Safe Water to Areas in Need: Siemens Provides Membrane Technology for 300 SkyHydrant Water Filtration System Installations Worldwide

Low maintenance, simple operation and high efficiency SkyHydrant water filtration units convert contaminated water into clean, potable water that exceeds the World Health Organization’s (WHO) requirements for potable water. Siemens Water Technologies is working with the SkyJuice Foundation of Sydney, Australia, to provide a reliable source of clean drinking water to communities without a safe water supply. Siemens supplies low-pressure membrane technology for the SkyJuice Foundation’s SkyHydrant water filtration unit. So far, over 300 systems have been installed worldwide, including a recent installation in the rural village of Obambo-Kadenge in Kenya, Africa.

Access to safe water is a fundamental need and basic human right, and is also a target under the United Nations’ Millennium Development Goals. The World Health Organization estimates that about 1.2 billion people worldwide lack access to clean drinking water. Two million people a year, many of them children and the elderly, die from preventable waterborne diseases.

Designed for affordable community water supply and disaster relief applications, the SkyHydrant unit is compact and portable with a robust design. The technology is based on chlorine disinfection combined with a self-contained Memcor low-pressure membrane filtration system from Siemens that operates under minimal feed pressure.
without the need for power and conditioning chemicals. The SkyHydrant removes particulates, bacteria, protozoa and other pathogenic material greater than 0.1 micron, and produces a minimum of 10,000 litres per day of potable water. The self-cleaning unit can be easily transported, installed and operated with minimal training and operator interface. The treated water should be chlorinated to ensure protection against post-treatment contamination.

SkyHydrants have been commissioned in 16 countries over four continents, such as in Sri Lanka, Pakistan, and Indonesia. Besides the Kenya installation, other SkyHydrant units recently installed in 2007 include: Yogyakarta and Jakarta, Indonesia; the San Jose de Los Molinos District in Peru; and Nagigi Village in Savusavu, Fiji.

“The SkyHydrant unit, incorporating the robust Memcor membrane technology, is a sustainable solution for supplying clean water to communities in the developing world,” says Rhett Butler, Business Development Manager for the Memcor product line at Siemens Water Technologies in Australia, and chairman of the SkyJuice Foundation. “The technology is affordable for even the poorest communities, but even more important, it is helping to save lives.”

As an example, a safe water kiosk containing four SkyHydrant units was installed in March 2007 in the rural village of Obambo-Kadenge in Kenya. Before the kiosk was installed, the village of several thousand residents relied mostly on runoff water collected in the shallow Gona Dam. This highly turbid water was contaminated by human activity and livestock waste. With no running water or power and virtually no sanitation, outbreaks of water-borne diseases like cholera, typhoid and dysentery were common.

The kiosk contains the SkyHydrant units, a pump powered by a small windmill, a header tank, a clean water storage tank and a tap stand. The kiosk is supplying approximately 2,200 litres per hour of potable water for less than 0.2 Euro per person per year. The water turbidity is reduced from 400 NTU to less than 0.1 NTU, and the community is already benefiting from the kiosk in improved health and prosperity.
“Our successful projects illustrate how SkyJuice and Siemens Water Technologies, working with other community organizations, are helping to improve the health and well-being of communities throughout the world,” said Butler.


This Kenyan child is happy to now have clean water all the time. The SkyHydrant solution guarantees a permanent water supply at minimal costs.

SkyJuice and SkyHydrant are trademarks of SkyJuice Foundation, Inc. Memcor is a trademark of Siemens and/or its affiliates in some countries.

The SkyJuice Foundation was incorporated in Sydney, Australia, in 2005 as a not for profit charitable organization. It provides partnered global assistance to provide access to reliable and safe drinking water to meet the real needs of developing nations and in disaster relief applications. (www.skyjuice.com.au).

Siemens Water Technologies delivers cost-effective, reliable water and wastewater treatment systems and services to municipal, industrial, commercial and institutional customers worldwide. The division “Water Technologies” is part of Siemens’ Industrial Solutions and Services Group (I&S) which is a system and solution provider for industrial and infrastructure facilities and global service provider for the
plant and projects business covering planning, installation, operation and the entire life cycle. In fiscal 2006 (to September 30), I&S employed a total of 36,200 people worldwide and achieved total sales of EUR 8.819 billion according to U.S. GAAP.

Further information and downloads at: http://www.siemens.com/water