CLAIMS

1. A system, comprising:

a crosshead, comprising:

a crosshead body;

a lubricant recess formed in an outer surface of the crosshead body; and

a lubricant port extending through the crosshead body from the lubricant recess to an aperture of the crosshead, wherein the crosshead body is made of a first composite material, wherein the first composite material comprises a first reinforcing material distributed in a first matrix material.

2. The system of claim 1, wherein the crosshead body is a one-piece structure.

3. The system of claim 1, wherein the first reinforcing material comprises a plurality of particles.

4. The system of claim 1, wherein the first reinforcing material is different than the first matrix material.

5. The system of claim 1, wherein the first matrix material comprises a plastic, polymer, polyester, epoxy, polyimide, polyetheretherketone (PEEK), or polypropylene, and the first reinforcing material comprises a carbon, glass, or ceramic.

6. The system of claim 1, wherein the crosshead comprises a crosshead pin coupled to the crosshead body.

7. The system of claim 6, wherein the crosshead pin comprises a hollow interior, end caps disposed on opposite ends of the crosshead pin, and first and second radial lubricant ports extending from an inner surface of the hollow interior to an outer surface of the crosshead pin.

8. The system of claim 7, wherein the first radial lubricant port is configured to receive a lubricant flow from a connecting rod.

9. The system of claim 7, wherein the second radial lubricant port is configured to align with the lubricant port extending through the crosshead body.

10. The system of claim 6, wherein the crosshead pin is made of a second composite material having a second reinforcing material distributed in a second matrix material.

11. The system of claim 1, comprising a machine having the crosshead.

12. A crosshead system, comprising:

a crosshead body, comprising:

an outer surface having a lubricant recess formed therein, wherein the outer surface is configured to translate along a crosshead guide;

an aperture extending through the crosshead body; and

a lubricant port extending through the crosshead body from the lubricant recess formed in the outer surface to the aperture, wherein the crosshead body is made of a first composite material; and

a crosshead pin, comprising:

a hollow body having first and second lubricant ports extending from a cavity of the hollow body to an exterior of the hollow body; and

end caps disposed on opposite ends of the hollow body.

13. The system of claim 12, wherein the hollow body of the crosshead pin is made of a second composite material.

14. The system of claim 13, wherein first and second composite materials each comprise a plurality of reinforcing particles distributed in a matrix material.

15. The system of claim 14, wherein the matrix material comprises a plastic, polymer, polyester, epoxy, polyimide, or polypropylene, and the plurality of reinforcing particles comprises a carbon, glass, or ceramic.

16. The system of claim 13, wherein the first and second composite materials are the same as one another.

17. The system of claim 13, wherein the first and second composite materials are different from one another.

18. A system, comprising:

a crosshead pin, comprising:

a hollow body, wherein the hollow body is made of a composite material;

first and second radial lubricant ports extending from an inner surface of the crosshead pin to an outer surface of the crosshead pin; and

end caps disposed on opposite ends of the hollow body.

19. The system of claim 18, wherein the end caps are made of a metal.

20. The system of claim 18, comprising a machine having the crosshead pin connecting a crosshead to a connecting rod, and a piston coupled to the crosshead.