

TECHNOLOGY FACTSHEET

Calcpo Rotary Burner (CRB)¹

1. **Sector/ Sub Sector:** Industry thermal energy application
2. **Introduction:** A new Calcpo rotary burner (CRB), using the available fuel gas pressure as a free source of drive energy, eliminates electric motors, providing a simple, cost effective means of retrofitting existing fired heaters for energy and environmental reasons.
3. **Technology Name:** **Calcpo Rotary Burner (CRB)**
4. **Technology Characteristics:** By virtue of its inherent, superb mixing capability, the CRB also provides a high performance, ultra-low emissions burner enhancing heat transfer effectiveness, thus reducing energy use. A laboratory tested prototype of 10.6 million Btu per hour capacity operating at 3.4% O₂ produced a compact flame with NO_x and CO emissions less than 1.0 and 2.0 ppmv respectively. This performance will typically result in energy savings of 5.0% compared to current fired heaters. Efficiency-degrading flame impingement and tube fouling are also eliminated with the CRB. Additional operational improvements in basic rotary burner technology include increased combustion stability, innovative fan and pilot ignition design, and compact geometry to facilitate on the fly heater conversion.



¹ This fact sheet has been extracted from TNA Report – Mitigation for Sri Lanka. You can access the complete report from the TNA project website <http://tech-action.org/>

5. **Country Specific Applicability:** It is applicable in Sri Lanka
6. **Status of the technology in the country and its future market potential:** -
7. **Barriers:** -
8. **Benefits:** Reduced energy use, Elimination of CO and NOx emissions, Easy and cost-effective retrofitting of existing fired heaters
9. **Operations:** -
10. **Costs:** -
11. **Reference:** US Department of Energy. Energy Efficiency & Renewable Energy