Claims:

1. A method for the automatic detection and measurement of chipping defects on diced wafers, comprising:

receiving an image of at least a portion of a diced wafer;

aligning the received image of the at least the portion of the diced wafer;

determining edges of the at least the portion of the diced wafer depicted in the aligned, received image;

automatically determining at least one baseline from which to measure chipping defects on the at least the portion of the diced wafer from the determined edges;

measuring chipping defects on the at least the portion of the diced wafer using at least one determined, respective baseline; and

applying a machine learning model to measured chipping defects to determine if a critical failure exists on the diced wafer.

2. The method of claim 1, further comprising:

aligning the received image along a vertical axis.

3. The method of claim 1, further comprising:

aligning the received image along a horizontal axis.

4. The method of claim 1, further comprising:

determining a reference axis line; and

aligning the received image along the determined, reference axis line.

5. The method of claim 1, further comprising:

measuring chipping defects as a distance from the determined respective baseline to an end of a chipping defect.

6. The method of claim 1 wherein the machine learning model is trained to recognize measured chipping defects that result in a critical failure of the diced wafer.

7. An apparatus for the automatic detection and measurement of chipping defects on diced wafers, comprising:

a processor; and

a memory coupled to the processor, the memory having stored therein at least one of programs or instructions executable by the processor to configure the apparatus to:

receive an image of at least a portion of a diced wafer;

align the received image of the at least the portion of the diced wafer;

determine edges of the at least the portion of the diced wafer depicted in the aligned, received image;

automatically determine at least one baseline from which to measure chipping defects on the at least the portion of the diced wafer from the determined edges;

measure chipping defects on the at least the portion of the diced wafer using the at least one determined baseline; and

apply a machine learning model to measured chipping defects to determine if a critical failure exists on the diced wafer.

8. The apparatus of claim 7, wherein the received image is aligned along a vertical axis.

9. The apparatus of claim 7 wherein the received image is aligned along a horizontal axis.

10. The apparatus of claim 7, wherein the apparatus is further configured to:

determine a reference axis line; and

align the received image along the determined, reference axis line.

11. The apparatus of claim 7, wherein chipping defects are measured as a distance from the determined respective baseline to an end of a chipping defect.

12. The apparatus of claim 7, wherein the machine learning model is trained to recognize measured chipping defects that result in a critical failure of the diced wafer.

13. A system for the automatic detection and measurement of chipping defects on diced wafers, comprising:

an image capture device for capturing images of at least a portion of a diced wafer; and

an apparatus comprising:

a processor; and

a memory having stored therein at least one program, the at least one program including instructions which, when executed by the processor, cause the system to perform a method, comprising;

capturing an image of at least a portion of a diced wafer;

aligning the captured image of the at least the portion of the diced wafer;

determining edges of the at least the portion of the diced wafer depicted in the aligned, received image;

automatically determining at least one baseline from which to measure chipping defects on the at least the portion of the diced wafer from the determined edges;

measuring chipping defects on the at least the portion of the diced wafer using at least one determined, respective baseline; and

apply a machine learning model to measured chipping defects to determine if a critical failure exists on the diced wafer.

14. The system of claim 13, wherein the method further comprises:

aligning captured images along at least one of a vertical axis or a horizontal axis.

15. The system of claim 13, wherein the method further comprises:

determining a reference axis line; and

aligning the captured images along the determined, reference axis line.

16. The system of claim 13, wherein the method further comprises:

measuring chipping defects as a distance from the determined respective baseline to an end of a chipping defect.

17. The system of claim 13, wherein the machine learning model is trained to recognize measured chipping defects that result in a critical failure of the diced wafer.