**PRODUCT PERFORMANCE**

Pressurizes to 14psi when fully insulated.

Full pressure recovery after pump operation in approximately 15 minutes.

Piston pump operates at 3 seconds per cycle while stream feed is open.

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THE CUSTOMER

Our market is off-grid regions of developing nations, in particular, Lesotho.

The Bethel Business and Community Development Center is a local Lesotho engineering educational center, which focuses on self sufficiency and the development of alternative power sources.

In 2002 they developed a parabolic trough they use to bake bread in batches of ten. They asked for design improvements to enable other applications.

Customer needs:
1. Electricity
2. Refrigeration
3. Pumping
4. Heat
5. Grinding
6. Other

THE SYSTEM

Trough
- Extruded steel frame
- Guide ribs for parabola
- Aluminized acrylic sheet
- Resistant to strong winds

Tracker
- One axis closed loop tracking
- Insensitive to passing clouds
- Automatic reset at end of day
- Vertical angle manually adjustable

Boiler
- Convective heat flow
- Automatic Refilling

Pump
- Pneumatic cylinder power stroke from steam condensation
- Connects to simple farmers’ pump
- Familiar technology
- Detachable for manual pumping