The invention claimed is:

1. A cavitation engine configured to produce superheated steam from injected liquid water, the engine comprising:

an impact chamber having an impact surface;

a heater to initially heat the impact surface to a temperature of at least 375 degrees Fahrenheit;

a source of hyperbaric liquid water; and

a fluid injector having an outlet positioned to inject the hyperbaric liquid water onto the impact surface of the impact chamber at supersonic velocities of about 1,500 meters/second or more such that cavitation bubbles are present in the injected water;

wherein the outlet of the fluid injector and the impact surface are located relative to one another such that the outlet is spaced a distance from the impact surface of between 0.150 and 0.450 inches and the injected water hits the impact surface at an angle of between 85 and 95 degrees, and

wherein impact of the injected water with the impact surface crushes the cavitation bubbles in the injected water to generate pressure above 1,000 pounds per square inch and produce superheated steam.

2. The cavitation engine of claim 1, wherein the injected fluid is injected using injector orifices oriented at such an angle to the impact chamber surface as to produce a nearly perpendicular trajectory.

3. The cavitation engine of claim 1, wherein the impact chamber has a funnel-like curvature opening towards the fluid injector that provides a substantially 90-degree angle of incidence of the injected water.

4. The cavitation engine of claim 1, wherein the impact surface is disposed at an angle relative to horizontal of from about 10 degrees to about 45 degrees, and the injector ejects water at an angle such that the injected water hits the impact surface at an angle of about 90 degrees.

5. The cavitation engine of claim 1, wherein the fluid injector injects the water at a pressure of about 20,000 psi or above.

6. The cavitation engine of claim 1, wherein the impact chamber has a volume and includes an opening at a bottom of the impact chamber and an expansion chamber below the opening, the expansion chamber having a volume less than the volume of the impact chamber.

7. A cavitation engine configured to produce superheated steam from injected liquid water, the engine comprising:

a funnel shaped impact chamber having an impact surface, a heater to initially heat the impact surface to a temperature of at least 375 degrees Fahrenheit, a an opening at a bottom of the impact chamber, and an expansion chamber below the opening;

a source of hyperbaric liquid water; and

a fluid injector having an outlet positioned adjacent a largest diameter of the impact chamber and located to inject the hyperbaric liquid water onto the impact surface of the impact chamber at supersonic velocities of about 1,500 meters/second or more such that cavitation bubbles are present in the injected water;

wherein the outlet of the fluid injector and the impact surface are located relative to one another such that the outlet is spaced a distance from the impact surface of between 0.150 and 0.450 inches and the injected water hits the impact surface at an angle of between 85 and 95 degrees, and

wherein the cavitation bubbles in the injected water are crushed by the impact of the injected water onto the impact surface and gases inside the cavitation bubbles rapidly increase in temperature to create superheated steam and pressure, and the pressure forces the superheated steam through the opening of the impact chamber.