CLAIMS

1. A method of removing a deposit from a passage extending through a component comprising the steps, immersing the passage within a liquid, directing a liquid jet at the passage from a source within the liquid bath and with a sufficient velocity so as to remove at least a portion of the deposit.

2. A method according to claim 1, wherein the deposit is contiguous with a coating provided on a first surface of the component.

3. A method according to claim 2, wherein the liquid jet is directed at the passage from a second surface of the component opposite the first surface.

4. A method according to any preceding claim, wherein the liquid jet further comprises solid particles disposed therein.

5. A method according to claim 4, wherein the solid particles are glass beads

6. A method according to any preceding claim, wherein the method further comprises the step of subsequently directing a second liquid jet at the passage from a second source within the liquid bath.

7. A method according to claim 6, wherein the second liquid containing jet further comprises gas admixed therein.

8. A method according to any preceding claim, wherein the component has a plurality of passages, the method comprising directing the first liquid jet at a first one of the plurality of passages and then traversing the jet across the second surface of the component to a second passage and directing the first liquid jet at a second one of the plurality of passages.

9. A method according to claim 8, wherein the second liquid jet is traversed with the first liquid jet to direct the second liquid jet at the first one of the plurality of passages after the first liquid jet has been directed thereat.

10. A method according to claim 8 or claim 9, wherein the first liquid jet is traversed at a constant rate over a region of the second surface of the component in which the passages are located

11. A method according to claim 8 or claim 9, wherein substantially all the deposit within the first one of the plurality of passages is removed before the first liquid jet is traversed to the second one of the plurality of passages.

12. A method according to any preceding claim, wherein the component is rotated about an axis and relative to the first liquid jet such that the fluid jet is intermittently directed at the passage.

13. A method according to claim 12, wherein the axis is orthogonal to the direction in which the first liquid jet traverses.

14. A method according to any preceding claim, wherein the fluid within which the passage is immersed has a current which flows towards the component.

15. A method according to claim 14, wherein the current flows towards the first surface of the component.

16. A method according to any preceding claim, wherein the passage is arranged to provide, in use, a cooling flow for the component.

17. A method according to any preceding claim, wherein the component is made from metal and the deposit is ceramic.

18. A method according to any preceding claim, wherein the component is a combustor flame tube.

CLAIMS

1. A method of removing a thermal barrier coating deposit (30) from a passage (16) extending through a gas turbine component (44) characterised in that the method comprises the steps of immersing the passage within a liquid (101), directing a first liquid jet (38) comprising solid particles at the passage (16) from a source (32) within the liquid bath and with a sufficient velocity so as to remove at least a portion of the deposit and subsequently directing a second liquid jet (39) comprising gas admixed therein at the passage from a second source (33) within the liquid bath.

2. A method according to claim 1, wherein the deposit is contiguous with a coating (28) provided on a first surface of the component.

3. A method according to claim 2, wherein the first liquid jet is directed at the passage from a second surface (24) of the component (44) opposite the first surface.

4. A method according to any preceding claim, wherein the solid particles are glass beads.

5. A method according to any preceding claim, wherein the component (44) has a plurality of passages (16), the method comprising directing the first liquid jet at a first one of the plurality of passages and then traversing the jet across the second surface (24) of the component to a second passage and directing the first liquid jet at a second one of the plurality of passages.

6. A method according to claim 5, wherein the second liquid jet (39) is traversed with the first liquid jet to direct the second liquid jet at the first one of the plurality of passages (16) after the first liquid jet has been directed thereat.

7. A method according to claim 5 or claim 6, wherein the first liquid jet is traversed at a constant rate over a region of the second surface of the component in which the passages are located.

8. A method according to claim 5 or claim 6, wherein substantially all the deposit (30) within the first one of the plurality of passages (16) is removed before the first liquid jet is traversed to the second one of the plurality of passages.

9. A method according to any preceding claim, wherein the component is rotated about an axis and relative to the first liquid jet such that the fluid jet is intermittently directed at the passage.

10. A method according to claim 9, wherein the axis is orthogonal to the direction in which the first liquid jet traverses.

11. A method according to any preceding claim, wherein the fluid (101) within which the passage is immersed has a current (103) which flows towards the component.

12. A method according to claim 11, wherein the current flows towards the first surface of the component.

13. A method according to any preceding claim, wherein the passage is arranged to provide, in use, a cooling flow for the component.

14. A method according to any preceding claim, wherein the component is made from metal and the deposit is ceramic.

15. A method according to any preceding claim, wherein the component is a combustor flame tube.

16. A method according to one of claims 1 to 14, wherein the component is a turbine blade.