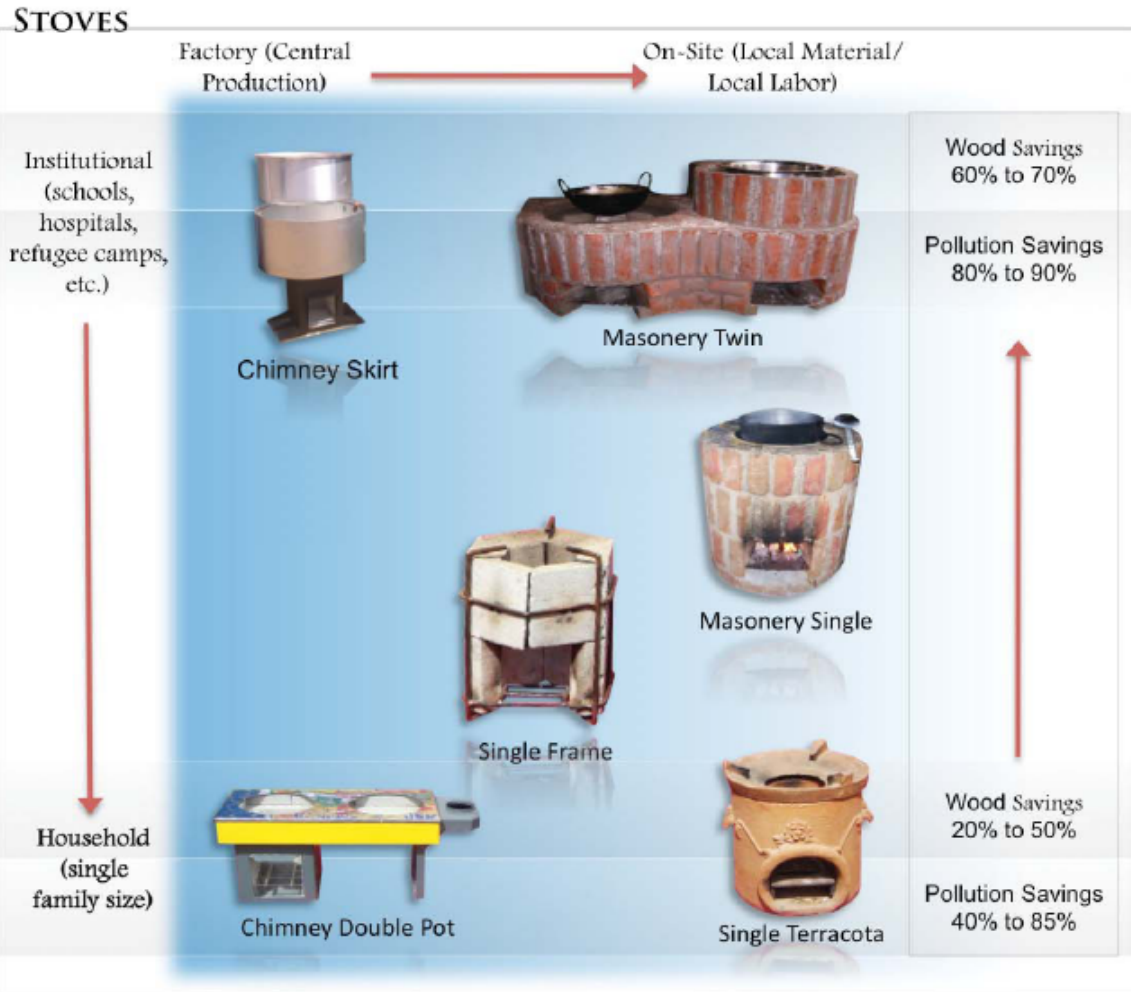
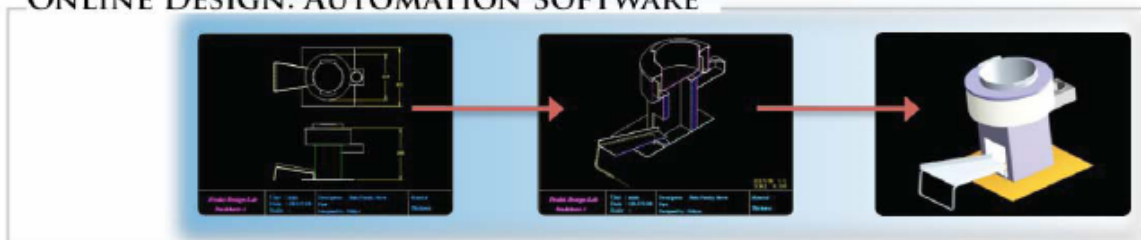




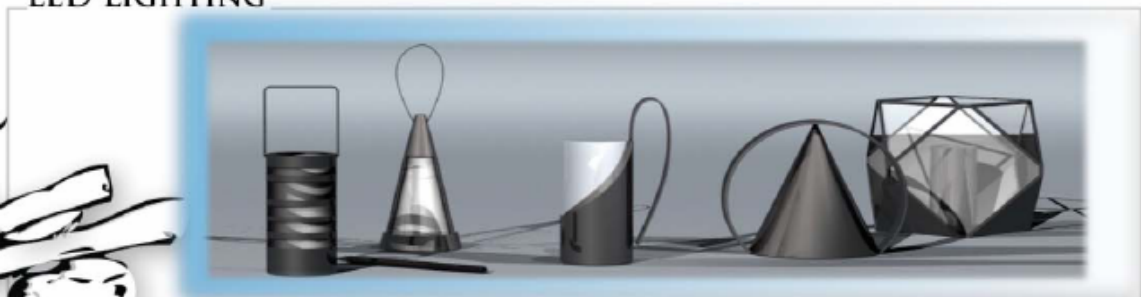
Prakti Design Lab Current Product Range



ONLINE DESIGN: AUTOMATION SOFTWARE



LED LIGHTING





Prakti Design Lab

Where Appropriate Technology Innovations become Viable Products

Company Profile

Company Background: Prakti Design Lab is a registered Indian company conceived in 2007 by an international team of engineers, designers, and other professionals to develop economically and environmentally sustainable products to serve basic energy, water, and health needs of poor communities worldwide.

Research and Development

Currently we develop and diffuse affordable, cleaner, efficient cooking stoves to meet the basic needs of poor communities in India and globally. Both household and institutional stove models have been designed and scientifically tested to greatly reduce fuel use and pollution. Our primary focuses are to be...

“Praktical”: We look for practical solutions that have high scale up! Without sacrificing quality and efficiency, our designs are affordable and can be widely distributed. Inventor-based innovation is truly critical, but our primary focus is on the end-users. To meet their specific needs, we have to consider economical, geographical, cultural, and technical backgrounds.

Grassroots Designers: There is not such thing as ONE ‘best design’... only ‘appropriate design’ that takes local conditions (user preferences, manufacturing capabilities, distribution network) into account. We integrate local end users and craft-persons throughout our design process through interactive design workshops and continuous field testing. It is the most efficient way to reach optimal design and gain larger on-the-ground feedback.

Products Portfolio

Our specialty and primary focus is improved biomass stoves.

Designs for low-cost LED lanterns to replace kerosene lamps is under evaluation. Interest and potential future products are: water filters, small-scale wind turbines, and passive solar applications.

We are developing this portfolio of both locally and centrally built products so implementers choose the product that fits best their specific needs, financial means, human resources, and project time frame.



Prakti Design Lab

Where Appropriate Technology Innovations become Viable Products

Company Profile

Technology Transfer

The need to generate awareness around global warming and alternative technology is greater than ever. We feel it is our responsibility to be intentional educators, not just designers and engineers. We are trying to share as much information about our experiences and work through...

Local Trainings: By partnering with local NGOs, we conduct educational seminars and trainings for rural villagers. We also offer affordable fee-based technology transfer and training to local entrepreneurs.

Open Source: We strive to offer our technology under open-source licenses and patent-free. Primarily, grants underwrite all the designs which are freely available in the public domain at our website – free to use, distribute, modify. In addition, by creating an interface on our website, we allow anyone, anywhere to utilize high technology software to customize and design their own stove according to their own specifications and needs.

Global Perspective

The need for alternative technology is global; the solutions are local. Prakti has already made partnerships all over the world. Our goal is provide comprehensive training for international leaders and entrepreneurs to be able to replicate the design and testing processes to fit their own local needs.



Prakti Design Lab

Where Appropriate Technology Innovations become Viable Products

Capabilities Statement

Technical Capacities / Services Offered

- Industrial and Product Design (SolidWorks and Pro/Engineer)
- Prototyping (advanced sheet-metal, ceramics)
- Lab testing (PEMS Stove testing setup in progress)
- Field Testing
- Scale up Engineering
- Pilot scale-up production

Staff

- 3 mechanical engineers
- 1 water and sanitation manager
- 1 industrial designer
- 1 technical assistant
- 2 cooks for in-house testing

Facilities

- Prototyping and field testing facilities
- 50 m2 showroom located among villages
- 300 m2 covered workshop
- 1000 m2 uncovered space for future expansion
- Head office and CAD lab in Pondicherry Town

Current Partners:

- SkillMech: long term manufacturing partner (sheet-metal prototyping, manufacturing and scale up development)
- Center for Scientific Research, Auroville: providing design and engineering to CSR's LED project.
- Village Action Group, Tamil Nadu: 1000 improved stoves pilot implementation
- GTZ / Aprovecho: improved biomass cooking and heating stoves in Tajikistan
- Sadhana Forest Community (Auroville), Sholai Center for Learning, Organic Farming, and Appropriate technology): design and implementation of institutional stoves



Prakti Design Lab

Staff Bio

Mouhsine Serrar, Ph.D., Director:



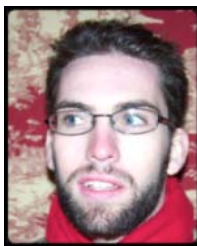
Mouhsine Serrar has over 20 years experience in engineering design. He worked for Motorola for 6 years in product design, engineering, and manufacturing scale up. With ABAQUS, he consulted for Intel, Boeing, Kyocera in the area of modeling automation and numerical impact simulation. Since 2004, he concentrated on technologies appropriate for poor communities. He consulted for USA-EPA in Mauritania, UNDP-GEF in Morocco, GTZ in Burkina Faso, and Shell Foundation in Ghana. Later, he started and run Shell Foundation-Aprovecho's Commercial Stoves Project in India for two years.

Thomas Drouin, Operations Manager,



Thomas Drouin has 10 years experience in development and emergency field operations. As emergency medical support staff, he worked with Medecins Sans Frontieres on missions in Kosovo and Ethiopia. His MS degree in Water and Sanitation Management brought him to India where he worked in Delhi as a consultant for Pragmatix research, Gurgaon, and in Tamil Nadu as a water and sanitation manager for Swayam shikshan Prayog a Bombay based NGO. He worked with Aprovecho for 1.5 years on the Shell Foundation Commercial Stoves Project.

Mark Witt, Mechanical Engineer,



Mark Witt has 3 years experience in mechanical engineering for appropriate technology projects including 2 years as Project Engineer for Aprovecho/Shell Foundation Commercial Stoves Project. He has consulted and conducted interactive user-based design workshops in Tajikistan and throughout India, collaborating with various business partners and NGOs including ARTI, GTZ, Development Alternatives, and Auroville Village Action Group. He has also worked closely with various manufacturers in the fields of ceramics, steel, foundry, metal working, and fabrication.

Mireille Arnaud, Industrial Designer,

Mireille Arnaud has 4 years experience in product design and design for rural development. She is working with a village of Stone Sculptors to diversify their craft and offer them a better living. She is also working with the biggest Indian brand like Coffee day and Himalaya. She has a master degree in Design from France. She has been involved with Prakti for the past one year.

V. Ganesh, Technical/Research Assistant,



V. Ganesh has over 2 years experience working on appropriate technology improved stove projects alongside the Aprovecho team. His primary responsibilities are wide in scope and include stove construction and testing, Tamil-English language support, and operations, such as accounting, office/staff management, and inventory maintenance.

Nithiya, Mechanical Engineer,



S. Nithiya is a mechanical engineer from Pondicherry. She has over 2 years experience of teaching Proe, Autocad, Catia, Solidworks in CAD centre in Pondicherry. She is in charge of generating specifications for design and manufacturing.