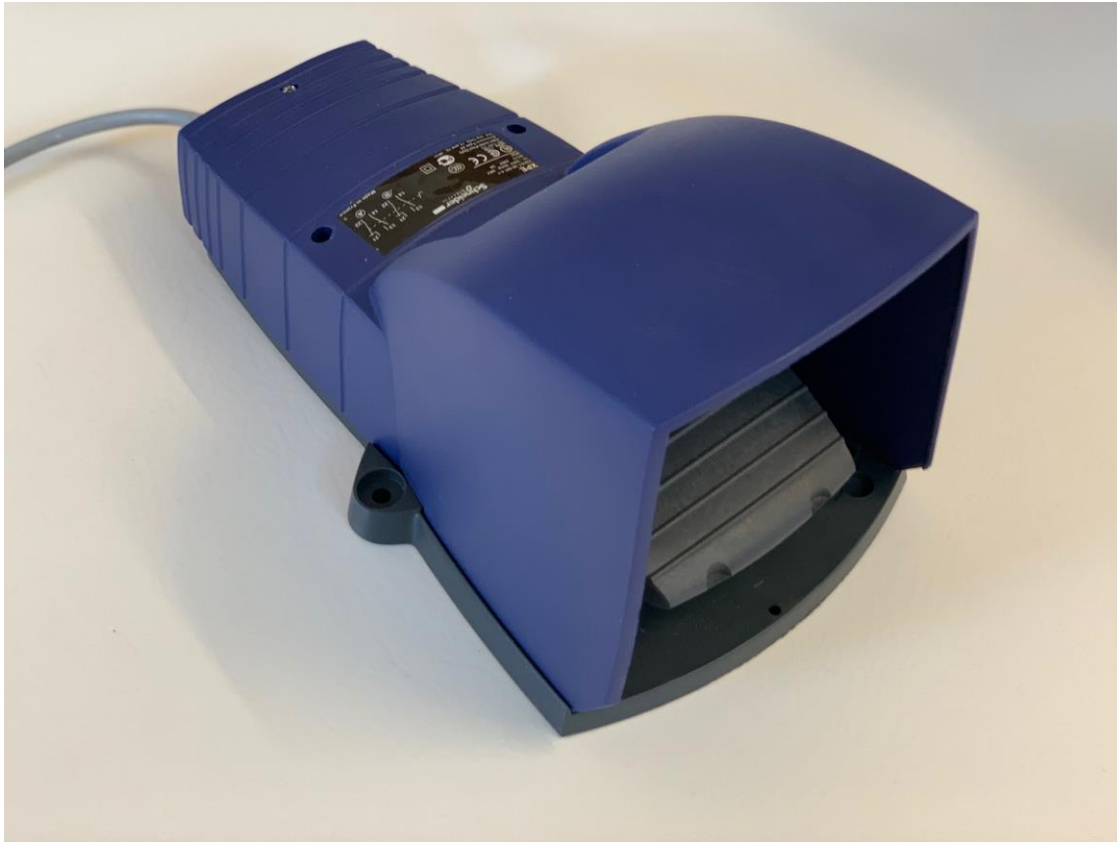
Sample scanning principle

EP 100 + Offline Burr height measurement system

- Thickness range 0,05 – 5 mm (other ranges must be clarified)
- Width range 10 – 1000 mm (other ranges must be clarified)
- Strip sample length > 200 mm (recommended strip length 1200 mm)
- Strip feeding speed 5 – 75 mm/s (adjustable via potentiometer)
- Measuring accuracy $\pm 1 \mu\text{m}$
- Burr height detection range 2 – 600 μm (Related to surface roughness)
- Measurement resolution Z-axis 0,11 μm
- Optical profile length X-axis CD 4,3 mm
- Pixel size X 2,10 μm



Front view and top view



Foot pedal control for material transport and rear connections

Master_working_34_190308_11_Clean - Excel

File Info

Save recipe in folder: C:\VocalSpec\PilotCore\Recipe\ Browse

Get exports folder: C:\VocalSpec\PilotCore\Data\2019\AF\24\ Browse

Save results: C:\VocalSpec\PilotCore\Results\ Browse

Sample Data

Test Recipe: Receipt1

Measurement name: 1234_51_K1

Bandnummer: 1234

Kant: 1

SlitNr: 1

Operator: Kenneth

Thickness: 300

Width: 50

burrheightTolerance: 10

slitindexTolerance: 90%

SpareParameter1: 1

SpareParameter2: 2

SpareParameter3: 3

SpareParameter4: 4

LOAD RECIPE NEXT MEASUREMENT

Measure: Height

Arrow Auto-import: On

Autosave: On

Drop off - Pre: 10

Drop off - Post: 10

Burr height result

MAGNA

FileName

1556099417.csv

1551974161.csv

1551979462.csv

1551979998.csv

1551980129.csv

1551980195.csv

1551980314.csv

1551981240.csv

FileName: 1556095:17.csv

HeightOver

Location	er	Sum of MaxLimit	Sum of HeightUnk
330	0	10	9,61
440	0	10	1,94
510	0	10	3,39
520	0	10	4,2
530	0	10	2,15
540	0	10	2,12
550	0	10	2,79
560	0	10	1,62
570	0	10	4,49
580	0	10	0,99
590	0	10	2,15
600	0	10	2,65
610	0	10	2,8
620	0	10	3,74
630	0	10	1,97
640	0	10	2,43
650	0	10	6,69
660	0	10	2,34
670	0	10	2,23
680	0	10	2,06
690	0	10	4,15
700	0	10	8,35
710	0	10	1,98
720	0	10	3,19
730	0	10	3,79
740	0	10	2,52
750	0	10	5,25
760	0	10	2,6
770	0	10	1,99
780	0	10	2,68

Values

Radetiketter	BP	Bt	Ba	Std	Bv
1	9,61	8,62	2,79	1,52	0,99
2	7,53	6,25	2,54	1,15	1,28
3	23,77	22,50	3,25	4,04	1,27
4	9,02	7,77	2,65	1,33	1,25
5	5,10	4,34	1,85	0,64	0,76
Totalsumma	11,18	10,06	2,64	1,77	1,12

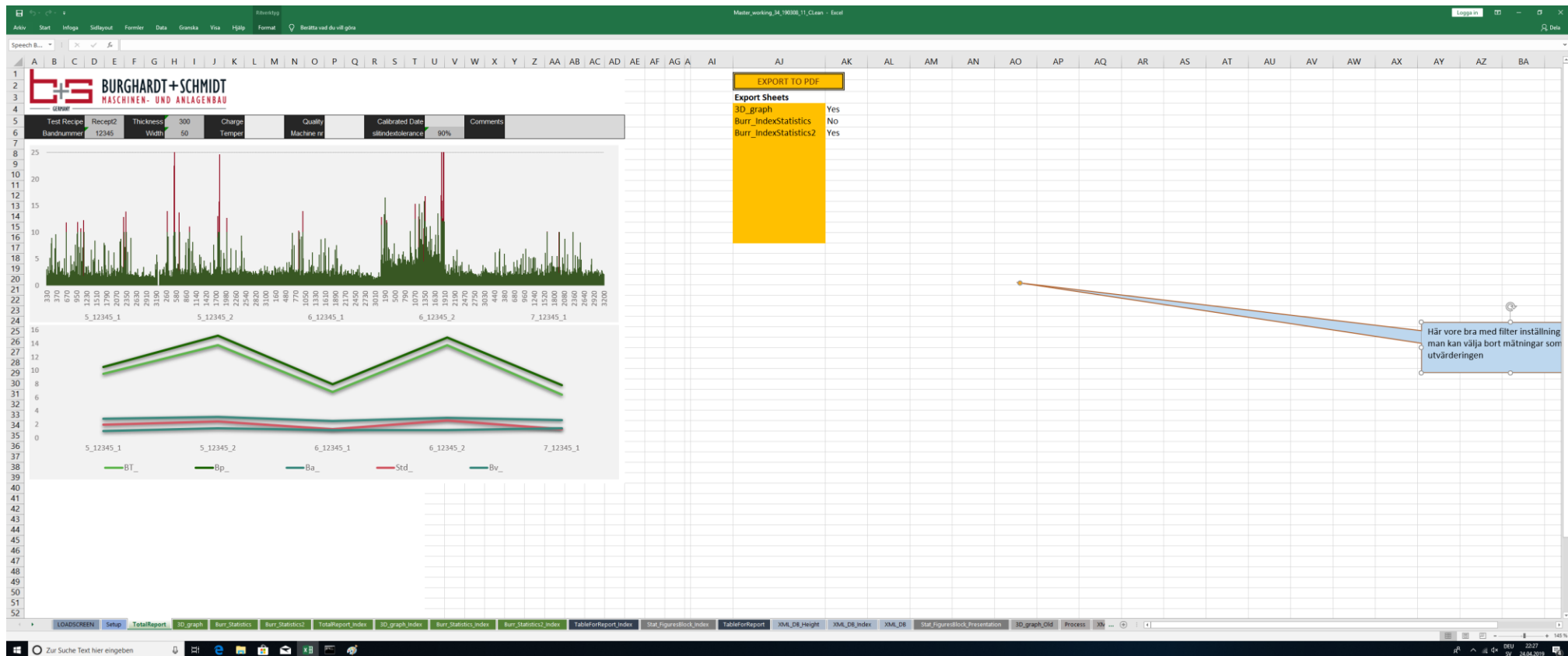
FileName: 1556095:17.csv

HeightOver

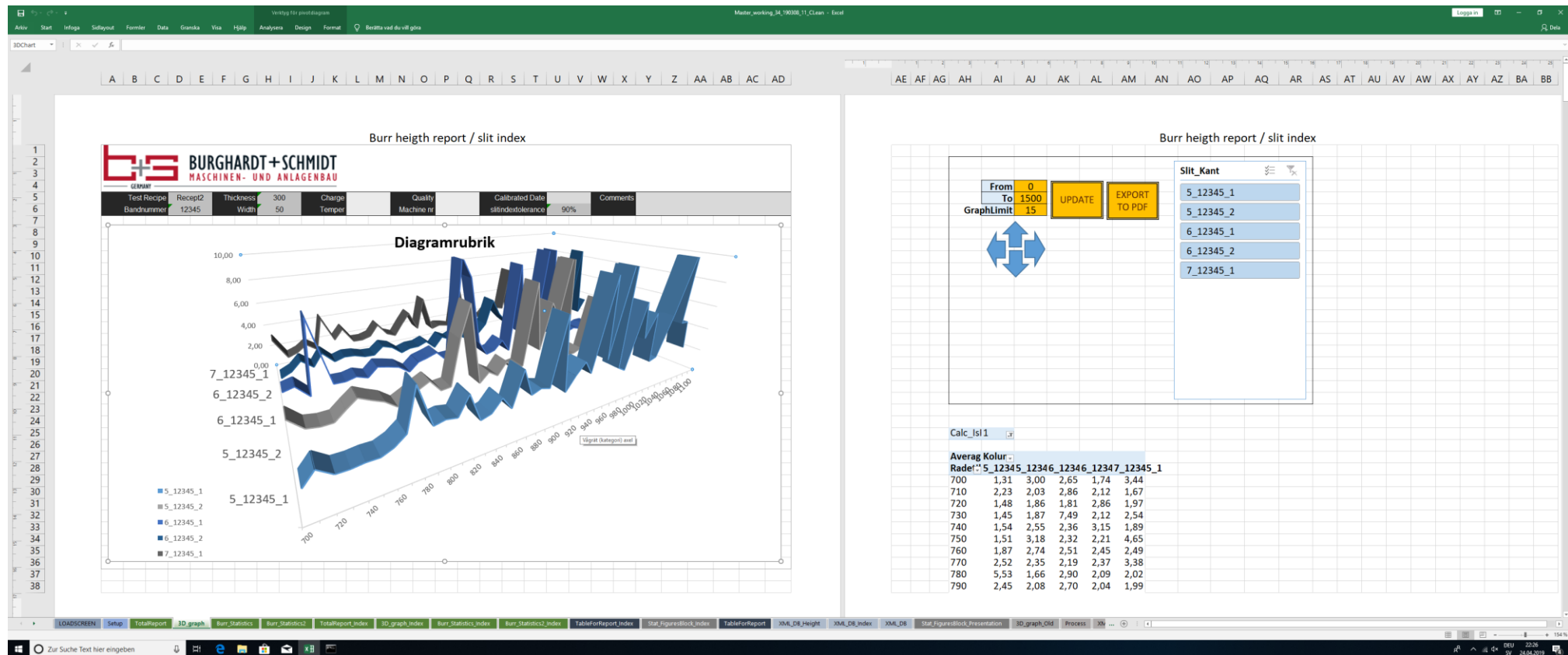
Location	er	Sum of He
910	2,43	0
930	4,46	0
950	2,08	0
970	1,94	0
990	3,24	0
1010	1,84	0
1020	3,8	0
1040	4,06	0
1050	1,28	0
1070	3,42	0
1080	2,16	0
1090	1,82	0
1100	1,56	0
1110	1,95	0
1130	2,51	0
1150	7,53	0
1170	2,24	0
1190	3,37	0
1200	2,64	0
1220	6,8	0
1230	1,44	0
1250	1,58	0
1270	3,24	0
1290	3,25	0
1300	3,65	0
1320	1,33	0
1340	1,35	0
1360	1,62	0
1380	2,17	0
1400	2,06	0

Windows aktivieren
Wechseln Sie zu den Einstellungen, um Windows zu aktivieren.

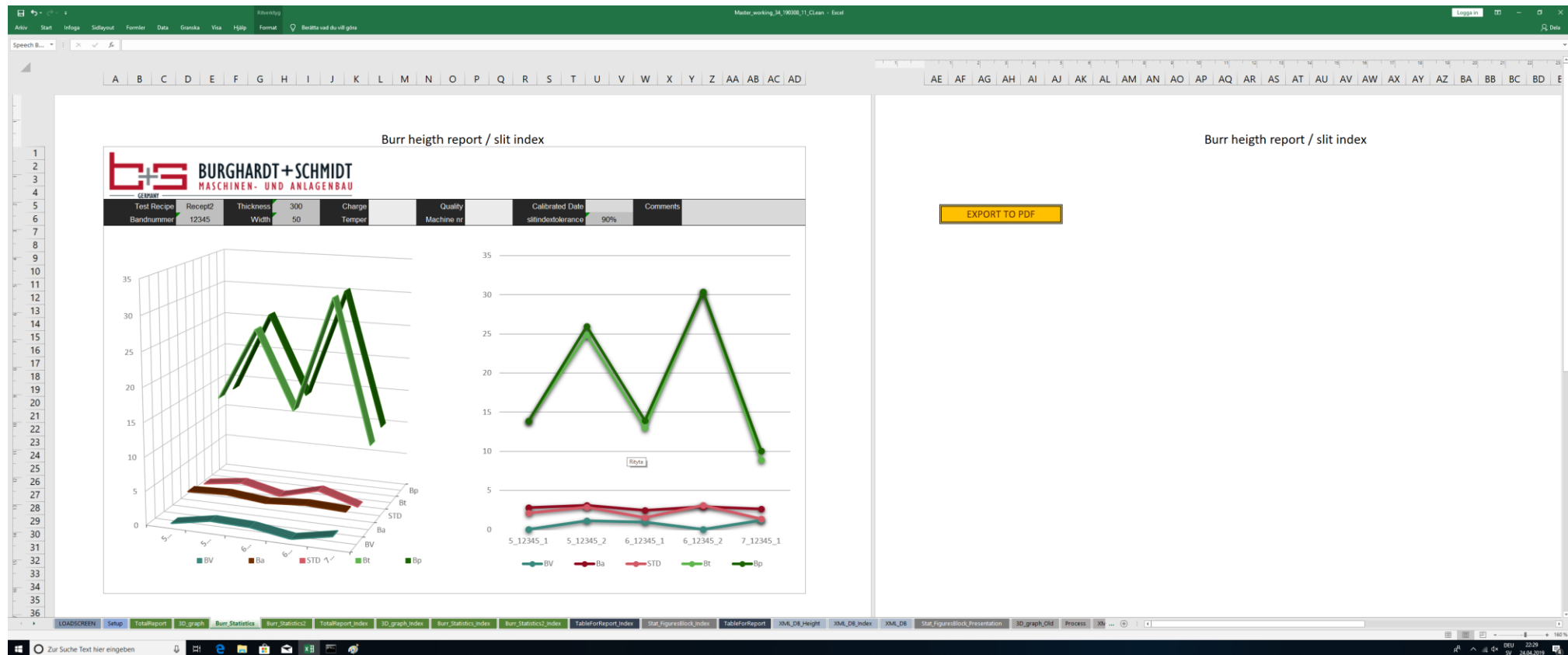
Setup and main measurement screen



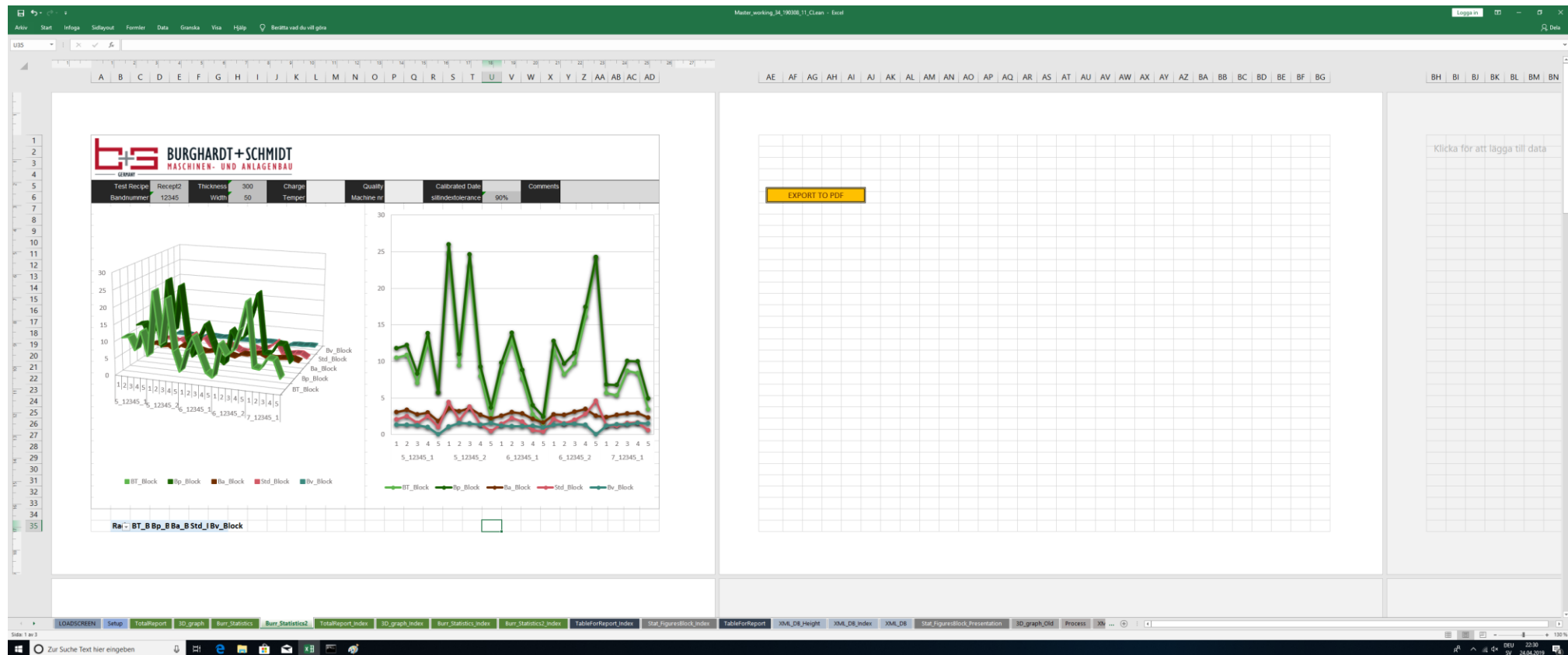
Total report of all measurements under one coil number



3-D chart for comparative measurements under one coil number

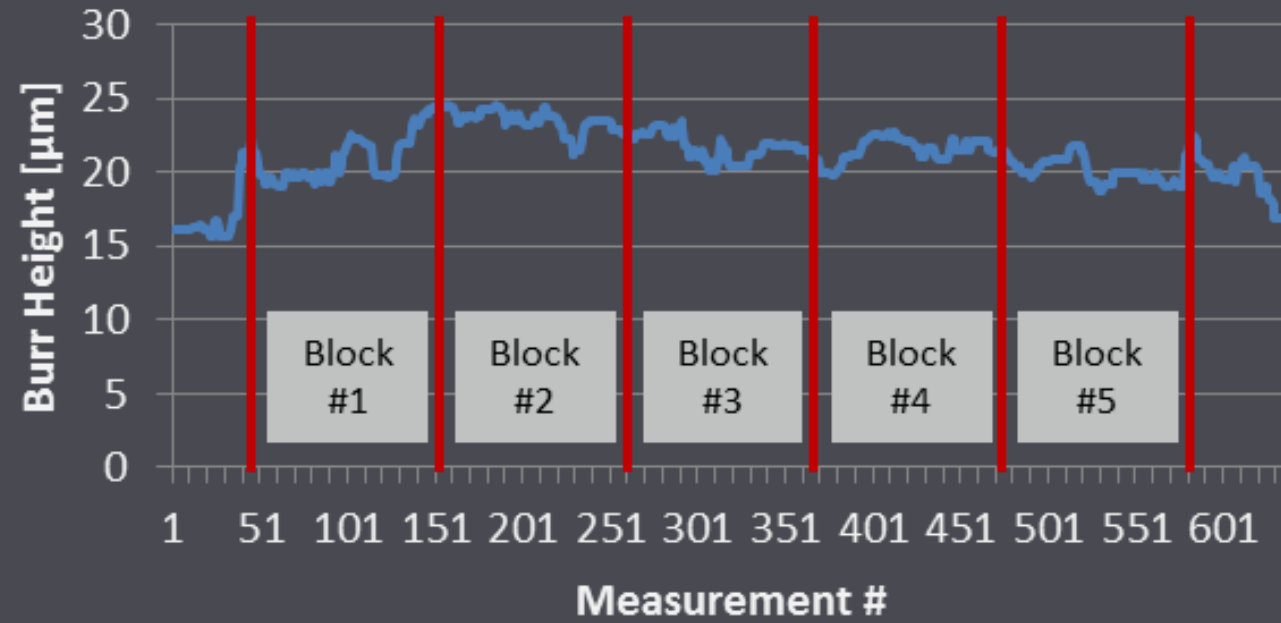


Burr statistics; Ba, Bp, Bv and Bt under one coil number



Burr statistical calculation with results for each 5 blocks

Readings



$$Ba_{block} = \frac{1}{n} \sum_{i=1}^n y_i \quad \Bigg| \quad Ba = \frac{1}{blocks} \sum_{i=1}^{blocks} Ba_i \quad \Bigg| \quad blocks = 5$$

Ba – average of Burr Height values.

$$Bv_{block} = \min y_i \quad \Bigg| \quad Bv = \frac{1}{blocks} \sum_{i=1}^{blocks} Bv_i \quad \Bigg| \quad blocks = 5$$

Bv – average of Burr Height minima.

$$Bt_{block} = \max y_i - \min y_i \quad \Bigg| \quad Bt = \frac{1}{blocks} \sum_{i=1}^{blocks} Bt_i \quad \Bigg| \quad blocks = 5$$

Bt – average of Burr Height maxima - minima.

$$Bp_{block} = \max y_i \quad \Bigg| \quad Bp = \frac{1}{blocks} \sum_{i=1}^{blocks} Bp_i \quad \Bigg| \quad blocks = 5$$

Bp – average of Burr Height maxima.

Statistical calculation method

