Molten Core Power System – Sealed Chamber Architecture

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1. **Introduction**
    - Purpose of sealed chamber design
    - Advantages over magnetic confinement
2. **System Overview**
    - Diagram: Core layout (Side & Top view based on your sketch)
    - Description of main components
3. **Core Components**
    - **Outer Shell** (Material: High-temp alloy + ceramic liner)
    - **Molten Salt Reservoir**
    - **Copper Heat Core**
    - **Waveguide System** (Laser heating path)
    - **Stirling Engine Ring Assemblies**
    - **Outgassing & Safety Ports**
4. **Thermal & Power Calculations**
    - Core dimensions: 3 m diameter, height from sketch
    - Molten salt energy capacity (MJ)
    - Expected power output to Stirling engines
    - Heat recycling efficiency
5. **Operational Principles**

- Laser re-injection heating cycle
- Pressure regulation
- AI monitoring & emergency eject system

6. **Safety & Redundancy**
    - Triple redundant thermal shutdown
    - Outgassing flow control
    - Containment field for structural breach
7. **Schematics**
    - **Top View**: 12 rings for Stirling engine mounts
    - **Side View**: Waveguide laser entry + copper core
    - 3D exploded view (generated for clarity)
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8. **Integration With Ship**
    - Mounting orientation (vertical or horizontal)
    - Space requirements
    - Connection to capacitor banks & propulsion unit