

EURAMET Project No 1242

Measurement of areal roughness parameters

Pilot:

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Instruments:

- Interference microscopes (PSI, CSI (WLI))
- Confocal microscopes (CF)
- Optical profilers (OP)

Samples:

Nr.	Typ	Manufacturer	Identification	Nominal value
1	Step height	Fraunhofer Institute of Microelectronics Stuttgart (ims)	SH B 1000	$d \sim 1000 \text{ nm}$
2	Flat	SiMetricS	FtS	$Sa < 10 \text{ nm}$, PSD
3	Pitch	SiMetricS	RS-N	$300 \text{ nm} < p < 6 \text{ }\mu\text{m}$ $d < 190 \text{ nm}$
4	Roughness (2D-FIB)	m2c calibration	UFRS145-100-20 ID 005	$Sa \sim 10 \text{ nm}$
5	Roughness (AIR)	SiMetricS	RnS Type F2	$Sa \sim 45 \text{ nm}$
6	Roughness (AIR)	SiMetricS	RnS Type F1	$Sa \sim 80 \text{ nm}$
7	Roughness (AIR)	Rubert & Co	B40 VP04	$Sa \sim 800 \text{ nm}$

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Schedule:

Institute	Month	Remarks
PTB	March 17	Measurements done
DFM	April 17	Measurements done
INRIM	May 17	Measurements done
METAS	March – April 2018	Measurements done
CEM	skipped	Participation withdrawn
<i>PTB (1st check)</i>	<i>August 17</i>	Inspection
<i>Summer break</i>	August 17	
VNIIMS (COOMET)	September 17	Measurements done
NPL	skipped	Participation withdrawn
VTT	Jan - Feb 2018	Measurements done
<i>PTB (final check)</i>	<i>April - May 2018</i>	Final inspection

- Dates:**
- 30.06.2018 sending data for evaluation by one software
 - 31.10.2018 sending all measurement results to coordinator
 - 31.12.2018 Draft A report distributed to participants for discussion
 - 15.10.2019 Draft B ready to be discussed at TC-L 2019 meeting