WHAT IS CLAIMED IS:

1. A method of repairing an internal engine component of a gas turbine engine by spanning a fillable volume defined between a first surface and a second surface of the internal engine component, the method comprising:

inserting a working head attached to a cable delivery system within a gas turbine engine;

positioning the working head adjacent to the fillable volume;

after positioning the working head adjacent to the fillable volume, temporarily securing the working head to the internal engine component being repaired adjacent to the fillable volume with a component of the working head configured as an attachment mechanism;

with the working head temporarily secured to the internal engine component, repairing the internal engine component by attaching a first end of a strap to the first surface of the internal engine component being repaired within the gas turbine engine via a weld or braze attachment;

with the working head temporarily secured to the internal engine component, repairing the internal engine component by attaching a second end of the strap to the second surface of the internal engine component being repaired within the gas turbine engine via a weld or braze attachment, such that the strap spans the fillable volume and repairs the internal engine component;

releasing the working head from the internal engine component; and

removing the working head and cable delivery system from within the gas turbine engine.

2. The method as in claim 1, wherein the strap has a thickness of about 250 μm to about 3 mm.

3. The method as in claim 1, wherein the strap has a thickness of about 250 μm to about 1.3 mm.

4. The method as in claim 1, wherein the strap spans a surface of the internal engine component to cover distress points defined within the surface.

5. The method as in claim 1, wherein the strap is positioned about a curved portion of the internal engine component being repaired.

6. The method as in claim 1, wherein the strap has a shared attachment point on either end.

7. The method as in claim 1, wherein the attachment mechanism comprises a tripod grip, a glue, or a vacuum sucker.

8. A method of repairing an internal engine component of a gas turbine engine by spanning a fillable volume defined between a first surface and a second surface of the internal engine component, the method comprising:

inserting a working head attached to a cable delivery system within a gas turbine engine;

positioning the working head adjacent to the fillable volume;

after positioning the working head adjacent to the fillable volume, temporarily securing the working head to the internal engine component being repaired adjacent to the fillable volume with a component of the working head configured as an attachment mechanism;

with the working head temporarily secured to the internal engine component, repairing the internal engine component by attaching a first end of a strap to the first surface of the internal engine component being repaired within the gas turbine engine via an adhesive;

with the working head temporarily secured to the internal engine component, repairing the internal engine component by attaching a second end of the strap to the second surface of the internal engine component being repaired within the gas turbine engine via an adhesive, such that the strap spans the fillable volume and repairs the internal engine component;

releasing the working head from the internal engine component; and

removing the working head and cable delivery system from within the gas turbine engine.

9. The method as in claim 8, wherein the strap has a thickness of about 250 μm to about 3 mm.

10. The method as in claim 8, wherein the strap has a thickness of about 250 μm to about 1.3 mm.

11. The method as in claim 8, wherein the strap spans a surface of the internal engine component to cover distress points defined within the surface.

12. The method as in claim 8, wherein the strap is positioned about a curved portion of the internal engine component being repaired.

13. The method as in claim 8, wherein the strap has a shared attachment point on either end.

14. The method as in claim 8, wherein the attachment mechanism comprises a tripod grip, a glue, or a vacuum sucker.

15. A method of repairing an internal engine component of a gas turbine engine by spanning a fillable volume defined between a first surface and a second surface of the internal engine component, the method comprising:

inserting a working head attached to a cable delivery system within a gas turbine engine;

positioning the working head adjacent to the fillable volume;

after positioning the working head adjacent to the fillable volume, temporarily securing the working head to the internal engine component being repaired adjacent to the fillable volume with a component of the working head configured as an attachment mechanism;

with the working head temporarily secured to the internal engine component, repairing the internal engine component by attaching a first end of a strap to the first surface of the internal engine component being repaired within the gas turbine engine, wherein the first end of the strap defines an attachment aperture, and wherein the first end is attached to the first surface via an attachment pin;

with the working head temporarily secured to the internal engine component, repairing the internal engine component by attaching a second end of the strap to the second surface of the component being repaired within the gas turbine engine such that the strap spans the fillable volume and repairs the internal engine component, wherein the second end of the strap defines an attachment aperture, and wherein the second end is attached to the second surface via an attachment pin;

releasing the working head from the internal engine component; and

removing the working head and cable delivery system from within the gas turbine engine.

16. The method as in claim 15, wherein the strap has a thickness of about 250 μm to about 3 mm.

17. The method as in claim 15, wherein the strap has a thickness of about 250 μm to about 1.3 mm.

18. The method as in claim 15, wherein the strap spans a surface of the internal engine component to cover distress points defined within the surface.

19. The method as in claim 15, wherein the strap is positioned about a curved portion of the internal engine component being repaired.

20. The method as in claim 15, wherein the attachment mechanism comprises a tripod grip, a glue, or a vacuum sucker.