

GRINDERS • TOOLS THAT EMPOWER COMMUNITIES



Women and girls living in the developing world spend much of their day preparing food for their families. They spend hours grinding their harvest, leaving them little time to pursue education or start businesses. This arduous work is performed by hand, typically with a mortar & pestle or a large stone. **CTI's grinders give people in developing countries the tools they need to feed, support, and empower themselves.**



CTI's Omega and Ewing grinders are hand-driven burr mills that make fine flour from various grains or creamy paste from roasted nuts. They were designed by CTI engineers to help families or small businesses in developing countries process crops for home consumption or to sell in the local market. Unlike other grinders on the market, CTI's are equipped with heat treated burrs that don't require sharpening or replacements. **Sturdy and easy to use, CTI's grinders are engineered to withstand challenging environments and transform communities.**



"The people in the surrounding area are thrilled because it takes only 1 pass through the mill rather than 2 or 3 so everyone gets a chance, it gets done faster and the mill is holding up to the demand. You have saved LIVES by giving these young men and women a way to make money." - Bette Gebrian, Director of Public Health, Haitian Health Foundation



Transforming communities from dependency to development

- Frees time to pursue entrepreneurial activities
- Produces higher quality, value-added products
- Reduces food waste
- Provides a means for microenterprise
- Inspires diverse, nutritious diets

For 30 years, the nonprofit **Compatible Technology International (CTI)** has been creating practical food and water tools for the developing world. By helping communities produce food more efficiently and effectively, CTI offers the world's poorest populations sustainable pathways to economic freedom.

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CTI's grinders are sturdy burr mills that make a fine flour from various grains and a creamy paste from roasted nuts or seeds. They were designed by engineers specifically for use in rural areas of developing countries. The grinders are very sturdy and may be driven by hand crank, pedal power, or with a motor. With the significant time and effort saved from food processing, families have the opportunity to send their children to school or earn incomes by selling their ground products in the marketplace.

Crops: Amaranth, dried breadfruit, dried beans, cocoa beans, coffee, corn/maize, cassava/yucca, cow peas, finger millet, fonio, green gram, groundnuts/peanuts, pearl millet, dried potatoes, dried moringa, rice, sesame, shea nuts, sorghum, soybeans, tef...and more!



Omega Grinder

- Cast Aluminum Body
- Hand, pedal, or motor operated (contact CTI for advisement on motor hook-up)
- Heat treated burrs



Ewing Grinder

- Steel Body
- Hand, or pedal operated
- Designed for low-cost shipping
- Heat treated burrs

On the new Ewing Grinder:

The Ewing grinder was optimized in 2011 for better performance and lower-cost shipping. The new Ewing is shipped in a flat-rate post office box for \$15 in the U.S. and under \$60 around the world.

For questions on pricing, or to order CTI's grinder or other devices, please contact CTI:
 CTI@compatibletechnology.org
 651-632-3912
 800 Transfer Rd, Ste 6
 St. Paul, MN 55114
 www.compatibletechnology.org



Grinder Output*

Crop	Hand Crank	Pedal Power (85)	Motor Drive **
Roasted Peanuts	7 kg/hr	11 kg/hr	15 kg/hr
Dry Maize	16 kg/hr	22 kg/hr	32 kg/hr
Pearl Millet	20 kg/hr	28 kg/hr	39 kg/hr

*Output reflects a constant rate of grinding

**CTI does not recommend motorizing the Ewing Grinder

Technical Specifications

	Omega	Ewing
Size	18"L x 8"W x 10"H	14"L x 11"W x 6"H
Shipping Weight	18 kg (38 lbs)	6 kg (14 lbs)
Housing	Cast Alum.	Steel
Stand*	30-35"H	30-38" H
Typical Motor	1.5 HP	Not recommended
Crank	11.5"	11"
Burrs Size	4.5" diameter, hardened machined steel	
Bearings	Sealed, self-aligning	

*CTI does not provide stands or motors, but will provide guidance for building/hooks up