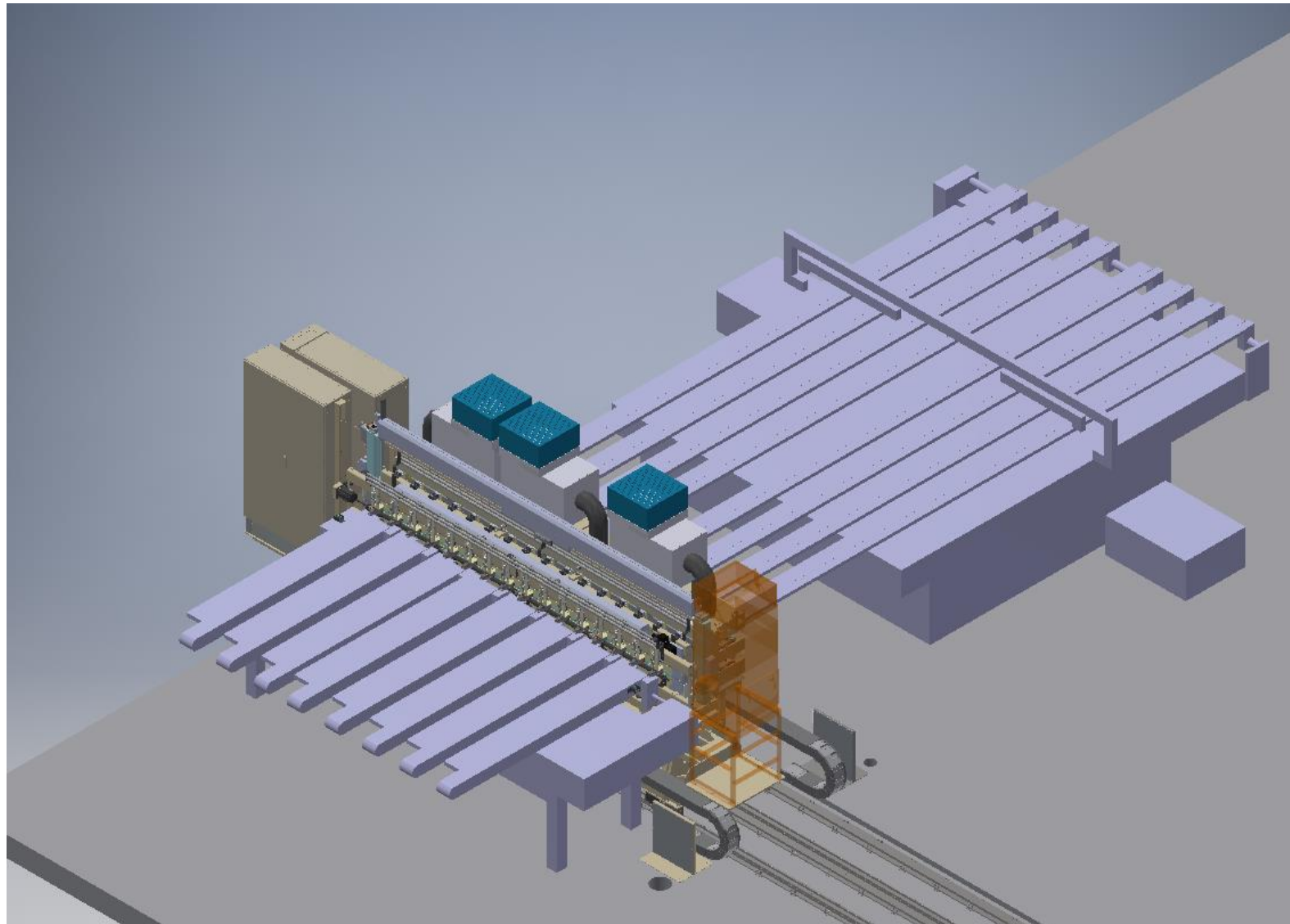


## FAT Brush machine report (FCS)

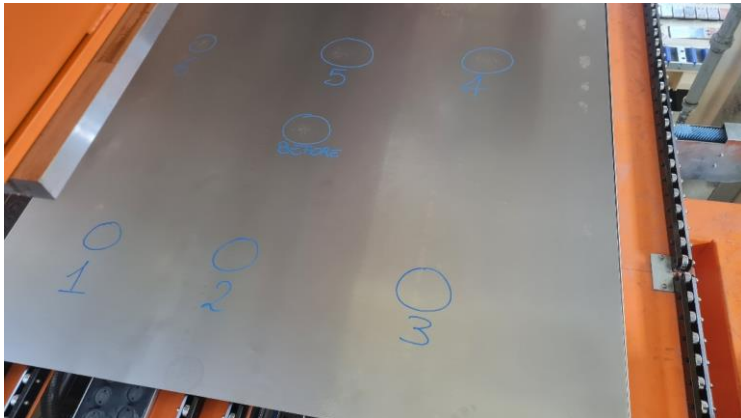


# FAT BRUSH MACHINE REPORT

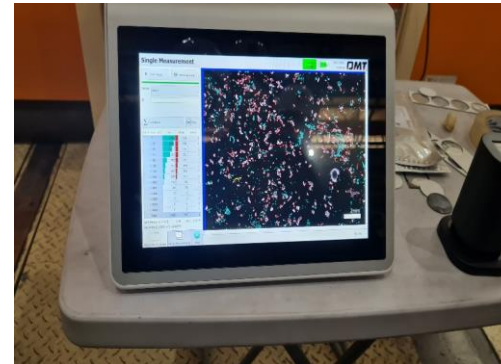
## TEST DESCRIPTION PERFORMED DURING FAT AT GMK

- Test performed with blank processing at 150 m/min speed
- Marked 6 spots on the blank to test size and quantity of the particles **before cleaning the blank**
- Marked 6 spots on the same blank to test size and quantity of the particles **after cleaning the blank using brush machine (FCS)**
- Collect the particles using special pads provided by measuring device manufacturer: TAPE LIFT PAD FOR PARTSENS
- Measure size and quantity of particles using measurement device: PARTSENS+ 4.0

BLANK BEFORE CLEANING



Tape for lift pad after collection and measurement of the particles



BLANK AFTER CLEANING



# FAT BRUSH MACHINE REPORT

## DEVICE USED TO MEASURE SIZE AND QUANTITY OF THE PARTICLES ON THE BLANK



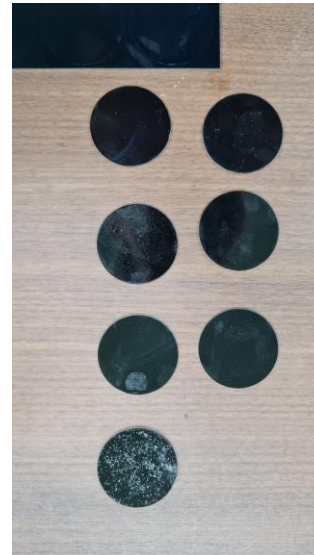
Manufacturer: OMT gmbh

Device name: PartsSens+ 4.0

Serial Number: PSP402115007

Calibration Valid Date: 08.2021 to 08.2022

## DEVICE USED TO COLLECT THE PARTICLES FROM THE BLANK



Manufacturer: OMT  
gmbh

Device Name: Tape

Lift Pad for Part Sens

Size Diameter: 36mm

Expiration date:

04.2023





# FAT BRUSH MACHINE REPORT

AVERAGE OF PERFORMANCE CLEANING AFTER TESTING 6 DIFFERENT SPOTS

## SUMMARY OF TESTS RESULTS

Test number	Cleaning performances
1	98,9 %
2	99,4 %
3	96 %
4	98,5 %
5	98,3 %
6	94,2%

PERFORMANCE REQUESTED TO PASS FAT:  
CLEAN AT LEAST 98% OF THE PARTICLES  
GREATER THAN 50 µM

## AVERAGE CALCULATION:

$$98,9+99,4+96+98,5+98,3+94,2 = 585,3$$

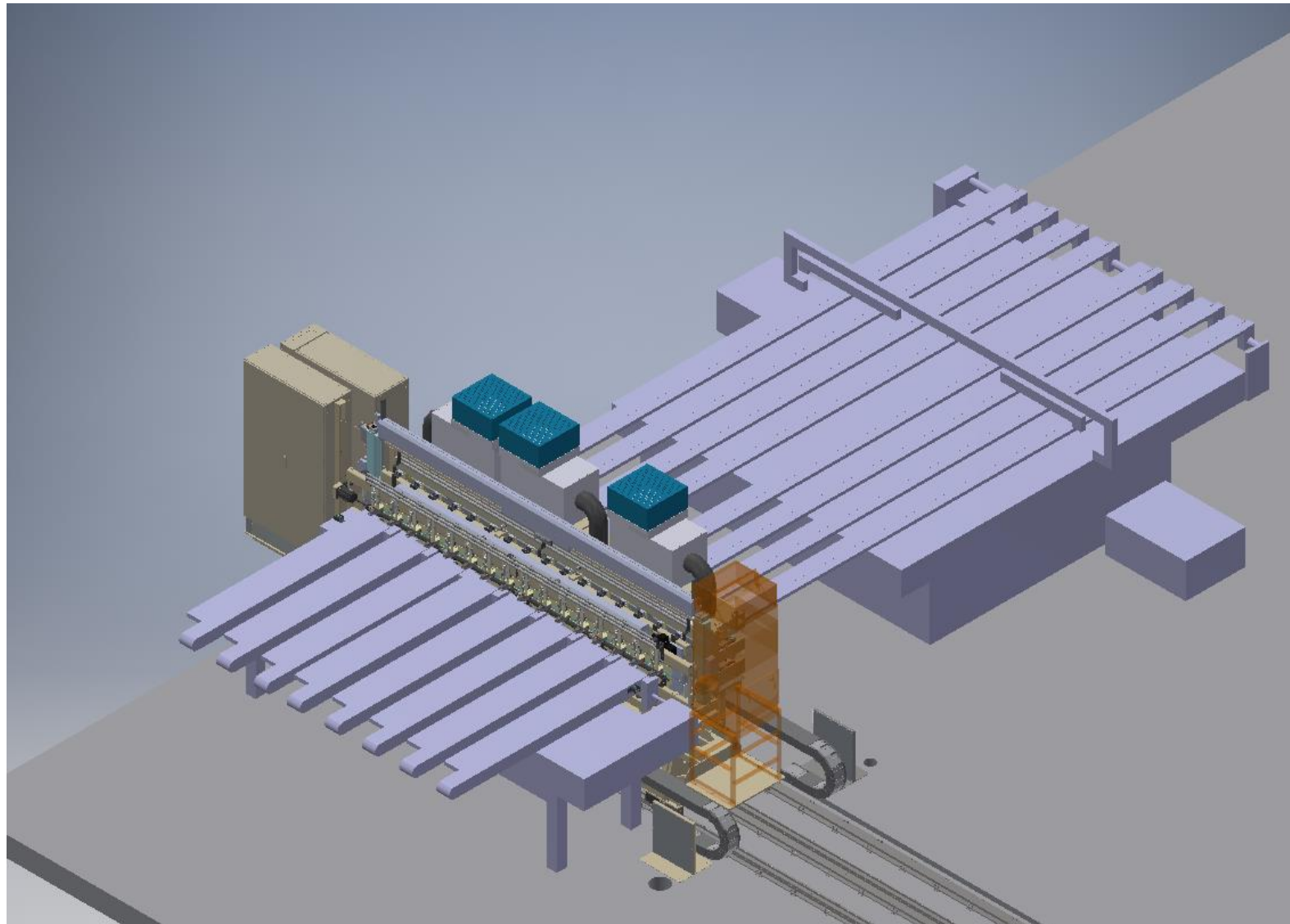
$$585,3 / 6 = 97,55 \%$$

\*Test 3 and 6 were performed simulating worst conditions:

- Spot 3: on this spot GMK requested to push particles before cleaning using fingers;
- Spot 6: on this spot GMK requested to spray oil on the particles before cleaning; the oil used is the same oil used in oiler machine.

Result of FAT: 97,55 %

# FAT Oiler machine report (ORA)



# FAT OILER MACHINE REPORT

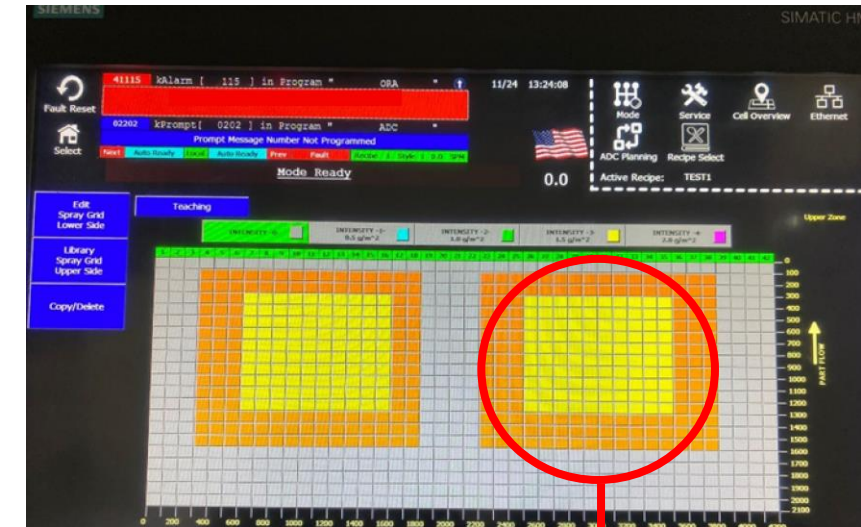
## TEST PERFORMED DURING FAT DESCRIPTION:

- Test performed with blank processing at 150 m/min speed
- Spray on the blank a pattern 1 square meter big
- Quantity tested 1,5 g/m<sup>2</sup>
- Collect the oil using a technical fabric
- Cleaning 1 square meter pattern sprayed with technical fabric to collect the oil and check the amount
- Check fabric weight before cleaning
- Collect the oil on the blank
- Check the fabric after oil collection , usign precision scale. Brand scale: OHAUS

## RESULT TO BE ACHIEVED TO PASS THE FAT

- Tested oil quanti: 1,5 g/m<sup>2</sup>
- Tollerance +/- 10%
- Values range accepted: 1,35 ÷ 1,65 g/m<sup>2</sup>

View of design of pattern from HMI (D1)



Blank tested

# FAT OILER MACHINE REPORT

## DEVICE USED TO MEASURE QUANTITY OF OIL SPRAYED ON THE BLANK



Manufacturer: Ohaus  
Device name: SPX2202KR  
Serial Number: C044393767  
Min weigh possible to detect: 0,01 g  
Max weight possible to detect: 2200 g



Check  
amount  
before  
spray



Check  
amount  
after  
spray

## COLLECTION OF THE OIL ON THE BLANK



## DEVICE USED TO COLLECT THE OIL ON THE BLANK



Manufacturer: MEWA  
Device name: MEWATEX ULTRA  
"RED"  
Material: Technical Fabric  
Features: high absorption  
capacity, low fabric residual  
dispersion  
Size: 40 x 30 cm

# FAT OILER MACHINE REPORT

## OILER PERFORMANCE TESTE RESULT

Amount of oil tested

1,5 g/m<sup>2</sup>

AMOUNT OF OIL COLLECTED ON  
THE BLANK

1,46 G/M<sup>2</sup>

FINAL RESULT IN PERCENTAGE %

$$(1,46 / 1,5) * 100 = 97,33 \%$$

Result of FAT: 97,33 %