CLAIMS:

1. An inspection device comprising:

an insert configured to be inserted into a fir-tree slot of a gas turbine engine;

a plurality of imaging devices coupled to the insert; and

a processor;

wherein the insert is configured to be moved along a longitudinal axis of the fir-tree slot;

wherein the insert has an external profile,

wherein a portion of the external profile of the insert corresponds to an internal profile of the fir-tree slot;

wherein each of the plurality of imaging devices is positioned adjacent an external surface of the insert and is configured to capture an image of a portion of the slot adjacent the imaging device; and

wherein the processor is configured to receive data corresponding to the images captured by the plurality of imaging devices.

2. The inspection device as claimed in claim 1, wherein the plurality of imaging devices are arranged at multiple heights along the insert.

3. The inspection device as claimed in claim 1, wherein each of the imaging devices has a field of view and wherein the total field of view of the imaging devices spans an entire height of the fir-tree slot.

4. The inspection device as claimed in claim 1, further comprising a plurality of illumination devices coupled to the insert and positioned adjacent an external surface of the insert, wherein each of the plurality of illumination devices is configured to illuminate a portion of the slot adjacent the illumination device.

5. The inspection device as claimed in claim 1, wherein the insert is substantially transparent and acts as a light guide.

6. The inspection device as claimed in claim 1, wherein each of the imaging devices comprises a bundle of optical fibres.

7. The inspection device as claimed in claim 1, wherein each of the imaging devices comprises a camera disposed adjacent the external surface of the insert.

8. The inspection device as claimed in claim 1, wherein the processor is configured to generate a single image from the data.

9. The inspection device as claimed in claim 1, further comprising a display configured to display images based on the data.

10. A method of inspecting a fir-tree slot, the method comprising:

inserting an insert of inspection device into the fir-tree slot at a first position, wherein the inspection device comprises:

the insert;

a plurality of imaging devices coupled to the insert; and

a processor,

wherein the insert is configured to be moved along a longitudinal axis of the fir-tree slow,

wherein each of the plurality of imaging devices is position adjacent an external surface of the insert, and

wherein the processor is configured to received data corresponding to the images captured by the plurality of imaging devices;

capturing an image using each of the imaging devices with the insert at the first position;

moving the insert to one or more further positions; and

capturing an image using each of the imaging devices with the insert at the one or more further positions.

11. The method of inspecting a fir-tree slot as claimed in claim 10, further comprising illuminating the fir-tree slot using one or more illumination devices.

12. The method of inspecting a fir-tree slot as claimed in claim 10, wherein images of the entire length and height of at least one side of the slot are captured.

13. The method of inspecting a fir-tree slot as claimed in 12, wherein a single image of the entire length and height of the fir-tree slot is generated based on the images.