Machine accuracy test report

ACT (Accuracy Check Tool)

The ACT is used to determine the placement accuracy of a specific placement head and, where necessary, to correct this. To do this, special components are first placed on a glass mapping plate and the plate is then measured. The offset determined (prescribed coordinates – placement coordinates) is then taken into account during each subsequent placement operation, which ensures that the placement head places components with the specified accuracy.

Principle of ACT Measurement

Placement of glass components or ceramic components (Ceram pads) on a glass plate with reference fiducials (*Figure 1-1*). Glass or ceramic components are used, depending on the camera type.

- Position measurement of the placed components on the glass plate.
- Automatic determination of offset in x, y and θ .
- Storage of corrections in the relevant machine data.

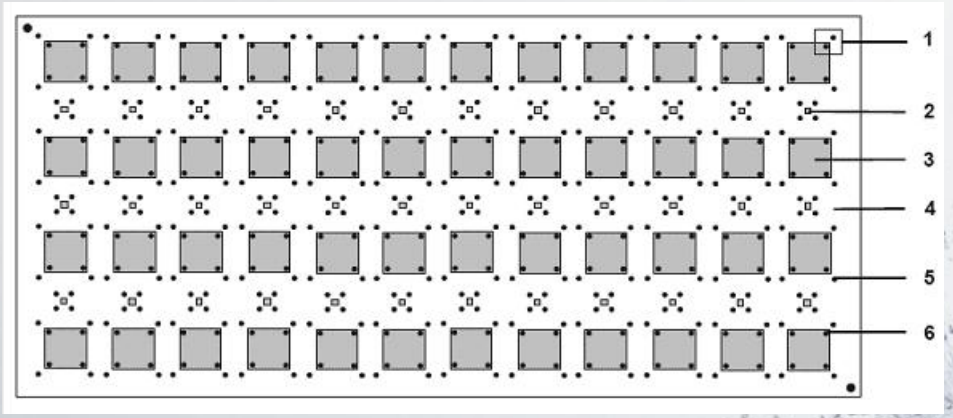
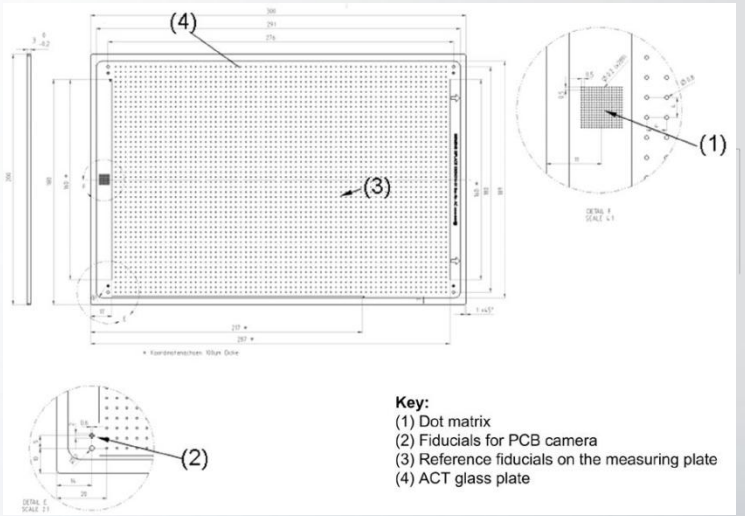
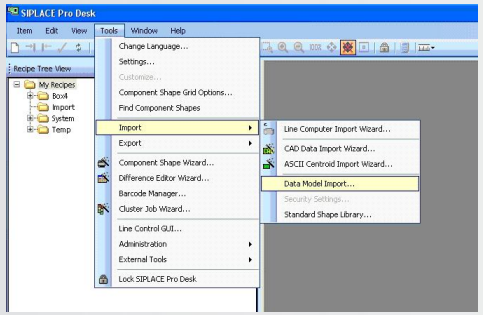


Figure 1-1: Principle: Measuring plate with glass and ceramic components

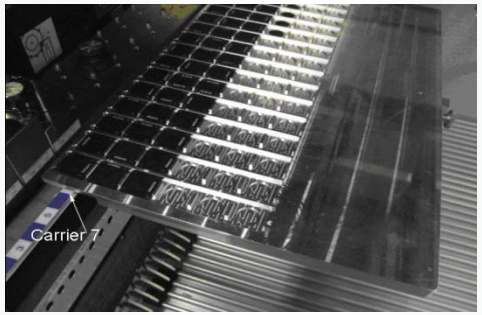


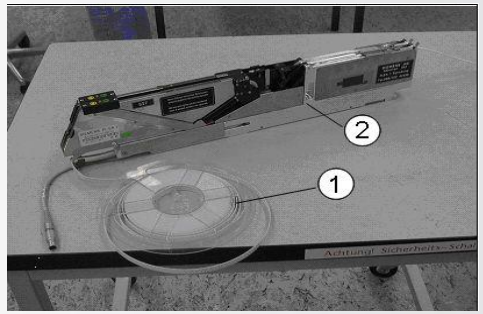
ACT Measurement Process

- Importing the SIPLACE Pro Data – Procedure

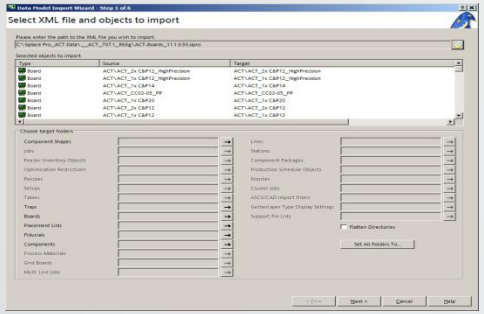


- Setting Up Components on the Component Table

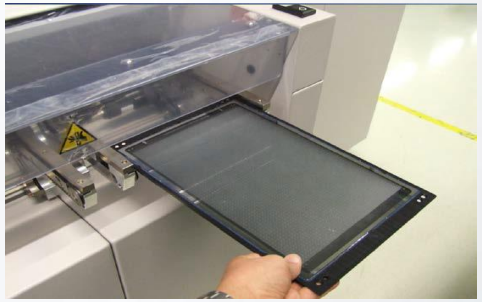




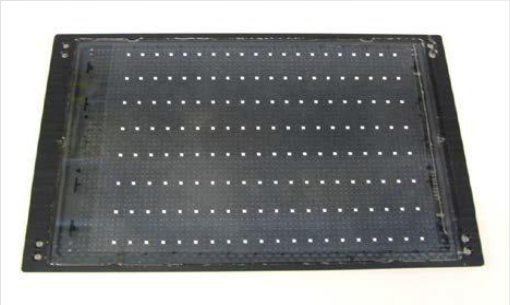
- Importing Boards in SIPLACE Pro

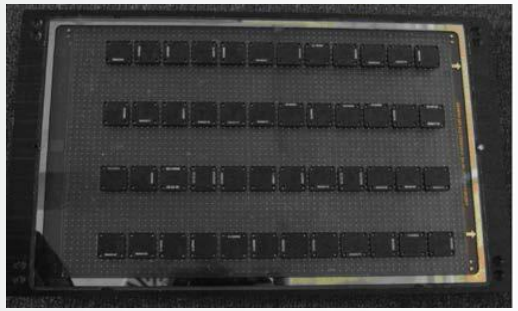


- Inserting the Plate



- Press Star, Thereafter, the measurement is automatically started





- Test results as below:

Machine serial number	Gantry	X	Y	Angle
SMD2 D6	1	2.22	2.54	-
	2	2.37	2.12	-
	3	2.99	2	-
	4	2.52	2.52	-

- Suggestions:

  Results are more than 2.0. It means status of this machine is stable.