



Cavitation Pump

**Infinity Turbine
LLC**

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<https://www.infinityturbine.com/cavitation-pump-for-liquid-co2-to-supercritical-and-refrigeration-compression-using-cavgenx-heat-pump-turbine.html>

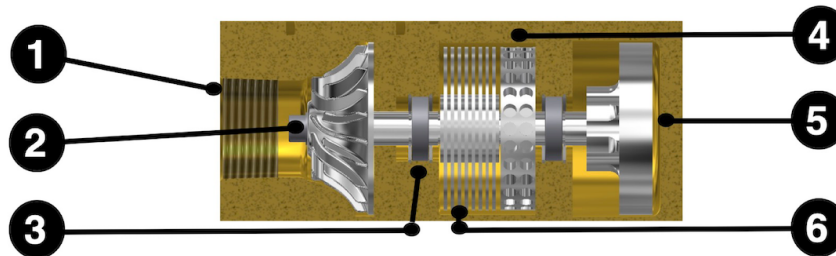
Introducing the state-of-the-art cavitation pump designed specifically for transforming liquid CO₂ into supercritical CO₂ through the innovative process of cavitation. This cutting-edge pump is a game-changer for industries that require supercritical CO₂ for extraction, purification, and other critical processes. Utilizing advanced cavitation technology, the pump efficiently facilitates the phase change of CO₂ from liquid to supercritical state, offering a seamless, energy-efficient solution. Ideal for sectors like pharmaceuticals, food processing, and material science, this pump ensures a high-quality, consistent output of supercritical CO₂, vital for precision extraction and purification processes. Its robust design ensures durability and low maintenance, while its energy-efficient operation reduces operational costs, making it a cost-effective investment. Easy to integrate into existing systems, this cavitation pump operates reliably under various conditions, ensuring uninterrupted performance.



This webpage QR code

PDF Version of the webpage (maximum 10 pages)

Cavgenx Heat Pump Turbine Hydraulic Power Unit Process Cooling



1. Variable Exit Port: The entire assembly is part of a modular block system. The exit port is variable, which can accommodate a variety of flow rates.
2. Turbine (Expander): We offer a host of expanders, including inflow radial, radial impulse, and our hybrid turbine.
3. High Speed Bearings: Ceramic or equivalent bearings that can last up to 100,000 hours. Larger units may use magnetic bearings.
4. Cavitation Disc: Provides pre-heating of liquid being pumped.
5. Magnetic Coupling: Our proven axial (pancake) type coupling.
6. Disc Pump: Tesla disc type pump which works well for viscous fluids.



Cavitating Pump for taking Liquid CO₂ to Supercritical via Rotation

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Cavitating Pump for taking Liquid CO2 to Supercritical via Rotation

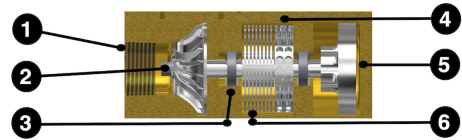
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INFINITY TURBINE	CavGenX Heat Pump Turbine	2023-124	Manufacture and component Patent US979533 B1 Valid until 2029
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