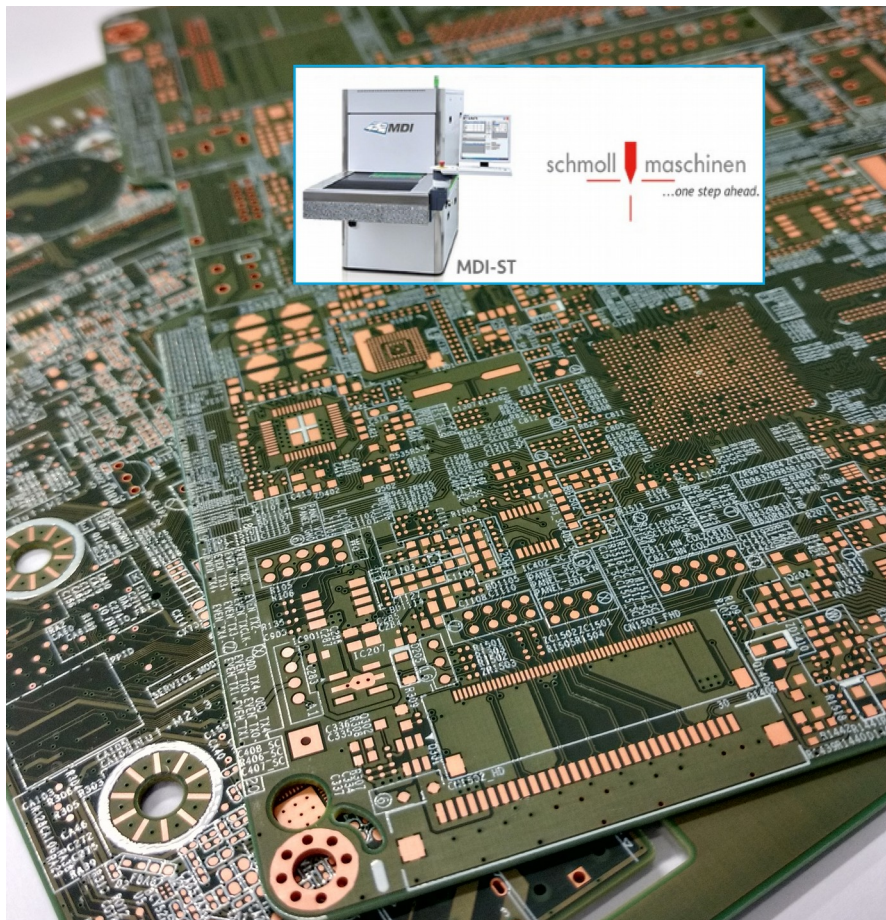




CIRCUIBRAS implements Direct Image in Welding Mask



Circuibras has implemented a new Direct Image equipment in the solder mask process. It is the MDI-ST, of German origin manufactured by the company Schmoll Maschinen. It is the first operating in Brazil.

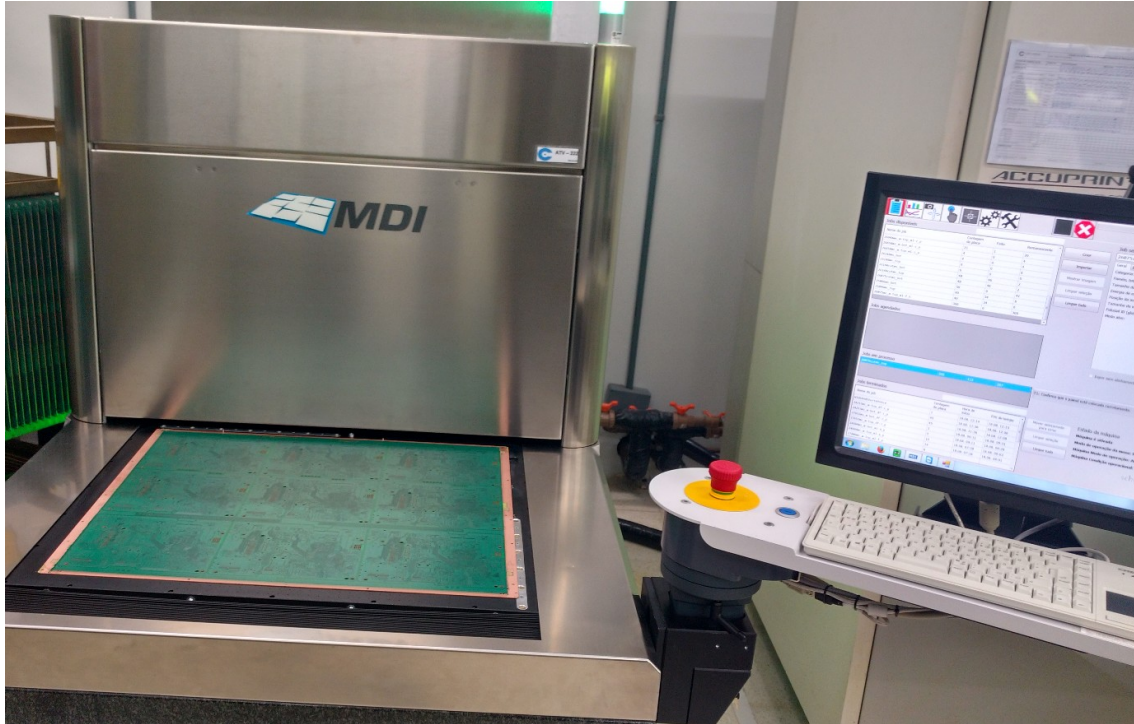


Figure 1 - MDI-ST

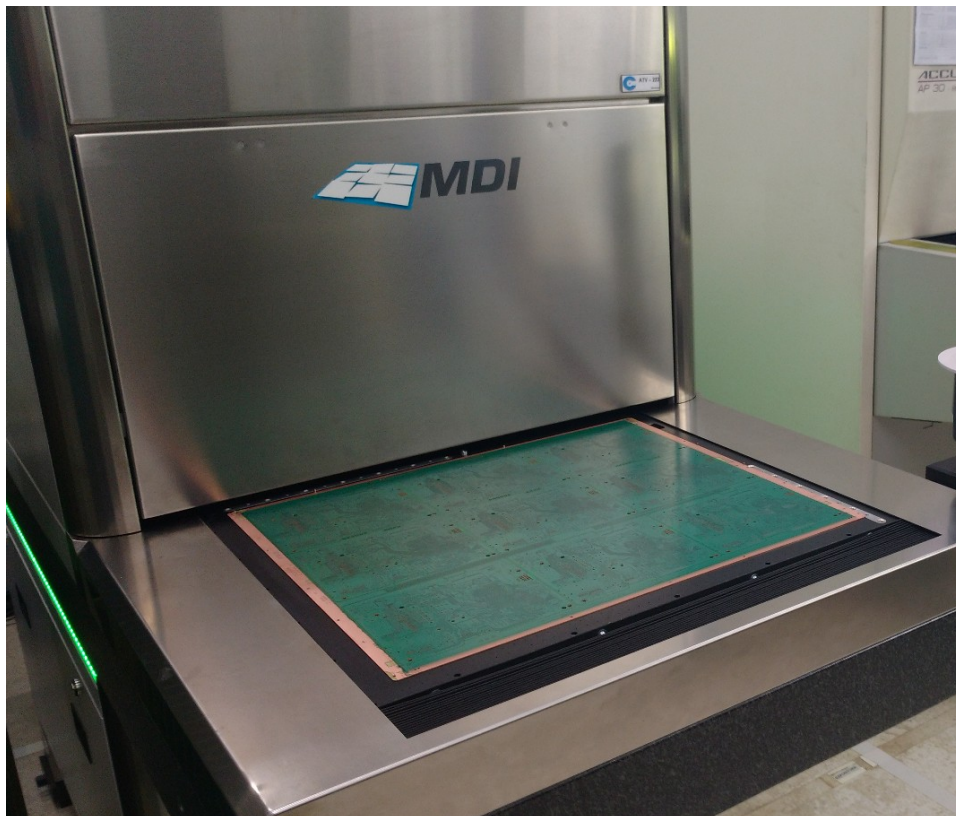


Figure 2 - MDI-ST

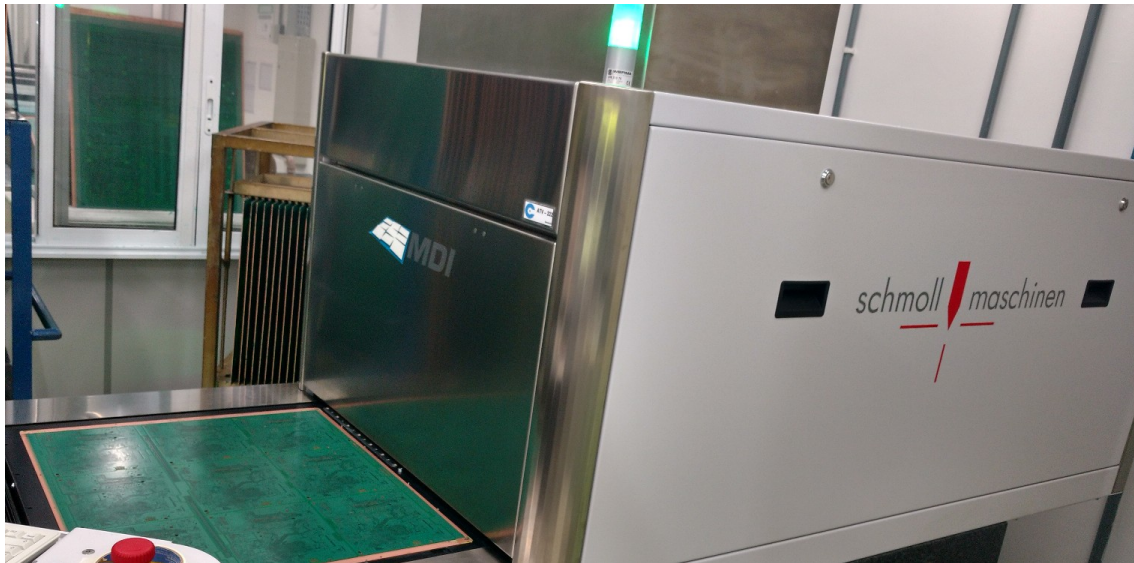


Figure 3 – MDI-ST

MDI-ST is distinguished by a high degree of accuracy in the centralization of solder masks. It is a differential in more dense and complex boards enabling a leap in quality.

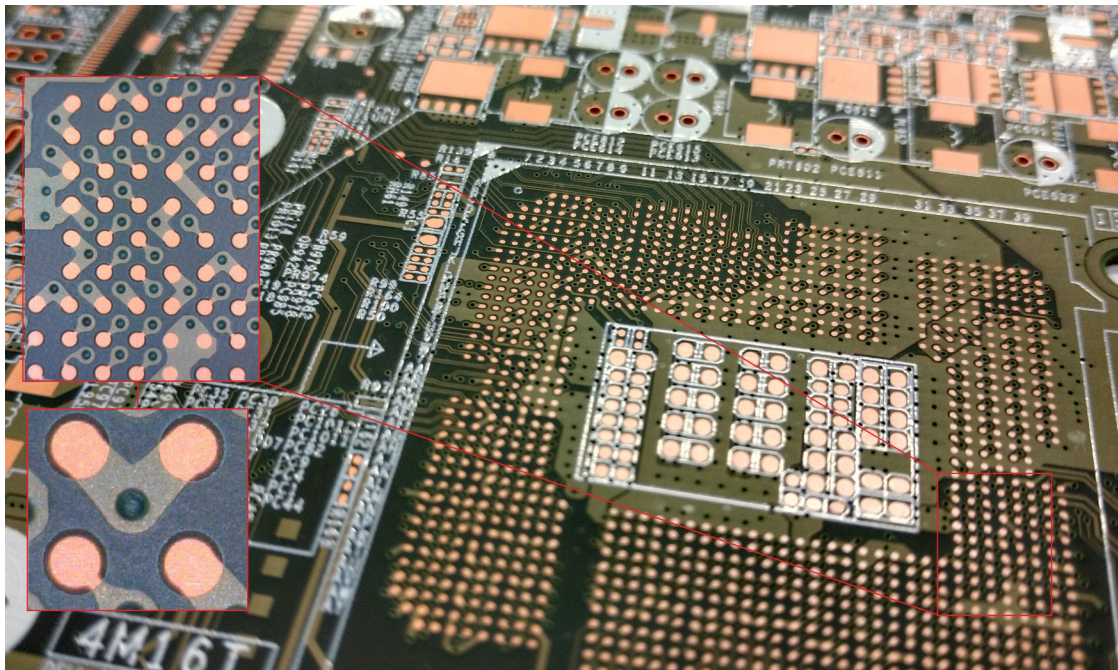


Figure 4 – BGA image with emphasis on the centralization of the balls

Main advantages of MDI-ST:

1. Image with higher quality and precision, especially in PCBs with denser and critical layouts:

A better record of the images allows tighter tolerances in the mask. The conventional method uses Photolithography with fixed compensation. In the production panels, especially in multilayer circuits, linear and nonlinear distortions that are hard to predict may occur, since they depend on several factors including distribution of copper on the surface of the panel.

With Direct Image, MDI-ST reads fiducial present in the production panel and based on values found, applies the compensation required for each panel, considering any distortions that they have suffered in the process.

These dynamic compensations allow more satisfactory results mainly in PCBs with higher compression density.

2. Maintenance of DAMs with lower values

With the miniaturization of electronic components, solder DAM becomes an increasingly important element to prevent short circuits in the welding of components. With the most critical insulations, preserving DAM ends up being a great challenge and MDI-ST has two wavelengths acting more effectively in the polymerization of all the layers of the paint, thus, mask grip on the surface is better and the result is the maintenance of DAMs.

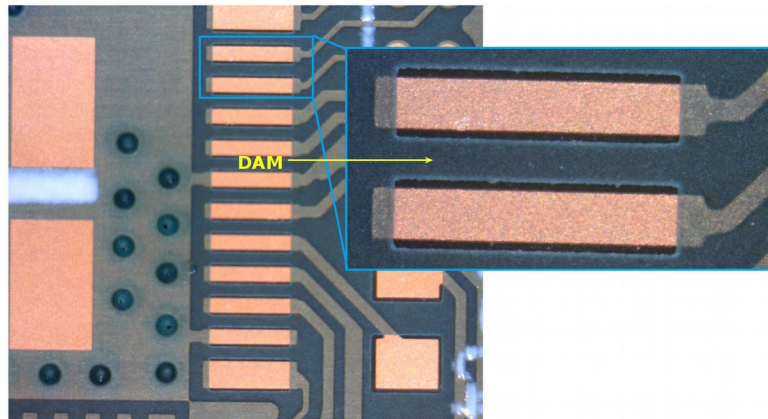


Figure 5 – DAM in rectangular pads (solder mask)

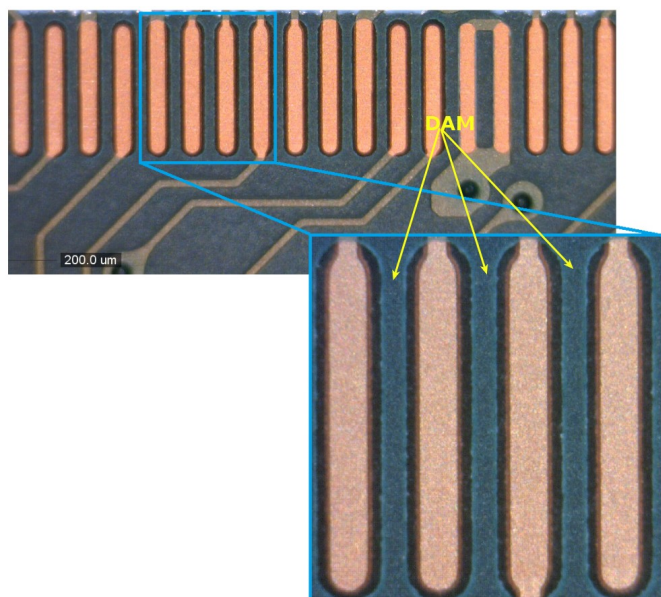


Figure 6 - DAM in oblong pads (solder mask)

The constant investment in equipment with advanced technology and the optimization of the process place Circuibras as a benchmark in the production of printed circuit boards of high complexity with up to 24 layers.

With the implementation of MDI-ST, Circuibras reinforces its commitment to quality and strives to keep its costumers satisfied.

CIRCUIBRAS, your reliable and agile partner.

