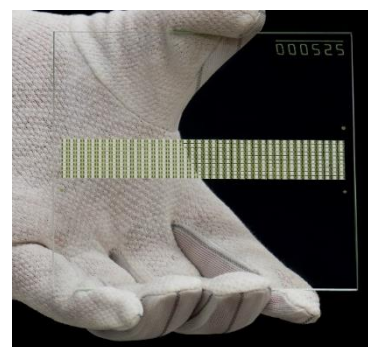


VERINAS

PBT GLASS TEST BOARD AOI TESTER

VERINAS is a dedicated AOI test equipment for evaluating remaining flux residues on PBT GLASS TEST BOARD

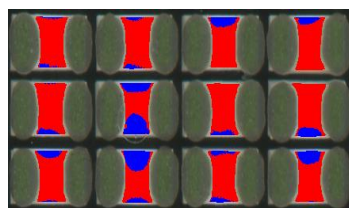
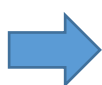


Numerical evaluation is used for precise comparison of cleaning results under different cleaning conditions

AOI evaluation process



Test board scan



Digitizing



94	92	82	89
92	52	93	85
87	61	87	78

Flux residue %

Report

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
10	62	84	66	59	48	51	58	48	70	54	52	46	52	64	66	54	55	48	38	38	47	67	78	45	70	66	52	49	64	60	65	59	51	65	54	60	82	97	58	67
9	99	65	73	89	59	67	79	74	77	78	63	46	81	79	80	72	60	88	55	70	79	89	70	78	82	71	84	88	88	98	74	88	64	88	88	75	88	86	98	98
8	84	69	88	98	66	75	77	79	65	64	88	57	72	69	69	88	88	72	57	69	63	88	78	87	89	65	84	63	71	88	68	70	55	84	84	88	88	82	89	98
7	87	88	74	84	81	83	75	74	67	68	75	57	71	60	62	75	48	68	74	84	76	88	61	86	67	88	78	51	72	77	83	74	79	71	69	87	52	85	85	91
6	100	94	75	77	87	69	87	81	71	61	63	58	79	76	57	78	56	67	63	75	78	88	84	82	73	80	63	72	68	80	60	71	88	74	79	87	61	87	78	98
5	100	78	85	76	98	94	74	75	69	69	77	70	77	80	57	88	63	70	81	77	59	88	68	75	87	77	72	69	73	70	84	73	66	69	81	78	91	89	100	
4	88	97	97	90	82	86	83	80	88	80	63	75	74	80	86	64	88	85	72	79	60	77	74	77	83	65	83	84	98	61	78	54	84	74	74	82	76	94	92	89
3	80	93	97	87	83	67	88	82	81	62	69	75	80	78	56	67	73	69	71	78	98	62	73	70	67	86	89	66	85	59	82	84	84	69	78	76	80	80	100	
2	100	82	69	68	98	83	80	78	62	58	67	69	68	77	74	66	81	58	60	59	66	76	74	59	81	71	69	69	61	77	79	88	85	72	81	78	77	84	84	82
1	79	67	63	78	60	57	54	57	46	48	19	43	55	56	58	65	62	54	46	40	88	54	43	47	60	46	44	66	54	42	62	54	58	69	55	55	53	53	57	88

Notes:
Pad f.:BILAKER2 Flux f.:FLUX2
Dyn.f.:OFF Red.Pad:2

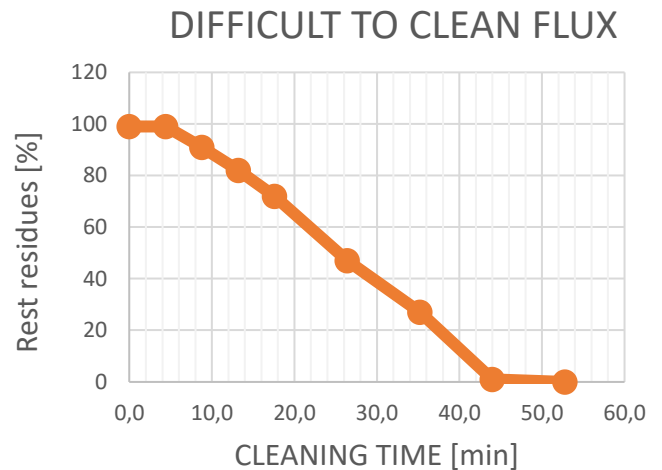
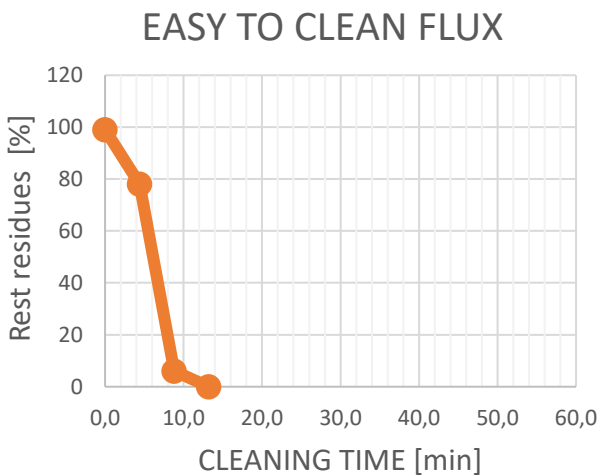
2019.4.17. 10:10 Configuration: SuperSwash S.N.:170294 AQUANOX A4727 1RS 446 AC8
Testing file: C:\Program Files (x86)\TESPAS\Projects\SMTA19_2Ra\000501_AC2.bmp
Middle value: 73 %
X=0.729 StDevRR=0.136 N=400 XLit=1.168 StdErrPR=0.0068 StdErrLit=0.0345
LoCLit=1.0994 HiCLit=1.2373 LoCI=75.01 HiCI=77.51 MeanResp=76.28
T: Save View

TYPICAL APPLICATIONS

- Flux residues dynamic solubility testing and comparison
- Statistical process control of cleaning process according to J-STD-001 Am. 1, par. 8
- Validation of changes instead of ionic contamination measuring
- Cleaning process optimization
- Cleaning machine capability studies
- Cleaning process diagnostic

• Typical applications

Comparing dynamic solubility of flux in cleaner

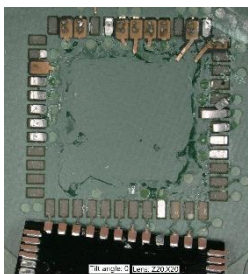


Cleaning machine capability

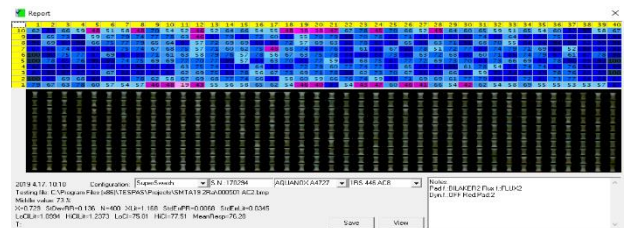
- Run the cleaning process with GLASS TEST BOARD in different chamber positions. Compare results.
- Run 10-30 cleaning cycles with the same cleaning parameter settings, each with GLASS TEST BOARD (to about 50% residues result). Compare results, calculate Cpk.

Process setup for new product cleaning

- Clean simultaneously your product and GLASS TEST BOARD
- Check cleanliness under critical components
- Test the remaining residue on GLASS TEST BOARD after your product is clean. This is a threshold for properly running cleaning process.



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Verification of process changes

- Run the cleaning process with GLASS TEST BOARD after each significant change (filter exchange, washing solution exchange, machine maintenance and other according to J-STD-001G AD. 1, clause 8.3.1)
- Evaluate and compare results against your threshold from process setup