WHAT IS CLAIMED IS:

1. A method of repairing a surface of a component within a gas turbine engine, comprising:

installing a first bladder within the gas turbine engine;

installing a second bladder within the gas turbine engine;

inflating the first bladder and the second bladder with an inflating fluid to form a first circumferential seal and a second circumferential seal to define an isolated area within the gas turbine engine;

coating all surfaces within the isolated area with a masking layer;

removing at least a portion of the masking layer to expose a working area; and

forming a coating on the working area.

2. The method as in claim 1, wherein all surfaces within the isolated area are coated via a vapor deposition process.

3. The method as in claim 1, wherein removing a portion of the masking layer comprises grit blasting the working area.

4. The method as in claim 3, wherein a working head is inserted into the isolated area, the working head comprising a grit blast nozzle.

5. The method as in claim 4, wherein the grit blast nozzle is positioned at an end of a delivery cable.

6. The method as in claim 1, wherein forming a coating on the working area comprises directing a micro-plasma spray head over the working area to form the coating thereon.

7. The method as in claim 1, wherein the coating formed is a thermal barrier coating or an environmental barrier coating.

8. The method as in claim 1, wherein the working area is an exposed metal, wherein the coating formed on the working area comprises the metal.

9. The method as in claim 8, wherein the coating builds up material over the working area so as to increase its thickness.

10. The method as in claim 1, wherein the working area defines the entire isolated area.

11. The method as in claim 1, further comprising:

after forming the coating, washing the isolated area to remove any remaining masking layer and any excess coating formed thereon.

12. The method as in claim 11, wherein the isolated area is washed with an acid rinse.

13. The method as in claim 11, further comprising:

forming a plurality of coatings on the working area.

14. The method as in claim 13, wherein the plurality of coatings comprise a bond coating and at least one barrier coating.

15. A method of repairing a surface of a component within a gas turbine engine, the method comprising:

installing a first bladder within the gas turbine engine;

installing a second bladder within the gas turbine engine;

inflating the first bladder and the second bladder with an inflating fluid to form a first circumferential seal and a second circumferential seal to define an isolated area within the gas turbine engine;

cleaning the gas turbine engine within the isolated area; and

wherein cleaning the gas turbine engine within the isolated area comprises,

using a grit blast to remove a coating on components within the isolated area of the gas turbine engine.

16. The method as in claim 15, wherein the first bladder is positioned between a first row of blades and a first row of stator vanes to form the first circumferential seal therebetween.

17. The method as in claim 16, wherein the second bladder is positioned between a second row of blades and a second row of stator vanes to form the second circumferential seal therebetween.

18. The method as in claim 17, wherein cleaning the gas turbine engine within the isolated area comprises:

washing the isolated area to remove a coating on components within the isolated area.

19. The method as in claim 18, wherein the isolated area is washed with an acid to remove the coating on components within the isolated area.