High.Contrast Filter makes defects jump out of 2D X-ray images to enable fast and reliable visual inspection. Radiography contrast and sharpness taken to the next level.
Unlike in computed tomography, where a component can be visualized in 3D, a single radiograph has to reveal all details that are present in 2D, from front to back, through high- and low-density areas. Typically when trying to visualize imperfections in dense areas of a PCBA, for example, lighter areas become oversaturated and detail is lost.

To alleviate the problem, High.Contrast Filter normalizes and enhances contrast across the entire radiograph and sharpens defect edges. It allows both high- and low-density areas to be displayed in stunning detail that is both bright and sharp, revealing defects that would otherwise be hidden.

As it is significantly easier to interpret the images, the operator is able to take decisions more quickly and confidently, increasing inspection productivity and raising the reliability and repeatability of results.

PRODUCT HIGHLIGHTS:

• FASTER REAL-TIME INSPECTION
  In combination with Nikon’s C.Clear real-time imaging engine, parameters are intelligently adapted to changing X-ray conditions and variations in sample position.

• ENHANCING NIKON’S POWERFUL X-RAY SYSTEMS
  Nikon’s industry-leading microfocus sources and detectors with high-dynamic range already capture the smallest defects in raw radiographs. With High.Contrast Filter, contrast and sharpness are taken to the next level.

• IDEAL FOR ELECTRONICS INSPECTION
  Enables optimal quality control and failure analysis of PCBAs and electronic components. Inspects BGAs, bond wires, through-holes and micro-bumps easily.

• TACKLE ALL NON-DESTRUCTIVE INSPECTION TASKS
  Equally well suited to examination of castings, 3D-printed components or welded parts and for analysis of assemblies such as heart valves and inhalers.