



## Infinity Turbine Supercritical CO2 Turbine Technology Development Kit

Infinity Turbine  
LLC

[ TEL ] +1-608-238-6001 (Chicago)

[ Email ] greg@infinityturbine.com

<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)**

---



## Supercritical CO<sub>2</sub> Turbine Technology Development Kit (TDK)

*Build Your Own sCO<sub>2</sub> Turbine System*

### Core Components Provided by Infinity Turbine



Turbine Design



Compressor Design



Cluster Mesh Layout



Turbine Housing



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+**



## Infinity Turbine Supercritical CO2 Turbine Technology Development Kit

### Cluster Mesh Architecture Development Program Executive Concept

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 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.

## Infinity Turbine Supercritical CO2 Turbine Technology Development Kit

### Cluster Mesh Architecture Development Program

#### Executive Concept

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 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:

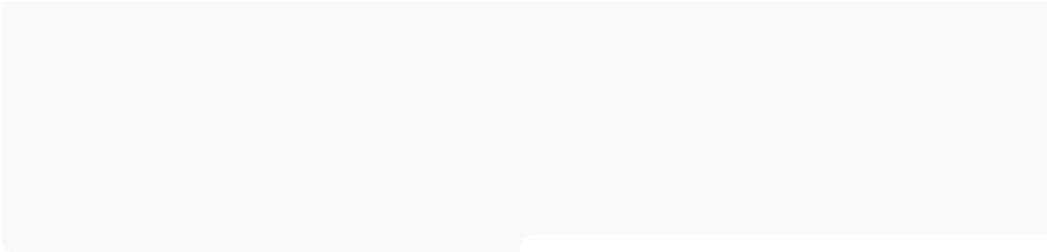
- Modular turbine cluster architecture
- Multi turbine synchronization design
- Pressure distribution system
- Parallel turbine scaling concept

This design enables scaling power output through multiple small turbines rather than one large turbine.

#### 4 Turbine Housing Design

Includes:





Copyright 3/6/2026 Infinity Turbine LLC

---

---

---









## Supercritical CO<sub>2</sub> Turbine Technology Development Kit (TDK)

Build Your Own sCO<sub>2</sub> Turbine System

### Core Components Provided by Infinity Turbine



### Buyer Developed Subsystems



### 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+



Data Centers



Industrial Heat



Geothermal



Oil & Gas