Infinity Turbine Supercritical CO2 Turbine Technology Development Kit

Infinity Turbine LLC

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https://www.infinityturbine.com/supercritical-co2-turbine-generator-development-kit-by-infinity-turbine.html

The Infinity Turbine Technology Development Kit (TDK) provides organizations with the core turbine and compressor architecture required to build supercritical CO2 turbine systems using the Cluster Mesh concept.
Instead of purchasing a finished turbine generator, buyers receive the foundational engineering package and complete the remaining subsystems themselves.

This webpage QR code

PDF Version of the webpage (maximum 10 pages)

INFINITY TURBINE
Supercritical CO_2 Turbine
Technology Development Kit (TDK)
Build Your Own sCO_2 Turbine System
Core Components Provided by Infinity Turbine
Turbine Design
Compressor Design
Cluster Mesh Layout
Turbine Housing
Buyer Developed Subsystems
Shaft Bearings
Seals & Gaskets
Heat Exchangers
Control Systems
Technology Development Kit
Partner Builds Custom Solutions
Retain Your Own IP
Product Tiers
Tier 1 Concept Kit
Research & Concept Docs
$100K+
Tier 2 Engineering Kit
CAD Models & Drawings
$250K+
Tier 3 Commercial Kit
Consulting & Prototypes
$750K+

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Infinity Turbine Supercritical CO2 Turbine Technology Development Kit

Cluster Mesh Architecture Development Program
Executive Concept
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Instead of purchasing a finished turbine generator, buyers receive the foundational engineering package and complete the remaining subsystems themselves.
This approach allows:
• Buyers to create their own intellectual property
• Buyers to tailor designs for their specific industry
• Infinity Turbine to monetize its core architecture repeatedly
The program transforms Infinity Turbine from a hardware manufacturer into a technology platform provider.

Core Technology Provided by Infinity Turbine
The TDK provides the high-value engineering components that define the system architecture.
1 Turbine Core Design
Includes:
• Turbine rotor geometry
• Nozzle configuration
• Expansion stage architecture
• Blade or Tesla disc design options
• High pressure casing design
The turbine core determines the efficiency and pressure drop performance of the system.

2 Compressor Architecture
Includes:
• CO2 compressor design
• Impeller configuration
• Multi-stage compression options
• Cluster mesh pressure routing concept
The compressor design is critical to achieving supercritical pressure levels between 74 bar and 300 bar.

3 Cluster Mesh System Layout
Includes:
• Modular turbine cluster architecture
• Multi turbine synchronization design
• Pressure distribution system
• Parallel turbine scaling concept
This design enables scaling power output through multiple small turbines rather than one large turbine.

4 Turbine Housing Design
Includes:
• Pressure vessel housing
• Internal structural supports
• Rotor alignment geometry
• Assembly structure
This design forms the foundation of the pressure containment system.

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