

ABSTRACT

Provided are an inspection system and an inspection method, the inspection system includes: a carrying device (300); at least one ray source (100) each includes a separate housing (110) to define a vacuum space and target spots enclosed within the housing (110), and a detector assembly (200). The at least one ray source (100) is rotatable between a plurality of scanning positions around a rotation axis relative to the carrying device (300). The at least one ray source (100) and the detector assembly (200) may be lifted or lowered along the rotation axis relative to the carrying device (300). When the at least one ray source (100) is located at one of scanning positions relative to the carrying device (300), the at least one ray source (100) and the detector assembly (200) are lifted or lowered along the rotation axis relative to the carrying device (300) and the at least one ray source (100) emits X-rays. After the at least one ray source (100) and the detector assembly (200) are lifted or lowered a predetermined distance relative to the carrying device (300), the at least one ray source (100) rotates around the rotation axis relative to the carrying device (300) to another one of scanning positions.