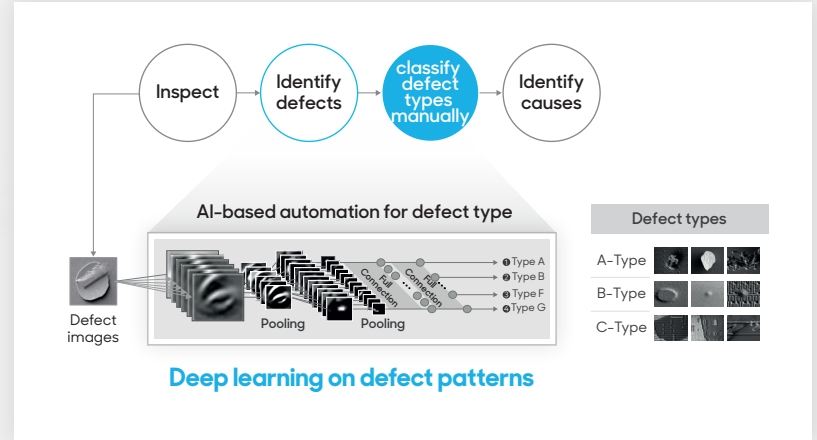## Nexplant Use Case

Intelligent Inspection driven by Deep Learning

Deep-learning algorithms are used to measure and inspect various defect images, not defined in advance. Inspectors' different level of skills results in an inconsistent rate of defect classification. If this issue is resolved, the accuracy of classification will improve up to 90 %.

How to inspect faster without errors in nspection with naked eyes?

Inspect → Identify defects → classify defect types manually → Identify causes

AI-based automation for defect type

Defect images

Pooling   Pooling

Full Connection   Full Connection

❶ Type A
❷ Type B
❸ Type F
❹ Type G

Deep learning on defect patterns

Defect types

A-Type
B-Type
C-Type

Maximize defect-identifying rate ⬆   Improve yield·quality ⬇