

## ***CIM-Tech Technical Profile***

### **Technical Capabilities**

Mechanical Engineering

Fluid Flow (Compressible & Non-Compressible)  
Distribution Systems, Cooling Systems, Oil  
Injection Systems

Machine Design

Hydraulics

Heat Transfer

High Temperature Design

Process Design

Instrumentation & Controls

Electrical Engineering

Refractory Design

Process Modeling

Animation / Motion Analysis

Structural Engineering

### **Additional Services Offered**

Project Management

Scope Development

Construction Management & Engineering

Solid Modeling

Finite Element Analysis – Strength, Heat  
Transfer and Fluid Flow

Two Dimensional Design (AutoCAD)

Raster Editing

Design/Build of Custom Equipment

On-Site Consultation

Inspection

Schedule Development

On-Site Troubleshooting and Investigation

Prototype Development

Diesel Engines for Custom Application

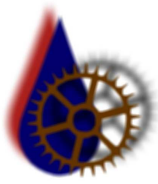
### **Company Description**

CIM-Tech, Inc. is a growing engineering firm servicing commercial, heavy industry, and municipal clients nationally.

CIM-Tech was formed in May of 2006, and combines more than 500 years of engineering and design experience.

With a strong commitment to providing quality engineering and design solutions to its diverse clientele, CIM-Tech is building professional long term relationships, and has many repeat customers through unparalleled work ethics and results.





**Finite Element Analysis**  
&  
**Computational Fluid Dynamics**

**Strength Analysis**

- Static Strength Analysis
- Impact Test
- Pressure & Resulting Stress
- Metals, Plastics, Non-Linear Materials

**Heat Transfer**

- Conduction
- Convection
- Radiation
- Temperature Dependent Thermal Conductivity

**Fluid Flow**

- Gas & Liquid
- Laminar & Turbulent
- Multiphase & Multi-fluid
- Pressure Distribution
- Cavitation Analysis

**Analysis**

- 2D & 3D
- Steady State
- Transient (Time Dependent)
- Vibration
- Product Failure
- Thermal Expansion

**Examples of Applications**

- Stress Calculations
- Structural Analysis
- ASME Boiler & Pressure Vessel Calculations
- Flow Paths
- Thermal / Mechanical Analysis
- Analyze Heat Flux Through a Part
- Pressure and Thermal Analysis
- Calculate Lift & Drag Coefficients

